13th EAOHP CONFERENCE | 2018

Adapting to rapid changes in today’s workplace

BOOK OF PROCEEDINGS

Edited by
Kevin Teoh, Nathalie Saade, Vlad Dediu, Juliet Hassard, Luis Torres

5-7 September | 13th Conference of the European Academy of Occupational Health Psychology
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PREFACE

The European Academy of Occupational Health Psychology, in collaboration with the Organizational Behaviour and Human Resources (OBHR) research group of the Business Research Unit, and the Portuguese Association of Organizational Psychology and Organizational Behavior (APPOCO), ISCTE – Instituto Universitário de Lisboa, welcomes you to Lisbon.

The Academy’s first conference took place in 1999 to provide a new platform to promote the development of research, education and practice in the then emerging field of occupational health psychology. That inaugural event was held in Lund, Sweden. In the intervening years, conferences have been held successfully in Nottingham, UK (2000), Barcelona, Spain (2001), Vienna, Austria (2002), Berlin, Germany (2003), Porto, Portugal (2004), Dublin, Ireland (2006), Valencia, Spain (2008), Rome, Italy (2010), Zürich, Switzerland (2012), London, UK (2014), and most recently Athens, Greece (2016). We are delighted to have been able to organise this 13th Academy conference in Lisbon and this has in no small part been possible due to the financial and practical support provided by ISCTE – Instituto Universitário de Lisboa and our national and international sponsors.

The theme for this year’s conference is ‘Adapting to rapid changes in today’s workplace’. In a world that is in constant flux, our workplaces are evolving and changing at an unprecedented scale. This requires adaptation to new demands and types of working conditions, underpinned by new forms of work organisation, an increasingly diverse workforce, technological advancements, digitalisation and automation. In this changing context, occupational health psychology has a critical role to play. The conference will address what occupational health researchers and practitioners can do to support adaptation processes in this new context while preventing new and emerging psychosocial risks and promoting a healthy work environment. To this end, the conference has a powerful and engaging schedule of keynote, oral and poster presentations, as well as special sessions.

At each conference, the Academy awards a lifetime fellowship to individuals, who in the opinion of the Executive Committee, have made an exceptional contribution to the discipline of occupational health psychology. This year we are proud to welcome Prof. Arnold B. Bakker (Erasmus University Rotterdam, the Netherlands), Prof. Leslie B. Hammer (Portland State University, USA), and Prof. David E. Guest (King’s College London, UK) into our College of Fellows.

On behalf of the Organising Committee, we would like to thank you for contributing to this conference. We hope it will meet your expectations and will stoke up your enthusiasm. We continue in our commitment to build a members’ Academy and will always welcome those who wish to be actively involved going forward. Finally, we would like to thank all of those who have given so generously of their time in helping to make this event a reality.

Sílvia Silva
Conference Chair

Sergio Iavicoli
President, EAOHP
ORGANIZING COMMITTEE

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SPONSORS & SUPPORTING INSTITUTIONS

The following have generously supported the 13th conference of the European Academy of Occupational Health Psychology

ISCTE-IUL
Instituto Universitário de Lisboa

BRU-IUL
Business Research Unit
ISCTE-INSTITUTO UNIVERSITÁRIO DE LISBOA

APPOCO
Associação Portuguesa de Psicologia das Organizações e Desempenho Organizacional

SPRINGER NATURE

Turismo de Lisboa

LISBOA
CÂMARA MUNICIPAL

TURISMO DE PORTUGAL

Metropolitano de Lisboa

Pastéis de Belém
≈ desde 1837 ≈

yellow bus
OFFICIAL SIGHTSEEING TOURS

maat
Museum Art Architecture Technology
DELEGATE FACILITIES

Venue

The Conference will be held at the ISCTE-IUL in Lisbon, Portugal. The ISCTE-IUL Campus has an exceptional location in the city centre and offers modern, spacious and functional facilities. It is a 5-minute walk from the nearest metro station and well connected by public transport.

The closest metro station is Entre Campos (Yellow line).

Address: Av. das Forças Armadas 376, 1600-077 Lisboa, Portugal

Getting there

By Car and Taxi
From the airport to the conference venue, the full trip will take around 10 minutes with the cost of 10-15 euros (with luggage included).

By Metro
From the airport to the conference venue, you can take the red line and get off at “Saldanha” station. In “Saldanha” station, you can take the yellow line and get off at “Entrecampos” station. The trip will take you around 35 minutes, with the cost of 1.45 euros (for one journey: the ticket is still valid when you change from the red line to the yellow line). To use Metro you need a rechargeable card - “Viva viagem” card (cost: 0.50 cents). See here more information about “Viva viagem” Card.

By Aerobus
Aerobus, the Lisbon Airport Transfer Bus, line 1 and line 2 (see here), stops in “Entrecampos” station. It costs 4 euros or 6 euros (24h x 2 = return ticket) if it is purchased in the bus or in the Airport. If it is purchased online, you get a 10% discount on the ticket price. Note: If you purchase the tickets online, you will need to print the vouchers.

By “Carris” Bus
You can take the bus “Carris” 701 and 754. It costs 1.45 euros if purchased in advance (you need to buy “7 Colinas” or “Viva Viagem” card, which is rechargeable) or 1.85 euros if purchased in the bus.

Internet access

Complimentary wireless internet available at the venue. For any queries please visit the conference registration desk.

Catering

Lunch is included in the delegate fee and refreshments will be available at no cost each morning and afternoon of the conference.
Exhibition stands

During the conference, you are invited to visit the exhibition stands located in the Foyer. Books and journals relevant to occupational health psychology from Springer, Taylor & Francis, and Wiley-Blackwell will be available.

Conference app

The conference app is available for iOS and Android users. Search ‘EAOHP’ on the Apple Store and Google Play to download the conference app on your device.

Presentations (Author Guidelines)

**ORAL:** Each presentation will last 15 minutes including time for questions. The session chair will introduce each presenter and ensure that presentations are kept to time. All oral presentations must be supported by Microsoft Power Point. Presentations should be on a USB stick and clearly labelled with (i) the name of the lead author, (ii) title of presentation and (iii) day, time and room number of the presentation. Please take your presentation directly to the room allocated for your presentation, where you will be assisted in copying it onto the system, prior to the start of your session.

**POSTER:** The poster should ideally be printed in AO size: 119cm (Height) X 84cm (Width) in portrait format. Authors for poster presentations should bring their posters to the conference venue on the day of the presentation. **Posters will be placed between 8:30 to 10:00 am each day.** This will allow a smooth presentation during the session time. Tape will be provided. All authors are responsible for placing their own posters according to their assigned space and will be assisted by the conference organizing team.

Additional information

**EAOHP Evening reception – Welcome to Lisbon:** An evening drinks reception has been organised on Wednesday, September 5th from 18:45 – 20:30, at the Building 2 Terrace where you are invited to join us for drinks and canapés.

**Conference dinner -** The conference dinner will take place in the evening on 6th September 2018 at the Casa do Alentejo in the centre of Lisbon. Two beautiful rooms form the Restaurant Casa do Alentejo. While one of the rooms is ornamented with tile panels, the second room is coated with tile panels from a 17th century palace. Both rooms provide a peaceful environment, ideal to enjoy the gastronomy of the Alentejo region.

The dinner will include a welcome cocktail and four courses plus couvert and drinks. Just arriving at the restaurant, you will find yourself in an Arab courtyard, where a welcome cocktail will be waiting for you. Go to the second floor and be mesmerized by the panel covered corridor that provides the access to halls where the dinner will take place.

**Further assistance**

Should you require any assistance during the conference, please don’t hesitate to contact a member of the conference organizing committee at the reception desk.
Building floorplan

BII - Building II (Edificio II)
PROGRAMME AT A GLANCE
### Tuesday, September 4th, 2018

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>09:30 – 10:00</td>
<td>Workshop 1 Registration&lt;br&gt;Reception</td>
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<tr>
<td>10:00 – 16:30</td>
<td>Pre-Conference Workshop: Designing, implementing and evaluating organisational initiatives&lt;br&gt;C1.04</td>
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<tr>
<td>12:30 – 13:00</td>
<td>Workshop 2 Registration&lt;br&gt;Reception</td>
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<tr>
<td>13:00 – 17:00</td>
<td>Pre-Conference Workshop: Introduction to multilevel moderation analysis: probing and plotting cross level interaction&lt;br&gt;D1.01</td>
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### Wednesday, September 5th, 2018

<table>
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<tr>
<th>Time</th>
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<tr>
<td>08:00 - 09:00</td>
<td>Conference Registration&lt;br&gt;Reception</td>
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<tr>
<td>09:00 - 09:30</td>
<td>Opening Ceremony&lt;br&gt;Grande Auditorio</td>
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<tr>
<td>09:30 - 10:15</td>
<td>Keynote: Human resource management, wellbeing and performance: Exploring the links&lt;br&gt;Grande Auditorio</td>
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<td>10:15 - 10:30</td>
<td>Coffee&lt;br&gt;Reception</td>
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<tr>
<td>10:30 - 12:00</td>
<td>Symposium: Women-dominated work: New perspectives and challenges, Part 1&lt;br&gt;B1.03</td>
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<td>Symposium: Novel perspectives on burnout: Patterns, long-term development and recovery&lt;br&gt;B1.04</td>
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<td>Symposium: Job crafting and beyond: Recent insights in crafting research&lt;br&gt;B2.03</td>
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<td>Symposium: Life at the beach: Research on work roles and occupational health psychology in a coastal tourist destination&lt;br&gt;B2.04</td>
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<td>Oral session: Antecedents of stress and wellbeing I&lt;br&gt;C1.03</td>
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<td>Oral session: Intervention evaluation&lt;br&gt;C1.04</td>
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<tr>
<td>12:00 - 13:00</td>
<td>Symposium: Women-dominated work: New perspectives and challenges, Part 2&lt;br&gt;B1.03</td>
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<td>Oral session: Occupational Health Psychology: Policy and practice&lt;br&gt;B1.04</td>
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</table>
Oral session: Job insecurity, wellbeing and culture  
*B2.03*

Oral session: Workplace violence, bullying and harassment I  
*B2.04*

Oral session: Overtime, working hours and time pressure I  
*C1.03*

Oral session: Organizational interventions and outcomes I  
*C1.04*

**13:00 - 14:30 Lunch and Poster Session**  
*Lunch Building*

Poster session: Interpersonal relationships and conflict
Poster session: Psychosocial risks, stress, safety and wellbeing
Poster session: Mental Health and the Workplace
Poster session: Work-home interface

**13:30 - 14:30 Research Forum**  
*B1.03*

**14:30 - 16:00 Symposium: Occupational health: Absenteeism and presenteeism**  
*B1.03*

Symposium: From job crafting to life crafting: Proactively shaping work, studying, leisure and the boundaries between life domains  
*B1.04*

Symposium: Beyond strain: New perspectives on the relationship between work & wellbeing: Explaining the effect of atypical work, job insecurity, and reemployment  
*B2.03*

Oral session: Antecedents of stress and wellbeing II  
*B2.04*

Oral session: Burnout  
*C1.03*

Early Career Showcase 1: Work-life balance, fatigue and recovery  
*C1.04*

**16:00 - 16:15 Coffee**  
*Reception*

**16:15 - 17:30 Symposium: Complex designs in occupational health: challenges and opportunities**  
*B1.03*

Symposium: Social interactions at the workplace  
*B1.04*

Symposium: Looking for a job despite feeling blue – job search and mental health among unemployed people  
*B2.03*
Symposium: The whole is greater than the sum of its parts: Developing a framework for psychologically healthy workers
B2.04

Oral session: Organizational interventions and development
C1.03

Oral session: Safety Climate and safety culture
C1.04

17:30 - 18:30 Symposium: Effects of a mindfulness-based intervention for teachers: a study on teacher and classroom interactions outcomes
B1.03

Oral session: Individual differences
B1.04

Oral session: Leadership and occupational safety and health I
B2.03

Oral session: Mental health and the workplace I
B2.04

Oral session: Resilience and wellbeing at work I
C1.03

EAOHP General Assembly (Open session)
C1.04

18:45 - 20:30 Evening Reception
Building 2 Terrace

Thursday, September 6th, 2018

08:00 - 08:30 Registration
Reception

08:30 - 09:30 Symposium: In agreement? Impact of leader-team agreement in organisational interventions
B1.03

Symposium: Employees' worries and feelings of guilt in the work-family interplay: Strenuous experiences from an everyday and a career-related perspective
B1.04

Oral session: Gender and diversity
B2.03

Oral session: Job crafting
B2.04

Oral session: Resilience and wellbeing at work II
C1.03

Oral session: Work-life balance and work-family conflict I
C1.04
09:30 - 10:45 Symposium: Workplace interventions: Implications for worker health and wellbeing
Symposium: Work-life balance – New perspectives on an enduring problem
Symposium: Translating research into practice: Understanding psychosocial risk management in context
Symposium: The crossover effects of work: A focus on physical activity
Oral session: Ageing and the workplace
Oral session: Antecedents of stress and wellbeing III

10:45 - 11:00 Coffee Reception

11:00 - 12:15 Symposium: Challenges of doing burnout interventions
Symposium: Interactive effects of job crafting, SOC strategies, and playful work design on work engagement, performance and sustainable work ability
Symposium: Conducting organisational interventions in different healthcare contexts: fitting the intervention to the context
Symposium: Sickness presenteeism: Practical and theoretical developments
Oral session: Interpersonal relationships
Oral session: Leadership and occupational safety and health II

12:15 - 13:00 Keynote: A review of work-family and job stress workplace interventions within total worker health and occupational health psychology frameworks

13:00 - 14:30 Lunch and Poster Session
Lunch Building
Poster session: Organisations, groups, culture and climate
Poster session: Interventions at work
Poster session: Burnout
Poster session: Working conditions, environment and employment

13:30 - 14:30 European Research Council
14:30 - 16:00  Symposium: Rapid changes in today's workplace: risks and challenges for workers' health
               B1.03

Symposium: 'Deconstructing recovery: Why, how, and when it occurs' (Part I)
               B1.04

Symposium: Age and work activity: Building health and experience over time
               B2.03

Symposium: Why do people extend and intensify their working hours?
Antecedents and outcomes of self-endangering work behaviour
               B2.04

Symposium: Relationships between working conditions, wellbeing and
performance in the healthcare sector: Extending the existing research evidence
               C1.03

Oral session: Psychosocial interventions
               C1.04

16:00 - 16:15  Coffee
               Reception

16:15 - 17:45  Symposium: Craft industry: Small but healthy?!
               B1.03

Symposium: You can walk away, but you can never leave… Work-related
smartphone use during off job hours: Implications and interventions
               B1.04

Oral session: Employee motivation and performance I
               B2.03

Oral session: Organizational interventions and outcomes II
               B2.04

Oral session: Work engagement, commitment, and performance
               C1.03

Early Career Showcase 2: Technostress and technological developments and
intervention/workplace changes and innovations
               C1.04

19:00 – 22:00  Conference Dinner
               Casa do Alentejo

Friday, September 7th, 2018

08:00 - 08:30  Registration
               Reception

08:30 - 09:30  Symposium: Digital OHP: Insights from research and business into the
development of online intervention tools
               B1.03

Oral session: Employee retention and sickness absence
               B1.04
Oral session: Job satisfaction and wellbeing
*B2.03*

Oral session: Leadership and occupational safety and health III
*B2.04*

Oral session: Work-life balance and work-family conflict II
*C1.03*

Oral session: Workplace health promotion
*C1.04*

09:30 - 10:45  Symposium: Building psychologically informed policing to meet the changing needs of a complex society
*B1.03*

Symposium: Healthy Enterprise Standard (HES) evaluation project
*B1.04*

Symposium: A second generation of tools and approaches for supporting employee participation in Total Worker Health® Programmes
*B2.03*

Symposium: Deconstructing recovery: Why, how, and when it occurs (Part II)
*B2.04*

Oral session: Mental health and the workplace II
*C1.03*

Oral session: Workplace violence, bullying and harassment II
*C1.04*

10:45 - 11:00  **Coffee**

Reception

11:00 - 12:15  Symposium: Return to work: Focusing on what works and exploring new directions
*B1.03*

Symposium: Difference is good – embracing neurodiversity as a core topic in the ohp community
*B1.04*

Symposium: Age, health, and retirement: The role of human resources management practices
*B2.03*

Symposium: Successful aging at work: The effects of age on performance and wellbeing
*B2.04*

Oral session: Overtime, working hours and time pressure II
*C1.03*

Oral session: Psychometrics in Occupational Health Psychology
*C1.04*

12:15 - 13:00  **Keynote:** Is the wellbeing at work possible for all? The case of temporary agency workers

*Grande Auditorio*
13:00 - 14:30 Lunch and Poster Session
Lunch Building
Poster session: Engagement, satisfaction and positive states at work
Poster session: Workplace health behaviours and promotion
Poster session: Individual differences and diversity

13:30 - 14:30 Portuguese Psychological Society
B1.03

13:30 - 14:30 ICG-OHP Meeting
B1.02

14:30 - 16:00 BPS Division of Occupational Psychology Symposium: Focusing on mental health at work: A broader perspective
B1.03
Symposium: Recent developments in research on the antecedents of work engagement and commitment
B1.04
Symposium: Occupational Health Psychology: The challenge of Industry 4.0
B2.03
Oral session: Employee motivation and performance II
B2.04
Oral session: Inequalities in working conditions and health
C1.03
Early Career Showcase 3: Health behaviours, wellbeing and absenteeism - What can we learn from our own PhD process?
C1.04

16:00 - 16:15 Coffee
Reception

16:15 - 17:30 Symposium: Work-family (Life) relationship in contingent jobs
B1.03
Symposium: Psychosocial risk management: Monitoring data supporting action
B1.04
Practitioner Focus Session
B2.03
Oral session: Antecedents of stress and wellbeing IV
B2.04
Oral session: Mental health and the workplace III
C1.03
Oral session: Workplace violence, bullying and harassment III
C1.04

17:30 - 18:30 Closing Ceremony
Grande Auditorio
DETAILED CONFERENCE PROGRAMME
Tuesday, September 4th 2018

Pre-Conference Workshop 1 Registration
09:30 - 10:00 Reception

Pre-Conference Workshop: Designing, implementing and evaluating organisational initiatives
10:00 - 16:30 C1.04 Delivered by: Karina Nielsen & Raymond Randall

Pre-Conference Workshop 2 Registration
12:30 – 13:00

Pre-Conference Workshop: Introduction to multilevel moderation analysis: probing and plotting cross level interaction
13:00 - 17:00 D1.01 Delivered by: Helena Carvalho

Wednesday, September 5th 2018

Registration
08:00 - 09:00 Reception

Opening ceremony
9:00 - 09:30 Grande Auditorio

Keynote: Human Resource Management, Wellbeing and Performance: Exploring the Links
09:30 - 10:15 Grande Auditorio Chair: Karina Nielsen
K1 Human Resource management, Wellbeing and Performance: Exploring the Links David Guest

Coffee
10:15 – 10:30 Reception
### Symposium: Women-dominated work: New perspectives and challenges, Part 1

<table>
<thead>
<tr>
<th>10:30 - 12:00</th>
<th>B1.03</th>
<th>Chair: Britt-Inger Keisu</th>
</tr>
</thead>
</table>
| S1            | Risk and Preventive Factors for Noise and Stress Exposure in Education and Health Care Services - Results from Focus Group Interviews<br>
*Kerstin Persson Waye, Sofie Fredriksson, Kristina Gyllensten* |
| S2            | Development of Organisational and Psychosocial Work Factors Across Industries with Different Gender Composition in Sweden, 2003-2013<br>
*Sara Cerdas, Annika Härenstam, Gun Johansson, Anna Nyberg* |
| S3            | Gender Differences in the Association Between Work Schedule and Health<br>
*Philip Tucker, Paraskevi Peristera, Göran Kecklund, Constanze Leineweber* |
| S4            | Understanding the Challenges of the Female Dominated Sector by Focusing on Workplace Factors<br>
*Anne Richter, Marta Roczniewska, Ulrica von Thiele Schwarz, Henna Hasson* |

### Symposium: Novel Perspectives on Burnout: Patterns, Long-term Development and Recovery

<table>
<thead>
<tr>
<th>10:30 - 12:00</th>
<th>B1.04</th>
<th>Chair: Michael Leiter</th>
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</table>
| S5            | Change in MBI Profiles of Exhaustion, Cynicism, and Efficacy: A Person Centered Perspective<br>
*Michael Leiter, Christina Maslach* |
| S6            | Improving Burnout Interventions<br>
*Christina Maslach, Michael Leiter* |
| S7            | Experiences of a Spouse’s Burnout and Recovery<br>
*Stela Salminen, Mäkikangas Anne, Eeva-Liisa Saari, Mika Pekkonen* |
| S8            | Exhausted across Mid-Career Years? Investigation of Job-, Career-, and Person-related Predictors of Exhaustion Trajectories<br>
*Anne Mäkikangas, Lea Pulkkinen, Katja Kokko* |
| S9            | Leader Behaviours, Healthy Workplaces, and Burnout<br>
*Arla Day, Nikola Hartling* |

### Symposium: Job Crafting and Beyond: Recent Insights in Crafting Research

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<thead>
<tr>
<th>10:30 - 12:00</th>
<th>B2.03</th>
<th>Chair: Piet van Gool &amp; Evangelia Demerouti</th>
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</thead>
</table>
| S10           | Reemployment Crafting: How to Proactively Shape One’s Job Search<br>
*Inge Hulshof, Evangelia Demerouti, Pascale Le Blanc* |
| S11           | The JSD-R Intervention: A Crafting Intervention to Enhance Wellbeing, Job Search Behaviour and Reemployment Chances among the Unemployed<br>
*Pascale Le Blanc, Inge Hulshof, Evangelia Demerouti* |
How Newcomers with High Core Self-Evaluations Achieve Work Meaning and Insider-status: The Role of Job Crafting and Leader Coaching Behaviour
Sheng-Qiang Cheng, Yan Tu, Hai-Jiang Wang

Who to turn to? Crafting Creative Contacts
Piet van Gool, Gerrit Rooks, Evangelia Demerouti

A Job Crafting Intervention Based on the Theory of Planned Behaviour. Effects on Cognitions, Behaviour and Work Engagement
Arianna Costantini, Evangelia Demerouti, Andrea Ceschi, Riccardo Sartor

Symposium: Life at the Beach: Research on Work Roles and Occupational Health Psychology in a Coastal Tourist Destination
10:30 – 12:00 B2.04 Chair: Prudence Millear

Is It All in the Mind? The Effect of Career Barriers on Career Satisfaction
Vanessa Moran, Prudence Millear

The Effect of Narcissism and Social Media on Work Outcomes Amongst Part-time Employees, Over and Above Their Demands and Resources
Prudence Millear, Roxane L. Gervais

The Effects of Psychosocial Safety Climate and Illegitimate Tasks in Small and Medium Enterprises in Australia
Clare Farley, Prudence Millear

The Impact of Demands and Resources on Engagement, Strain, and Entrepreneurial Success
Simon Doonican, Prudence Millear

'Someone Else's Problem': Behaviour in Communal Kitchens as an Expression of Social Support in the Workplace
Prudence Millear

Oral session: Antecedents of Stress and Wellbeing I
10:30 - 12:00 C1.03 Chair: Peter Kelly

Interaction Effects of Psychosocial Occupational Factors on Burnout and Depressive Symptoms: Cross-Sectional Analyses of 3,547 German Employees
Hermann Burr, Grit Müller, Uwe Rose, Maren Formazin, Clausen Thomas, Anika Schulz, Hanne Berthelsen, Peter Martus, Guy Potter, Anne Pohrt

Resources and Stressors in Leaders’ Work Life: The Relevance of Follower Behaviour for Leader Wellbeing
Stefanie Richter, Judith Volmer

Daily Experiences of Commuter Strain and Self-control at Work and at Home: A Diary Study
Bettina S. Wiese, Olivia Chaillié, Ruth Noppeney, Anna M. Stertz
“Charging the Batteries” or the “Monday Blues?” A Daily Diary Study Examining Stress Experience Over the Work Week.  
*Shani Pindek, Zhiqing Zhou, Stacey Kessler, Alexandra Krajcevska, Paul Spector*

Morningness and Schedule Misfit: Implications for Work and Health Outcomes  
*Rick Laguerre, Janet Barnes-Farrell, Lee Di Milia*

How Does Experiencing a Positive Day at Work Make Me a Better Partner at Home?  
*Lynn Germey, Sara De Gieter*

### Oral session: Intervention Evaluation I

**10:30 - 12:00 C1.04 Chair: Sabir Giga**

**O7**  
The Successful Leader in Occupational Health Interventions  
*Per Øystein Saksvik, Marit Christensen, Maria Karanika-Murray, Silje Fossum*

**O8**  
Pay One Take Two? A Meta-Analysis of the Effectiveness of Interventions for Engagement and Burnout  
*Delia Mihaela Virgă, Laurentiu Maricuțoiu*

**O9**  
Can App-based Mindfulness Training Reduce Employee Stress? Preliminary Results from a Randomized Controlled Trial in an Australian Public Sector Workforce  
*Larissa Bartlett, Kristy Sanderson, Michelle Kilpatrick, Petr Otahal, Angela Martin, Amanda Neil*

**O10**  
Safety Self-efficacy and Internal Locus of Control as Mediators of Safety Motivation – Randomised Controlled Trial (RCT)  
*Mikko Nykänen, Jukka Vuori*

**O11**  
From Co-located to Dispersed Work – First Experiences of Commuter Hubs as Stress Intervention  
*Christine Ipsen, Giulia Nardelli, Paul Cox*

### Symposium: Women-dominated work: New perspectives and challenges, Part 2

**12:00 - 13:00 B1.03 Chair: Britt-Inger Keisu**

**S20**  
Care Work in Different Arenas: Working Conditions in Swedish Eldercare and Disability Services  
*Sara Erlandsson, Helene Brodin*

**S21**  
The Prevalence and Consequences of Intragroup Conflicts in Women-Dominated Work  
*Susanne Tafvelin, Elin Kvist, Britt-Inger Keisu*

**S22**  
Fit for Fight - A Study of Conflicts and Emotions in Welfare Occupations  
*Elin Kvist, Britt-Inger Keisu, Susanne Tafvelin*
Oral session: Occupational Health Psychology: Policy and Practice
12:00 - 13:00  B1.04  Chair: Silvia Silva

O12  The Influences of Trainees' Felt-Responsibility and Supervisor Support in the Transfer of Safety Training
Ana Freitas, Silvia Silva, Catarina Santos

O13  Impact of Psychosocial Hazards on Workers' Health and Human Development: A Study of the 5th European Social Survey
Daniel Mari Ripa, Juan Herrero, Aditya Jain

O14  How Intimate Partner Violence Impacts the Workplace in Terms of the Victim, Team and Manager
Arlene Walker, Sarah Carrigan, Craig Macpherson

Oral session: Job Insecurity, Wellbeing and Culture
12:00 - 13:00  B2.03  Chair: Georg Bauer

O15  How do Job Insecurity and Organisational Injustice relate to Mental Health Problems? A Multilevel Study on Synchronous and Delayed Effects
Claudia Bernhard-Oettel, Constanze Eib, Yannick Griep, Constanze Leineweber

O16  Job Insecurity and Self-rated Health: Findings from a Five-wave Study in Switzerland
Ieva Urbanaviciute, Hans De Witte, Jérôme Rossier

O17  Justifying the Labour Market in Spain: Boltanski and Thévenot, the Six Worlds of Justification and the Organisational well-being
Rocío González-Martínez, Pedro Francés Gómez, José María González-González

O18  Meta-analysis on Job Insecurity and Its Outcomes: Investigating Cross-sectional and Longitudinal Associations
Magnus Sverke, Lena Låstad, Johnny Hellgren, Katharina Nåswall, Anne Richter

Oral session: Workplace Violence, Bullying and Harassment I
12:00 - 13:00  B2.04  Chair: Angeli Santos

O19  Beyond Bullying: An Exploration of Other Facets of Workplace Abuse
Alan Cavaiola, David Stout

O20  Workplace Bullying in Sweden: A Randomized Representative Sample of the Swedish Workforce
Michael Rosander, Stefan Blomberg

O21  Preventing Workplace Bullying through Person-job Fit, and the Diminishing Impact of Job Insecurity
Katrien Vandevelde, Elfi Baillien, Ivana Vranjes, Hans De Witte, Guy Notelaers

O22  First, Do No Harm": Understanding the Role of Negative Emotions and Moral Disengagement in Targets of Workplace Aggression
Roberta Fida, Carlo Tramontano, Marinella Paciello, Claudio Barbaranelli
### Oral session: Overtime, Working Hours and Time Pressure I

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<td>Trajectories in Effort-Reward Imbalance Over Time and their Associations with Health Complaints</td>
<td>Jian Li</td>
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<td>Constanze Leineweber, Constanze Eib, Claudia Bernhard-Oettel, Anna Nyberg</td>
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<td>Nurses' Experiences of Time Pressure and Psychological Distress at Work – Does Electronic Health Records or Nurses' Competence have a Role?</td>
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<td>Is Overtime Work Harmful to Your Heart? A Prospective Cohort Study from Germany</td>
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<td>Tuulikki Vehko, Hannele Hyppönen, Sampsa Puttonen, Sari Kujala, Eeva Ketola, Johanna Tuukkanen, Tarja Heponiemi</td>
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<td>Non-standard Work Arrangements: Taxonomy, Data Collection, and Research Needs</td>
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<td>Regina Pana-Cryan, Tim Bushnell, Tapas Ray, Abay Asfaw, Anasua Bhattacharya</td>
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### Oral session: Organizational Interventions and Outcomes I

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<td>Sue Cowan</td>
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<td>Effects of an Intervention Program to Promote Workplace Social Capital and Work Engagement in Industrial Settings</td>
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<td>Annette Meng, Thomas Clausen, Vilhelm Borg</td>
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<td>Reducing Harmful Sun Exposure in Construction Workers Using a Smartphone Intervention</td>
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<td>Sue Cowan, Terry Lansdown</td>
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<td>Comparative Assessment of Professionals on Organisational Cultural Dimensions in Pakistan: An Indigenous Perspective</td>
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### Lunch and Poster Session

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### Poster session: Interpersonal relationships and conflict

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<td>The Conceptual Model for the Relationship Between Emotional Labour and Aggressive Behaviour at Work</td>
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Daniela Adiyaman, Laurenz L. Meier

The Longitudinal Association between Supportive-Disloyal Leadership, Moral Disengagement and Counterproductive Work Behaviors
Andrea Bobbio, Stig Berge Matthiesen, Ståle Einarsen, Massimiliano Pastore

Team Interdependence and Satisfaction: The Mediating Role of Socioaffective Relationships Within Workgroups
Marta Alves, Paulo Renato Lourenço

How Flexible Are Our Social Needs? Can Social Needs Be Satisfied in Flexible Work Arrangements and Therefore Increase Job Engagement?
Jona Glade, Christian Korunka, Ada Sil Patterer

Workplace Accidents: The Impact of Civility Norms and Work-safety Tension
Sarah Berger, Ragan Decker, Samantha Lacey, Janet BarnesFarrell, Martin Cherniack

Effort-Reward Imbalance: A Risk Factor for Bullying?
Guy Notelaers, Maria Törnroos, Denise Salin

Prevalence of Sexual Harassment of Security Employees in Guadalajara Mexico
Maria de Lourdes Preciado Serrano, Blanca Elizabeth Pozos Radillo, Ana Rosa Plascencia Campos, Juan Manuel Vazquez Goñi

The State of Sexual Harassment Preventative Training
Lauren Gannon, Taylor Barr, Vicki Magley, Joanna Grossman

Workplace Bullying among Employees in Germany: Prevalence Estimates and the Role of the Perpetrator
Stefanie Lange, Hermann Burr, Paul Maurice Conway, Uwe Rose

On the Conjunction of Behavioural and Emotional Indicators – A New Approach to Diagnosing Mobbing.
Katarzyna Durniat

Workplace Incivility and Work-family Conflict: The Impact of Perpetrator Power and Surface Acting
Ragan Decker, Sarah Berger, Alec Calvo, Vicki Magley

Patient Verbal Aggression and Emotion Work among Nurses: The Buffering Role of Job and Personal Resources. A Moderated Mediation Model
Chiara Guglielmetti, Silvia Gilardi, Sara Viotti

Examining Workplace Bullying in Cyprus’ Work Environment
Maria P. Michailidis, Europia Voukelatou

Juliet Hassard, Kevin Teoh, Tom Cox

Heuristics, Bias and Personality Traits Attribution: The Cognitive Side of Gender Career Inequalities in a Male-dominated Work Sector
Silvia Riva, Ezekiel Chinyio, Paul Hampton
Poster session: Psychosocial risks, stress, safety and well-being

13:00 - 14:30 Lunch Building

P18 Brilliantly Resilient: The Role of Cognitive Ability in Work Stress Management
Yiwen Zhang

P19 Job Stress Among Humanitarian Aid Workers: Two Models Combined
Liza Jachens, Jonathan Houdmont

P20 Disengagement Strategies at Work Might Not Always be a Bad Idea: The Role of Job Demands
Elissa el Khawli, Anita Keller, Susanne Scheibe

P21 The Mediating Role of Well-being on the Relationship Between Mindfulness and Work Behaviours
Helenides Mendonça, Tais Alvin, Valcêmia Novaes, Maria Tereza Tomé Godoy

P22 Reality Check: A Study About Occupational Stress and Quality of Working Life in a Federal Teaching Network
Daysi Farias, Paulo Domingues Jr, Albertina Sousa, Loise Medeiros

P23 Does Error Orientation Associate with Worries About Leadership among Upper White-collar Employees?
Heidi Tsupari, Elina Auvinen, Mari Huhtala, Joona Muotka, Taru Feldt

P24 Leading to Better Care: Leadership alInterpersonal Job Performance in Long-term Care
Vanessa Myers, E. Kevin Kelloway

P25 Board of Directors' Influence on Occupational Health and Safety: Scoping the Literature in Quest of Best Practice and Evidence
Mandus Frykman, Ulrica von Thiele Schwarz, Henna Hasson, Carl Johan Sundberg, David Ebbevi

P26 The Good, the Bad and the Ugly: Leadership and Safety Behaviors
Rachael Jones-Chick, E. Kevin Kelloway, Lori Francis

P27 Contributing to Human Factors Investigation in Work Accidents Using a Psychosocial Risk Assessment Approach
Liliana Dias, José Sintra, Sandra Gonçalves

P28 Identifying Frontline Sales and Sales Management Potential and Capability
Alia Al Serkal

P29 The Future of Work: Opportunities and Challenges for the Nordic models
Jolien Vleeshouwers

P30 Development of a Scale to Measure Psychosocial Risk Factors for the Mexican Population.
Juana Patlan-Perez

P31 Is Mindfulness a Noticeable Quality? Development and Validation of the Observed Mindfulness Measure
Larissa Bartlett, Kristy Sanderson, Michelle Kilpatrick, Angela Martin, Petr Otahal, Amanda Neil
### Poster session: Mental Health and the Workplace

**13:00 - 14:30**  **Lunch Building**

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<td>Psychosocial Symptoms in Nursing Staff in Guadalajara, Mexico</td>
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<td>Caroline Mizael, Patricia Baptista, Ricardo Yamassake</td>
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<td>Jaana Vastamäki, Heini Kapanen</td>
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<td>Proposals for Intervention to Minimise the Mental Suffering of Nursing Workers of Cardiology Hospital in Brazil</td>
<td>Patricia Baptista, Renata Tito, Fabio Silva, Cristiane Zogheib</td>
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Zsuzsanna Kerekes, Caroline Dignard, Courtney Lessel, Alyssa Smith, Monika Tiszberger, Behdin Nowrouzi-Kia, Michel Larivières

Work-related Stress and General Mental Health in the Study of Copper Mining Industry
Dorota Molek-Winiarska, Katarzyna Orlak

Positive Mental Health at Work: Design, Validity and Reliability of the OPMH-40 Survey
Mario Ángel-González, Julio César Vázquez-Colunga, Claudia Liliana Vázquez-Juárez, Cecilia Colunga-Rodríguez, Bertha Alicia Colunga-Rodríguez

Psychosocial Risk Factors in Hospital Workers in Guadalajara, Mexico
Patricia Elizabeth Silva-Colunga, Mario Ángel-González, Cecilia Colunga-Rodríguez

Investigating the Impact of Traumatic Event Exposure: Research to Enhance the Health and Wellness of Emergency Medical Professionals
Stephanie Andel

Job Insecurity and Mental Health: Examining the Role of Organisational Justice Types
Jurgita Lazauskaite-Zabielske, Leva Urbanaviciute, Birute Pociute

Workplace Health Promotion in the Offshore Wind Industry: A Mixed-Methods Study
Janika Mette, Marcial Velasco Garrido, Alexandra M. Preisser, Volker Harth, Stefanie Mache

Absenteeism among Male and Female Judiciary Workers in Brazil: Justicel Study
Mery Natali Silva Abreu, Eduardo de Paula Lima, Bruna Vieira de Lima Costa, Marcel Toledo Vieira, Adson Eduardo Resende, Ada Avila Assunção

**Poster session: Work-home interface**

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<td>Perceived Parenting Style as Antecedent of the Ideal Implicit Leadership Theories</td>
<td>Andreea Petrus, Dragos Iliescu</td>
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<td>Boundaries, Bridges and Benefits of Career Adaptability – Results from a Two-wave Representative Study in the German Workforce</td>
<td>Irina Nalis-Neuner, Bettina Kubicek, Christian Korunka</td>
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<td>Aspects of the Work-Family Relation and the Influences of this Dyad on the Well-being of Brazilian Army Military Personnel</td>
<td>Carolina Rodrigues-Silveira, Maria José Chambel</td>
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<td>An Examination of Flexible Work Arrangements and Workplace Well-Being in Public Sector Employees in Canada</td>
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Work and Trait-personal Characteristics’ Effect on Employee Well-being: A Diary Study Using Work-home Resource Model
*Inés Martínez-Corts, Evangelia Demerouti, Arnold B. Bakker*

Exploring the Paradox of Smart Technology in the Management of Work-life Boundaries
*Alice Davis, Rebecca Whiting*

Perception of Working Conditions and Mental Strain of Segmentors and Integrators
*Amanda Sophie Voss*

The Effect of Division of Labour in Same-sex Marriages on Workplace Outcomes
*Jessica Keever, Katelyn Sanders, Malissa Clark*

The Benefits of New Ways of Working on Employees’ Well-being and Work-family Interaction: Gender Differences
*Maša Tonković Grabovac*

A Systematic Review of the Effects of Interventions Targeting the Reconciliation of Work and Nonwork Demands
*Nicola Jänsch, Andreas Hirschi, Anne Burmeister*

**EAOHP Research Forum**

**13:30 - 14:30  B1.03**  
Chair: Karina Nielsen

Sp1 Lunch time workshop: How can we promote research on OHP? How can the EAOHP promote research in OHP?

**Early Career Showcase 1: Work-Life Balance, Fatigue and Recovery**

**14:30 - 16:00  C1.04**  
Chair: Birgit Greiner

EC1 Work- and Family-Related Stress: On challenges and Highlights of Turning Long-Term Research Results into Internet Intervention
*Ewelina Smoktunowicz*

EC2 “Too Stressed Out to Become Active?!” – How and When Can Employees Benefit from Physical Activity as a Recovery Activity?
*Kristina Hilckmann*

EC3 Getting the Work-life Interface You Are Looking For: The Importance of Work-nonwork Boundary Management Fit
*Yanne Bogaerts, Rein De Cooman, Sara De Gieter*

EC4 ‘My Work Feels Like Home’: Dogs at the 2020 (Home-)Workplace
*Joni Delanoeije, Marijke Verbruggen*

EC5 Autonomy, Self-regulation and Well-being in ICT-enabled Boundaryless Work Environments
*Edo Meyer*

EC6 Who Can Offer a Shoulder to Cry On: On Flexible Working and Compensating Relatedness Need Satisfaction Across Life Domains
*Ada Sil Patterer, Christian Korunka*
EC7  Flexibility vs. Structure: The Role of a Personal Need for Structure in an ICT-enabled Deregulated World of Work  
Julia Schoellbauer

EC8  Teachers’ Recovery Processes: Investigating the Role of Different Breaks from Work for Well-Being and Health among Ageing Teachers  
Anniina Virtanen

EC9  Time Pressure in Daily Working Life  
Roman Prem

EC10  Psychological Fatigue in the Offshore Wind Industry: Causes, Consequences, Prevention and Management  
Stefi McMaster, Fiona Earle, Terry Williams

Symposium: Occupational Health: Absenteeism and Presenteeism  
14:30 - 16:00  B1.03  Chair: Aristides Ferreira

S23  Appraisals of the Economic Crisis and Its Impact on Work-unit Absenteeism: The Moderating Role of Psychological Distress  
Gabriele Giorgi, Jose M. Leon-Perez, Francesco Montani, Mindy K. Shoss

S24  The Mediator Role of Normative and Affective Commitment in the Relationship Between Organisational Resources and Presenteeism  
Bruna Espadinha, Aristides Ferreira

S25  Stay at Home or Go to Work Sick? Leaders’ Presenteeism and Workers’ Emotional Reactions  
Sara Lopes, Aristides Ferreira

S26  A Scenario Study about the Observer Reactions to Absenteeism Versus Presenteeism  
Merce Mach, Eric Patton, Gary Johns

S27  The Nightmare of Getting Sick on Vacation: The Effects of Sickness Presenteeism in the Hospitality Sector Net Promoter Score  
Ana Catarina Correia Leal, Aristides Ferreira

Symposium: From Job Crafting to Life Crafting: Proactively Shaping Work, Studying, Leisure and the Boundaries Between Life Domains  
14:30 - 16:00  B1.04  Chair: Jessica de Bloom & Philipp Kerksieck

S28  Validation of the Study-Related Crafting Questionnaire (SRCQ)  
Anne Mäkikangas, Johanna Rantanen

S29  Work-Sports Enrichment in Amateur Runners: A Diary Study  
Anniek Postema, Arnold B. Bakker, Heleen van Mierlo

S30  Boundary Crafting: Development of an Instrument to Capture Behaviours that Promote a Balance Between Work and Private Life  
Philipp Kerksieck, Rebecca Brauchli, Georg F. Bauer
Crafting Work and Leisure: The “Why” and “How” of Crafting Within and Across Life Domains
Jessica de Bloom, Hoda Vaziri, Louis Tay, Miika Kujanpaeae

The Job Crafting Intervention in Practice: Tips, Tricks and Food for Thought
Machteld Van den Heuvel

14:30 - 16:00  B2.03  Chair: Eva Selenko & Barbara Stiglbauer

S33 The Role of Role Stress in the Job Insecurity – Strain Relationship
Barbara Stiglbauer, Bernad Batinic

S34 Atypical Jobs Undermine Professional Identity and thereby Affect Well-being.
Eva Selenko, Hans De Witte

S35 Dealing with Job Insecurity: Does a Resourceful Work Environment Make a Difference?
Jasmina Tomas, Darja Maslić Seršić, Hans De Witte

S36 Job Insecurity in South Africa’s Higher Education Sector: Towards a Deeper Understanding
Lara C. Roll, Sebastiaan Rothmann, Hans De Witte

S37 The Restorative Effect of Work after Unemployment: Examining Subjective Well-being Recovery through Re-employment
Ying Zhou, Steve A. Woods, Min Zou, Chia-Huei Wu

Oral session: Antecedents of Stress and Wellbeing II
14:30 - 16:00  B2.04  Chair: Weiwei Wang

O31 Associations of Length, Tempo and Timing of Working Hours with Fatigue: A Within-Subject Longitudinal Study.
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O32 Human Resource Management Practices and Employee Engagement
Sónia Gonçalves, Carlos Botelho, Manuela Faia Correia

O33 Entrepreneurship and Well-being: The Role of National Entrepreneurship Norm and the importance of Meaningfulness at Work
Susana M. Tavares, Helena Carvalho, Susana C. Santos, Marc van Veldhoven

O34 Already Exhausted when Arriving at Work? Daily Demands of Working Parents and Their Impact on Start-of-Day Fatigue
Carolin Wendt, Jan Dettmers, Jana Biemelt

O35 Working Time and Recovery in Germany
Vera Engelen, Anne M. Wöhrmann, Corinna Brauner, Alexandra Michel
O36 Employee-oriented Human Resource Practices and Occupational Health: Mediating and Moderating Roles of Job Involvement

Severin Hornung, Thomas Höge, Jürgen Glaser, Matthias Weigl

O37 Association of Social Support at Work and in Private Life with Burnout. Results from a National Survey of French Teachers

Sofia Temam, Fabien Gilbert, Nathalie Billaudeau, Marie-Noël Vercambre-Jacquot

O38 Back to Basics: Organizational Trust and Burnout Among Expert Physicians at General Public Hospitals

Gillie Gabay

O39 Testing the Association of the Burnout Assessment Tool with Job Demands and Resources

Steffie Desart, Wilmar Schaufeli, Hans De Witte

O40 Long-term Profiles of Detached Concern and Their Association with Burnout in Human Service Occupations

Bettina Lampert, Christine Unterrainer, Jürgen Glaser

O39 Burnout and Job Satisfaction among Medical Doctors in Kenya: The Role of Emotional Regulation and Work-Life Balance

Hazel Melanie Ramos, Hilda Akoth Yonga

O40 Influence of a Cognitive Behavioral Training Programme on Burnout: A Study Among High School Teachers

Hugo Figueiredo-Ferraz, Pedro R. Gil-Monte, Ester Grau-Alberola, Bruno Ribeiro do Couto, Jorge López-Vilchez

Coffee

16:00 - 16:15 Reception

Symposium: Complex Designs in Occupational Health: Challenges and Opportunities

16:15 - 17:30 B1.03 Chair: Alfredo Rodríguez-Muñoz & Ana Sanz-Vergel


Jørn Hetland, Arnold B. Bakker, Evangelia Demerouti, Roar Espevik, Olav K. Olsen

S39 Abusive Supervision and Heart Rate: An Experimental Design

Alfredo Rodríguez-Muñoz, Lorena Fuencasta

S40 Longitudinal Relationships Between Job Crafting Behaviours, Job Demands and Four Types of Employee Well-being – Causal, Reversed or Reciprocal Effects?

Jari Hakanen
Symposium: Social Interactions at the Workplace

16:15 - 17:30  B1.04  Chair: Petra L. Klumb & Regina Jensen

S41  Expressive Writing Intervention: A Longitudinal Study
Mirko Antino, Paul Bliese

Symposium: Social Interactions at the Workplace

16:15 - 17:30  B1.04  Chair: Petra L. Klumb & Regina Jensen

S42  A Bottom-up Perspective on Social Stress at Work - A Meta-analytic Approach.
Christin Gerhardt, Maria U. Kottwitz, Sabine Sauter, Alexandra Walker, Nathal de Wijn, Bernd Kersten, Simone Grebner, Norbert K. Semmer, Achim Elfering

S43  Examining the Effect of Poor Psychological Well-Being on Interpersonal Conflict at Work: A Multi-Source Longitudinal Study
Laurenz L. Meier, Myriam Bechtoldt

S44  When Helping Others Hurts: Differential Effects on Need Fulfillment and Meaningfulness
Anita Keller, Sinhui Chong, Courtney Bryant, Chu-Hsiang Chang

S45  Do Positive Interactions at Work Help to be a Better Parent? Results from a Diary Study.
Regina Jensen, Dominik Schoebi, Petra L. Klumb

Symposium: Looking for a Job Despite Feeling Blue – Job Search and Mental Health among Unemployed People

16:15 - 17:30  B2.03  Chair: Karsten Paul & Andrea Zechmann

S46  The Role of Personal Social Network Composition and Structure in Predicting Job Search Outcomes
Ivona Čarapina Zovko, Darja Maslić Seršić

S47  Too Old for Work? Mediated Associations Between Perceived Age Discrimination and Job Search Among Older Unemployed People
Marta Sousa-Ribeiro, Magnus Sverke, Joaquim Luis Coimbra

S48  The Extended Deprivation Model: Do the Latent Functions of Employment Really Correspond to Psychological Needs?
Andrea Zechmann

S49  Marie Jahoda’s Latent Deprivation Model – Meta-Analytic Findings
Karsten Paul, Andrea Zechmann, Bernad Batinic, Klaus Moser

Symposium: The Whole is Greater than the Sum of its Parts: Developing a Framework for Psychologically Healthy Workers

16:15 - 17:30  B2.04  Chair: Arla Day

S50  Supporting Individuals at Work: Putting training into ACTion
Arla Day, Meredith Ivany, Dayna Lee-Baggley

S51  Actively Promoting Civility: Piloting a Group Level Intervention Study
Michael Leiter
Is it Me or Us? The Effects of Individual and Collective Participation in a Cluster-Randomised Organisational Intervention
Karina Nielsen, Mirko Antino, Alfredo Rodriguez-Muñoz, Ana Sanz-Vergel

Investing in Leaders to Foster Psychologically Healthy Workplaces
Nikola Hartling, Arla Day, Samantha Penney

**Oral session: Organizational interventions and development**

16:15 - 17:30  C1.03  Chair: Laura Thompson

O43 In the Middle of Change: Managers and Employees as Change Recipients
Ann-Louise Holten, Gregory R. Hancock, Anne Bøllingtoft

O44 Occupational Taint and Psychological Empowerment Among South African Informal Recyclers in Cape Town
Alexandra Marsh, Chao Nkhungulu Mulenga

O45 Changing Outcomes Through Words: The Missing Interactional Basis of Occupational Health Psychology?
Laura Thompson, Eduardo de Paula Lima, Alina Gomide Vasconcelos, Kevin Teoh, Tom Cox

O46 Effects of Home-based Telework on Employee Wellbeing and Performance: An Intervention Study
Joni Delanoeije, Marijke Verbruggen

O47 Enhancing Adaptive Hybrid Management in Public Hospitals Teresa Carla Oliveira, Francisco Edinaldo Lira de Carvalho

**Oral session: Safety Climate and Safety Culture**

16:15 - 17:30  C1.04  Chair: Sharon Clarke

O48 Occupational Safety Climate Improves Safety Behaviours: What are the Mechanisms? A Longitudinal and Multilevel Study
Margherita Brondino, Margherita Pasini, José Maria Peiró

O49 Safety Knowledge Sharing
Pernille Goodbrand, Charlotte McClelland, Nick Turner, Krista Uggerslev

Marika Melin, Emil Lager, Petra Lindfors

O51 Fit for Flight? Inappropriate Presenteeism Among Swedish Commercial Airline Pilots and its Dangers to Flight Safety
Filippa Johansson, Marika Melin

O52 The Error Aversion Culture: Do Employees Working in this Culture Experience more Negative Emotions and Make More Errors? Maria Luisa Farnese, Roberta Fida

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Symposium: Effects of a Mindfulness-based Intervention for Teachers: A Study on Teacher and Classroom Interactions Outcomes

17:30 - 18:30  B1.03  Chair: Alexandra Marques-Pinto & Joana Sampaio de Carvalho

S54  Effects of a Mindfulness-based Intervention for Teachers on Teachers’ Social and Emotional Competencies, Burnout and Well-being
Sofia Oliveira, Joana Sampaio de Carvalho, Alexandra Marques-Pinto

S55  Effects of a Mindfulness-based Intervention for Teachers on Teachers’ Attentional Processing: An Event-related Potential Study
Maria Amorim, Ana Patrícia Pinheiro

S56  Effects of a Mindfulness-based Intervention for Teachers, on Teachers' Behavioural Classroom Interactions with Students
Carolina Gonçalves, Rita Pereira, Joana Cadima, Teresa Leal, Joana Sampaio de Carvalho, Alexandra Marques-Pinto

Oral session: Individual differences

17:30 - 18:30  B1.04  Chair: Olga Chelidoni

O53  Exploring the Cognitive and Affective Correlates of Work-related Rumination
Olga Chelidoni, Mark Cropley, David Plans

O54  A Conceptual Framework of Personally and Socially Identified Strengths at Work
Hannah Leah Moore, Arnold B. Bakker, Heleen van Mierlo

O55  The Impact of Emotional Intelligence and Emotional Labour on Organisational Citizenship Behaviour: Findings from the Hotel Industry
Angeli Santos, Ana Ayala Cantu

O56  Work Values and Affective Organizational Commitment: A Study on Gen X and Gen Y Blue-collar Workers
Burcu Kumbul Guler, Umit Deniz Ilhan

Oral session: Leadership and Occupational Safety and Health I

17:30 - 18:30  B2.03  Chair: Taru Feldt

O57  How are Intensified Job Demands Associated with Managers' Worries about Leadership?
Taru Feldt, Saija Mauno, Heidi Tsupari, Mari Huhtala, Elina Auvinen

O58  Towards more Sustainable Social Services? A Case Study of Work Environment and Management Control Integration in a Municipal Organisation
Robert Larsson, Wanja Astvik, Jonas Welander

O59  Engaging Leadership and Work Engagement in Public Servants: The Indirect Role of Job-related Affect
Beata Basinska, Ewa Gruszczynska, Wilmar Schaufeli
Oral session: Mental Health and the Workplace I
17:30 - 18:30  B2.04  Chair: Peter Kelly

O60 Implications/Recommendations for Future Workplace Mental Health Interventions in a Policing Context: A Qualitative Study
_Amanda Allisey_

O61 Self-Actualisation in Modern Workplaces – Time-lagged Effects of Job Demands and Matched Resources for Learning, Self-regulation and Flexibility
_Jürgen Glaser, Severin Hornung, Thomas Höge, Christian Seubert_

O62 Cross-lagged Associations between Psychosocial Work characteristics and Depressive Symptoms: Dpanel Models with Fixed Effects
_Julia Åhlin, Linda Magnusson Hanson_

Oral session: Resilience and Wellbeing at Work I
17:30 - 18:30  C1.03  Chair: Gail Kinman

O63 Does Self-Compassion Works at Work? A Diary Study
_Ivana Igic, Roman Prem, Tobias Krieger_

O64 Can Mindfulness Increase Emotional Resilience in Social Workers?
_Gail Kinman, Louise Grant_

O65 Investigating the Relationship Between Resilience and Proactive Coping During Job Displacement
_Clodagh Butler, Deirdre O'Shea, Tadhg MacIntyre_

O66 Toward the Psychologically Healthy Workplace: National Trends as Measured by the American Psychological Association’s Surveys of the U.S. Workforce
_David Ballard_

EAOHP General Assembly (Open session)
17:30 – 18:30  C1.04  Chair: Sergio Iavicoli

EAOHP Evening Reception
18:45 - 20:30  Building 2 Terrace
Thursday, September 6th 2018

Registration
08:00 - 08:30  Reception

Symposium: In Agreement? Impact of Leader-Team Agreement in Organisational Interventions
08:30 - 09:30  B1.03  Chair: Henna Hasson & Ulrica von Thiele Schwarz

S57 Does Seeing Eye to Eye with your Leader Influence Training Outcomes? A Multi-source, Multi-level Quasi-Experiment
Karina Nielsen, Susanne Tafvelin, Ulrica von Thiele Schwarz, Henna Hasson

S58 Leader-Team Perceptual Distance Affects Outcomes of Leadership Training: Examining Safety Leadership and Follower Safety Self-Efficacy
Susanne Tafvelin, Karina Nielsen, Johan Simonsen Abildgaard, Anne Richter, Ulrica von Thiele Schwarz, Henna Hasson

S59 Understanding How Agreement on Organisational Implementation Climate Affects Leaders’ Ability to Develop Their Implementation Leadership
Anne Richter, Iris Blotenberg, Ulrica von Thiele Schwarz, Henna Hasson

Symposium: Employees' Worries and Feelings of Guilt in the Work-family Interplay: Strenuous Experiences from an Everyday and a Career-related Perspective
08:30 - 09:30  B1.04  Chair: Bettina S. Wiese & Anna M. Stertz

S60 Work-Family Conflict and Guilt – Only a Women’s Issue?
Denise Messerli, Laurenz L. Meier, Eunae Cho, Myriam Bechtoldt

S61 Perceived Organizational Work-family Culture and Fathers’ Worries during Parental Leave: A Diary Study
Anna M. Stertz, Lisa K. Horvath, Bettina S. Wiese

S62 Setting Inter-domain Boundaries: Does It Affect the Compatibility of Career Strivings and Family-related Goals?
Ruth Noppeney, Anna M. Stertz, Bettina S. Wiese

Oral session: Gender and Diversity
08:30 - 09:30  B2.03  Chair: Juliet Hassard

O67 Women Underrepresentation on the Job: A Case Study in the Chinese Pharmaceutical Industry
Fei Zhao, Maria Gabriela Silva

O68 Integrating Variable- and Person-Oriented Approaches to the Study of Psychosocial Risks Factors for Work-Related Stress: A Gender Perspective
Valerio Ghezzi, Claudio Barbaranelli, Valeria Ciampa, Cristina Di Tecco, Roberta Fida, Barbara Ghelli, Benedetta Persechino, Matteo Ronchetti, Sergio Iavicoli
O69  Occupational Psychocardiology: Why There Is a Need for a Gender-perspective
Eva Langvik, Håvard Karlsen, Sylvi Thun, Torhild Anita Sørengaard, Trond Viggo Grøntvedt, Ingvild Saksvik-Lehouillier

O70  Diversity and Inclusion from a JD-R Model Perspective
Janna Behnke, Evangelia Demerouti, Sonja Rispens

Oral session: Job Crafting
08:30 - 09:30  B2.04  Chair: Arnold Bakker

O71  A Model Explaining the Predictors of Job Crafting. Testing the Theory of Planned Behaviour Through a Latent Change Score Approach
Arianna Costantini, Evangelia Demerouti, Andrea Ceschi, Riccardo Sartori

O72  The Work-home Interface: Lowering Conflict and Fostering Enrichment via a Job Crafting Micro-intervention
Lorenz Verelst, Rein De Cooman, Colette Van Laar, Loes Meussen

O73  Job Crafting in Contexts of Autonomy and Dependence
Lotta Harju, Maria Tims

O74  Job Crafting Towards Your True Self? The Associations Between Job Crafting, Authenticity, and Employee Well-being
Veerle Brenninkmeijer, Anneke den Hartog

Oral session: Resilience and Wellbeing at Work II
08:30 - 09:30  C1.03  Chair: Mayanna Duncan

O75  Poor Quality and Quantity of Sleep: The Role of Managerial Level and Impact on Well-Being
Victoria Culpin

O76  Resilience Training for Medical Students: The ‘Resilience Challenge’ Serious Videogame
Myanna Duncan, Katerina Hulova, Jennifer Jackson, Janet Anderson

O77  Work Ability in Employees with Migraine: The Role of Illness Perceptions and Coping
Margot van der Doef, Karin van der Hiele

O78  Career Characteristics and Career Resilience
Ellen Peeters, Marijke Verbruggen, Marjolein Caniëls

Oral session: Work-life Balance and Work-Family Conflict I
08:30 - 09:30  C1.04  Chair: Roxane Gervais

O79  Examining the Mediating Role of Heavy Work Investment Between Work Environment and Work-to-Family Conflict: A Longitudinal Study
Audrey Babic, Florence Stinglhamber, Marie Barbier, Isabelle Hansez
When Mailing Means Failing: Studying the Effect of Workplace Telepressure on Family Role Performance
Niels Gadeyne, Marijke Verbruggen

How Leisure Crafting Influences Family-work Enrichment and Individuals’ Well-being and Job Performance: A Moderated Mediation Model
Sandra María Manzanares Gavilán, Inés Martínez-Corts, Francisco José Medina Díaz

Symposium: Workplace Interventions: Implications for Worker Health and Well-being
09:30 - 10:45 B1.03 Chair: Leslie Hammer

S63 Retail Employees’ Personal Technology Use On and Off the Job: Validating Cell Phone Behaviours for Interventions
Ellen Ernst Kossek, Kyunghee Lee, Douglas Giddings, Todd Bodner

S64 How to Improve Job Demands and Resources: The Effects of a Crafting Intervention among Healthcare Professionals
Evangelia Demerouti

S65 Two Job Crafting Intervention Studies: Increasing Person-job Fit and Work Engagement of Aging and Busy Employees
Dorien Kooij, Marianne Van Woerkom, Evy Kuijpers

S66 Future Paths for Workplace Age Intervention Research
Donald Truxillo

Symposium: Work-life Balance – New Perspectives on an Enduring Problem
09:30 - 10:45 B1.04 Chair: Gail Kinman & Almuth McDowall

S67 Compassion, Recovery and Work-life Outcomes in Child Protection Social Workers
Gail Kinman

S68 The Experience of Women Police Officers Investigating Sexual Violence – Implications for Work-life Balance Support
Adina Bozga

S69 Are We Less Good at Multitasking Than We Think?
Almuth McDowall, Gunadi Hanafi

S70 Improving Work-nonwork Balance by Conveying ICT-related Boundary Management Techniques: An Intervention
Svenja Schlachter, Ilke Inceoglu, Almuth McDowall, Mark Cropley
Symposium: Translating Research into Practice: Understanding Psychosocial Risk Management in Context
09:30 - 10:45 B2.03  Chair: Karina Nielsen

S71  Policy and Practice in Tackling Psychosocial Risks in the European Union - Evidence from the ESENER-2 survey
Malgorzata Milczarek

S72  The Danish Model in Action. Co-creation of Wellbeing and a Good Psychosocial Work Environment
Jan Lorentzen, Peter Dragsbaek

S73  Authority and the Social Partners – the Two Columns in the Danish Regulation of Psychosocial Work Environment
Signe Bergmann, Jan Lorentzen, Peter Dragsbaek

S74  Managers as the Key in Promoting a Better Psychosocial Work Environment
Signe Bergmann

Symposium: The Crossover Effects of Work: A Focus on Physical Activity
09:30 - 10:45 B2.04  Chair: Sven van As

S75  Leisure Time Physical Activity as a Mechanism Linking Job Characteristics to Well-Being: An Ambulatory Assessment Study
Jan Häusser, Sascha Abdel Hadi, Andreas Mojzisch

Sven van As, Fiona Earle, Debby Beckers, Harm Veling, Stefi McMaster, Michiel Kompier, Sabine Geurts

S77  Daily Associations between Work-related Exhaustion and Exercise: The Moderating Role of Intrinsic Motivation and Habit
Madelon van Hooff

S78  Multidimensional Fatigue After-Effects Following Mental and Physical Work
Fiona Earle, Jonathan Huddlestone

Oral session: Ageing and the workplace
09:30 - 10:45 C1.03  Chair: Maria Karanika-Murray

O82  Ageing Workers: Health and Wellbeing in Professional Drivers
Sheena Johnson, Lynn Holdsworth, Helen Beers, Nina Day

O83  Experiences of Working after Retirement: A Qualitative Study in the Swedish Health Care Sector
Marta Sousa-Ribeiro, Katinka Knudsen, Petra Lindfors, Magnus Sverke
Workplace Practices Predict Retirement Intentions via Three Critical States
Maria Karanika-Murray, Natalie Harrison, Thom Baguley

The Role of Workplace Practices for Older Workers’ Work Ability: A Case Study at Two Organisations in the UK
Dimitra Gkiontsi, Maria Karanika-Murray, James Hunter, Andromachi Tseloni

Generational Differences in the Workplace: Myth or Reality?
Roxane L. Gervais, Prudence Millear

Oral session: Antecedents of Stress and Wellbeing III
09:30 - 10:45 C1.04 Chair: Michael Ertel

Rumination as a Mediator Between Work-stress and Sleep Disturbances Among British School-teachers
Leif Rydstedt, Mark Cropley

Antecedents of Stress and Well-being: A Comparison Between Migrant and Native Workers in Spain
Francisco D. Bretones, Stavroula Leka, Aditya Jain, Pedro A. Garcia-Lopez

Multiple Bosses, Incivility and Health: The Positive Effect of Role Clarity
Donatella Di Marco, Silvia Silva, Susana M. Tavares, Ana Margarida Passos

From 8-h Shifts to 12h-Shifts: What Advantages for Occupational Health? A Longitudinal Study in an Intensive Care Unit
Sandrine Schoenenberger, Damien Ramez

How Mindfulness Influences the Relationship Between Affective Daily Events and Well-being at Work
Ana Junça-Silva, António Caetano, Rita Rueff-Lopes

Coffee
10:45 - 11:00 Reception

Symposium: Conducting Organisational Interventions in Different Healthcare Contexts: Fitting the Intervention to the Context
11:00 - 12:15 B2.03 Chair: Karina Nielsen

Implementing Organizational Interventions in a Nordic Context – Experiences from the ARK Intervention Programme
Marit Christensen, Eyvind Helland, Siw Tone Innstrand, Per Øystein Saksvik, Karina Nielsen

Implementation and Assessment of a Surveillance System for the Prevention and Treatment of Work-related Stress in an Italian Paediatric Hospital
Maria Rosaria Vinci, Guendalina Dalmasso, Francesco Gilardi, Annapaola Santoro, Vincenzo Camisa, Natalia Bianchi, Massimiliano Raponi, Silvia Rongoni, Salvatore Zaffina
Symposium: Interactive Effects of Job Crafting, SOC Strategies, and Playful Work Design on Work Engagement, Performance and Sustainable Work Ability

11:00 - 12:15  B1.04  Chair: Filipa Rodrigues

S83 Interactive Effects of Daily Job Crafting and SOC Strategies Use on Work Engagement, Burnout and Aging Satisfaction
Filipa Rodrigues, Miguel Pina e Cunha, Filipa Castanheira, Hannes Zacher

S84 Job Crafting and Playful Work Design: A Daily Diary Study
Arnold B. Bakker, Jørn Hetland, Olav K. Olsen, Roar Espevik

S85 The Mediating Role of Job Crafting in the Relationships Between Relational Job Characteristics and Work Engagement
Alda Santos, Filipa Castanheira, Maria José Chambel

S86 Successful Aging and Job Crafting to Sustain at Work: Examining Relations Between Job Crafting and Work Ability of Healthcare Workers
Annet de Lange, Karen van Dam, Karen Pak, Marit Christensen, Lise Loveseth, Eghe Osagie, Tjerry Verhoeven

Symposium: The Challenges of Doing Burnout Interventions

11:00 - 12:15  B1.03  Chair: Anthony Montgomery & Margot Van der Doef

S87 The Effectiveness of Burnout Interventions for Health Care Professionals: A Meta-Analysis
Nathal de Wijn, Chris Verhoeven, Margot van der Doef

S88 Assessing the Effects of a Burnout Intervention on Recovery, Psychological Detachment, Stress-Perception and Burnout.
Jessica van Wingerden, Daantje Derks

S89 Intervening on Burnout in Complex Organisations – the Process of an Action Research in the Hospital
Patrícia Costa, Sara Ramos, Ana Margarida Passos, Silvia Silva, Ema Sacadura-Leite

S90 Using Action Research to Address Burnout and Change Work Practices: Reflections on Success and Failure
Anthony Montgomery, Spanu Florin Spanu, Adriana Baban, Irina Todorova, Roumiana Gotseva-Yordanova, Yulia Panayotova, Dragan Mijakoski, Karolina Doulougeri
### Symposium: Sickness Presenteeism: Practical and Theoretical Developments

**11:00 - 12:15  B2.04**  
**Chair:** Caroline Biron & Maria Karanika-Murray

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<td>Preliminary Validation of a Taxonomy of Presenteeism Behaviour</td>
<td>Caroline Biron, Maria Karanika-Murray</td>
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<td>S93</td>
<td>Sickness Presenteeism in a UK sample: An Exploration of Differences According to Health Condition and Measurement Approach</td>
<td>Zara Whysall</td>
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<td>S94</td>
<td>A Taxonomy of Presenteeism Behaviour: Balancing Health and Performance Demands</td>
<td>Maria Karanika-Murray, Caroline Biron</td>
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### Oral session: Interpersonal relationships

**11:00 - 12:15  C1.03**  
**Chair:** Norbert Semmer

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<td>“Good manners” at Work: The Mediating Role of Civility Between Structural Empowerment and Mental Health</td>
<td>Luisa Ribeiro, Martina Nitzsche, Tito Laneiro</td>
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<td>O93</td>
<td>The Relationship Between Workplace Civility, Efficacy Beliefs and Work Engagement in Portuguese Hospitality Workers</td>
<td>Martina Nitzsche, Luisa Ribeiro, Tito Laneiro</td>
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<td>O94</td>
<td>Beyond Differences in Opinions: Towards a Theory of Micro-Coordination Conflict</td>
<td>Norbert K. Semmer, Sandra Keller, Franziska Tschan</td>
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<td>O95</td>
<td>Workplace Bullying and Workplace Violence as Risk Factors for Cardiovascular Disease: A Multi-cohort Study</td>
<td>Tianwei Xu, Linda Magnusson Hanson, Theis Lange, Liis Starkopf, Hugo Westerlund, Ida E.H. Madsen, Jaana Pentti, Reiner Rugulies, Sari Stenholm, Jussi Vahtera, Åse M Hansen, Marianna Virtanen, Mikä Kivimäki, Naja H Rod</td>
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<td>O96</td>
<td>Role Clarity, Supervisor Conflict, and Employees’ Job Performance: The Moderating Effect of Transformational Leadership and Shared Mental Model</td>
<td>Ying Liu, Cong Liu, Kimberly Rubenstein</td>
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### Oral session: Leadership and Occupational Safety and Health II

**11:00 - 12:15  C1.04**  
**Chair:** E. Kevin Kelloway

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<td>O97</td>
<td>The Definition and Effects of Leaders' Safety Hypocrisy</td>
<td>E. Kevin Kelloway, Jane Mullen, Timur Ozbilir, Jennifer Wong</td>
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A Person-Oriented Approach to Mixed Leadership and Health
Katharina Klug, Annika Krick, Jörg Felfe

The Potential Impact of Leadership Style on Work Engagement through Job Crafting and Job Resources
Sandra Corso de Zúñiga, Jurayma Romero, Rocio Rodríguez, Daniel Ramos

Sharon Clarke

Keynote: A Review of Work-Family and Job Stress Workplace Interventions within Total Worker Health and Occupational Health Psychology Frameworks
12:15 - 13:00 Grande Auditorio Chair: Gail Kinman

K2 A Review of Work-Family and Job Stress Workplace Interventions within Total Worker Health and Occupational Health Psychology Frameworks
Leslie Hammer

Lunch
13:00 - 14:30 Lunch Building

Poster session: Organisations, groups, culture and climate
13:00 - 14:30 Lunch Building

P64 Psychophysiological Symptoms Predictive of Stress in Mexican Immigrants in Canada
Blanca Elizabeth Pozos Radillo, María de Lourdes Preciado Serrano, Ana Rosa Plascencia Campos, Martín Acosta Fernández, María de los Ángeles Aguilera Velasco

P65 Foreign-born Health Professionals' Experiences of Stress related to Information Systems in Finland
Tarja Heponiemi, Tuulikki Vehko, Laura Hietapakka, Salla Lehtoaro, Hannele Hyppönen, Anu Kählanen, Anna-Mari Aalto

P66 Spaniards in the United Kingdom: Psychosocial Risks in Skilled Emigrants
Francisco D. Bretones, Rebeca R. Aragon

P67 Exploring Organisational and Social Safety Climate among First Line Managers in Municipal Elderly care in Sweden
Cecilia Cervin

P68 Cultural Conceptions of the Meaning of Fatigue of the Firemen in a Station of Zapopan, Jalisco, México in 2017
Jose Miguel Antuan Melendez Lopez, Monica Contreras Estrada, Maria de la Luz Benitez Venegaz
Organisational Citizenship Behaviours: Preliminary findings from Civic Skills, Social Justice, Political Efficacy and Political Behaviors in Chilean workers
Edmundo Varela

Applying Models of Behaviour Change to Overcome Organisational Conflict and Increase Collaboration in the Oil and Gas sector.
Ricardo Twumasi, Natascha Mueller-Hirth, Charlie Booth

An Optimized Measure of Human Resource Management Practices
Sophie Drouin Rousseau, Claude Fernet, Stéphanie Austin

Configural, Metric, and Scalar Invariance of Colquitt’s Organisational Justice Scale Across Workers Belonging to Different Industrial Sectors in Chile
Viviana Rodríguez, Karla Carvajal

Socio-Economic Factors of Safety Climate
Stacy A. Stoffregen, Frank B. Giordano, Jin Lee

Psychosocial Safety Climate and its Assessment in Germany – Preliminary Results
Maren Formazin, Michael Ertel

Card Sorting: A New Method of Measuring Perceptions of Safety Culture
Tabatha Thibault, Brianna Cregan, Keri Harvey, Mark Fleming

The First Steps of Adaptation and Validation of Psychosocial Safety Climate for Use in Sweden
Hanne Berthelsen, Tuija Muhonen

Intricacies of Virtual Teams: An Insight into the Performance and Wellbeing of Virtual Employees in the IT sector
Rahul Goel

The Effects of Organisational Downsizing on Surviving-Employees’ Mental Health
Maria D. Villaplana Garcia, Guillermo Soriano Tarín

The Importance of Workplace Climate for Workability
Maria Karanika-Murray, Natalie Harrison, Thom Baguley, Juhani Ilmarinen

Poster session: Interventions at work
13:00 - 14:30 Lunch Building

Work Self-redesign: Interactive Effects of Task Autonomy, Job Crafting, and Idiosyncratic Deals on Quality of Working Life and Occupational Health
Severin Hornung, Thomas Höge, Denise Rousseau

Employee Authenticity: The Roles of Job Crafting, I-deals and Satisfaction of Basic Psychological Needs
Wendy Woudenberg, Nicole Hoefsmit, Karen van Dam

Nudging and Acceptance-commitment Therapy: Cognitive Aspects of a Mobile Application for Stress Management
Silvia Riva, Paul Hampton, Ezekiel Chinyio
P83 The Health Help-point for Managing Work-related Stress Risk in Complex Health Facilities
Guendalina Dalmasso, Silvia Rongoni, Maria Rosaria Vinci, Salvatore Zaffina

P84 Coaching as a Leadership Development Tool in a Multicultural Organisation in the GCC: A Practitioner’s View
Alia Al Serkal

P85 A Play at Work Intervention: What Are the Benefits?
Liana Fourie, Grizelle Els, Leon De Beer

P86 How Can Continuous Quality Improvement Tools Support Systematic Work Environment Management? Perspectives from Practice and Theory
Annika Nordin, Michael Ostrelius

P87 No Leader is an Island: Contextual Antecedents to Line Managers’ Constructive and Destructive Leadership during an Organisational Intervention
Robert Lundmark, Karina Nielsen, Henna Hasson, Ulrica von Thiele Schwarz, Susanne Tafvelin

P88 Experiences of Decision Making and Incentives to Use Stamina – An Organisational Model Focusing on Systematic Work Environment Management
Therese Hellman, Fredrik Molin, Tomas Eriksson, Magnus Svartengren

P89 The Role of Workaholism in the Relationship Between Daily Workload and Strain Experiences
Malissa Clark, Katelyn Sanders, Melissa Robertson

P90 Effect of Cognitive - Emotional Training on Labour Satisfaction and Occupational Wear of Nursing Staff
Ana Rosa Plascencia Campos, Blanca Elizabeth Pozos Radillo, María de Lourdes Preciado Serrano, Ana Catalina Murguía Ramírez

P91 Collaborative Supervision of One-time Telephone Counseling in a Japanese EAP
Haruo Nomura

P92 Results of a Web-based Stress Management Training: A Randomised Controlled Pilot Study
Petra Lindfors, Caroline Johansson, Victoria Blom

P93 Internet-delivered Treatment for Work-related Stress (iMARS)
Morten Vejs Willert, Gitte Laue Petersen, Trine Eilenberg, Ditte Hofmann Jensen, Lisbeth Frostholm, Ane Marie Thulstrup

P94 An Assessment to Solutions Approach to Workplace Well-Being in a Large Public Sector Organization
Tzvetanka Dobreva-Martinova, Gary Ivey

P95 Writing Exercises Between Coaching Sessions to Support Psychological Capital
Andrea Fontes, Silvia Dello Russo

P96 Stress Management Training for Law Enforcement Professionals
Darius Turc
Poster session: Burnout
13:00 - 14:30 Lunch Building

P97 Investigating the Contributions of Compassion Fatigue, Compassion Satisfaction as Predictors of Burnout: A Cross-Sectional Study with Theatre Nurses
Teresa C. D’ Oliveira, Edna Semwezi

P98 The Effects of Employee Burnout on Customers: An Experimental Approach
Hadar Nesher Shoshan, Sabine Sonnentag

P99 Prevalence of Burnout and Risk Factors in Public Bank Employees in Bursa
Deniz Ilknur Ardali, Serap Gokmen, Alpaslan Un, Mustafa Erdogdu, Mustafa Cebeci, Frank Van Dijk, Ahmet Ozu, Mustafa Kemal Basarali, Berna Ayaka Serifi

P100 Good or Bad Demands: Is One Man's Meat Another Man's Poison?
Peikai Li, Toon Taris, Maria Peeters

P101 The Perception of Occupational Burnout from the Perspective of Employers from the Education, Higher Education, Medical Care Sectors in Poland
Magdalena Slazyk-Sobol, Dorota Kwiatkowska-Ciotucha, Urszula Zaluska

P102 Burnout Among Portuguese, Spanish and Brazilian Nurses
Cristina Queirós, Elisabete Borges, Pilar Mosteiro, Patricia Baptista, Margarida Abreu, Vanda Felli

P103 The Impact of Humor Styles on Adaptive Performance via Burnout
Amélia-Rita Monteiro, Pedro Neves

P104 The Reliability and Validity of the Burnout Clinical Subtypes Questionnaire (BCSQ-36) in Latvia
Marija Abeltina, Malgozata Rascevska, Ieva Stokenberga

P105 Cognitive Difficulties at Work and Exhaustion: Do Job Demands Play a Role?
Marina Horvat, Sara Tement

P106 Burnout in Portuguese Veterinary Doctors
Fatima Iobo, Cristina Queirós, Eduardo Tavares

P107 Nursing Workers' Burnout in Cardiac Pediatric Intensive care
Renata Tito, Patricia Baptista, Fábio Silva, Luisa De Sordi

P108 The Effect of Training in Psychosocial Factors on Occupational Burnout and Stress at a Government Institution in Mexico
Maria de Lourdes Preciado Serrano, Blanca Elizabeth Pozos Radillo, Ana Rosa Plascencia Campos, Paula González Sánchez

P109 Emotional Exhaustion in Professionals of a Health Institution in Guadalajara, Mexico
Laura Patricia Díaz Romero, María de Lourdes Preciado Serrano, María Luisa Avalos Latorre

P110 Med-Stress: Internet Intervention Aimed at Reducing Job Stress and Job Burnout Among Medical Professionals.
Ewelina Smoktunowicz, Magdalena Lesnierska, Roman Cieslak, Per Carlbring, Gerhard Andersson
I am... unemployed! Stress, Coping and Employment Expectations Related with Self-Categorisation of Unemployed.  
Ieva Stokenberga

Technostress: A Conceptual Model to Help Understand, Reduce and Prevent Technology-related Stress  
Liza M. C. van Dam, Joep van den Eerenbeemt, Martine P. van Egmond, Laurie M. Hermans, G. Lennart van der Zwaan

Psychological Flexibility Moderates Between Professional Isolation and Cognitive Weariness among Early-career Psychologists and Social Workers  
Jaco Pienaar, Stefan Holmström, Esther Hauer, Ingrid Schele

Illegitimate Tasks and Well-being at Work: The Power of Job Resources  
Sylvi Thun, Marit Christensen

Decision Made, Good Feelings Fade? Effects of Noise and Multitasking on Decision Confidence and Wellbeing  
Marc Syndicus, Bettina S. Wiese

Linking Quantitative Demands to Offshore Workers’ Stress: The Role of Personal and Job Resources  
Janika Mette, Marcial Velasco Garrido, Alexandra M. Preisser, Volker Harth, Stefanie Mache

Propensity for Presenteeism and Sickness Absenteeism in Nurses Working with Older Adults  
Luke Anthony Fiorini, Jonathan Houdmont, Amanda Griffiths

Organization-Based Self-Esteem (OBSE): A Buffer or Amplifier of the Job Insecurity-Health Association?  
Morteza Charkhabi

Qualitative and Quantitative Job Insecurity: Testing the Building Blocks Approach  
Ieva Urbanaviciute, Jurgita Lazauskaite-Zabielske, Birute Pociute, Hans De Witte

Examining the Relationship Between Job Insecurity Today and Financial Insecurity in Retirement: The Moderating Role of Caregiving Responsibility  
Samantha Lacey, Janet Barnes-Farrell, Ragan Decker, Alec Calvo, Sarah Berger, Alicia Dugan

Exploring the Nature and Consequence of Leader and Work Group Actions in the Face of Understaffing  
Winny Shen, Kirk Chang, Kuo-Tai Cheng, K. Yourie Kim

Environmental Hazards and Work Outcomes in the Shipyard? A Study among Shipyard Workers in Spain  
Adela Reig Botella, Annet de Lange, Sarah Detaille, Jaime López Golpe
Human Factors and Ergonomics in Health Care: A Review of Literature and New Lines of Research

Silvia Rongoni, Salvatore Zaffina, Francesco Gilardi, Daniela Casasanta, Guendalina Dalmasso

A Meta-Analytic Examination of Curvilinear Workload-Strain Relationships

Shani Pindek, Winny Shen, Cheryl Gray, Paul Spector

The Numbing Effect of Experience in Hazardous Work among Temporary Workers

Frank B. Giordano, Stacy A. Stoffregen, Leah S. Klos, Jin Lee

Knowledge Work Characteristics Are Positively Related to Proactive Work Behaviour - But Only for Employees with Low Sensory Processing Sensitivity

Antje Schmitt, Simone Christine Deibel

European Research Council

13:30 - 14:30  B1.03

Sp2  Funding opportunities at the European Research Council for top scientists from anywhere in the world

Diana Francisco

Symposium: Rapid Changes in Today’s Workplace: Risks and Challenges for Workers’ Health

14:30 - 16:00  B1.03  Chair: Bettina Kubicek & Roman Prem

S95  This Job is Killing Me: Rumination Links Work Intensification to Health Outcomes

Katja Kerman, Sara Tement, Roman Prem, Christian Korunka

S96  Cognitive Demands of Flexible Work: Measuring Demands to Structure, Coordinate, and Plan in Flexible Work Arrangements

Roman Prem, Bettina Kubicek, Vera Baumgartner, Lars Uhlig, Christian Korunka

S97  The Challenge of Flexibility – An Investigation into Learning Processes and Strain Reactions Resulting from Cognitive Demands of Flexible Work

Lars Uhlig, Bettina Kubicek, Roman Prem, Christian Korunka

S98  The Daily Consequences of Work-Related Smartphone Use for Employees’ Regulatory Resources: A Self-Control Perspective

Lilian Gombert

S99  Don’t Leave your Heart at Work: Work-home Boundary Management and Cardiac Health

Sara Tement, Katja Kerman
### Symposium: 'Deconstructing Recovery: Why, How, and When It Occurs' (Part I)

**14:30 - 16:00 B1.04**  
**Chair: Ana Sanz-Vergel & Despoina Xanthopoulou**

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<tr>
<td>S100</td>
<td>Recovery and Well-being of On-call Workers</td>
<td>Carla Ziebertz, Madelon van Hooff, Debby Beckers, Michiel Kompier, Sabine Geurts</td>
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<tr>
<td>S101</td>
<td>The Positive Spirals Between Domains and Work Colleagues: The Role of Relaxation</td>
<td>Alfredo Rodríguez-Muñoz, Gerardo Montes-Maroto, Mirko Antino, Paula Ruiz-Zorrilla</td>
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<tr>
<td>S103</td>
<td>Is Work-related Rumination Associated with deficits in Executive Function Skills?</td>
<td>Mark Cropley, Hannah Collis</td>
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### Symposium: Age and Work Activity: Building Health and Experience Over Time

**14:30 - 16:00 B2.03**  
**Chair: Sara Ramos & Serge Volkoff**

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<td>S104</td>
<td>Work and Action in Psychodynamics of Work</td>
<td>Duarte Rolo</td>
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<td>S105</td>
<td>The Circulation of Knowledge Within Work Collectives: Challenges for Performance and Health in the Face of Changes in the Workplace</td>
<td>Jeanne Thébault, Catherine Delgoulet, Valérie Zara-Meylan</td>
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<tr>
<td>S107</td>
<td>Health and Competences along Professional Career</td>
<td>Serge Volkoff, Corinne Gaudart, Willy Buchmann</td>
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<td>S108</td>
<td>AGE Survey: A Tool to Support the Study and Intervention on Health and Age at Work</td>
<td>Sara Ramos, Céline Mardon, Helena Carvalho</td>
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### Symposium: Relationships Between Working Conditions, Wellbeing and Performance in the Healthcare Sector: Building on and Extending the Existing Research Evidence

**14:30 - 16:00 C1.03**  
**Chair: Kevin Teoh & Georg F. Bauer**

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<tr>
<td>S109</td>
<td>The Key Job Resources and Demands of Nursing Staff: A Narrative Meta Review</td>
<td>Sylvia Broetje, Gregor J. Jenny, Georg F. Bauer</td>
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Successful Aging at Work? The Influence of Individual Difference Variables and Person-Environment Fit in Relation to Healthcare Workers' Work Ability
Annet de Lange, Sarah Detaille, Karen Pak, Filipa Rodrigues, Trude Furunes, Guus Heuvelink

The Role of Organisational Justice in Healthcare Organisations: How to Enhance Team Performance through Team Resilience and Horizontal Trust
Isabella Meneghel, Juana Olvera, Susana Llorens, Marisa Salanova

Work-related Wellbeing as a Mediator Between Hospital Doctors’ Psychosocial Working Conditions and Quality of Care: A Multilevel Perspective
Kevin Teoh, Juliet Hassard, Tom Cox

Goal Pursuit in Organisational Health Interventions: The Role of Team Climate, Outcome Expectancy, and Collective Implementation Intentions in Healthcare
Anja Lehmann, Rebecca Brauchli, Georg F. Bauer

Symposium: Why Do People Extend and Intensify Their Working Hours? Antecedents and Outcomes of Self-Endangering Work Behaviour
14:30 - 16:00 B2.04
Chair: Michaela Knecht & Nicole Deci

Facets and Correlates of Indirect Control
Maida Mustafic, Michaela Knecht, Andreas Krause

Self-endangering Work Behaviours to Overcome Time Pressure - The Role of Personality Traits
Nicole Deci

Daily Diary Study on the Association Between Workload, Active Coping Strategies (Self-Endangering Work Behaviour and Self-Empowering Work Behaviour) and Wellbeing
Michaela Knecht, Jonas Mumenthaler, Andreas Krause

Abusive Supervision and the Extension of Working Hours: Investigating the Mediating Role of Workload
Maie Stein, Sylvie Vincent-Höper

Never off Duty? – The Role of Supervisors in the Relationship between Extended Availability and Subordinate Well-being
Jana Biemelt, Nicole Deci, Christiane R. Stempel, Jan Dettmers

Oral session: Psychosocial Interventions
14:30 - 16:00 C1.04
Chair: Birgit Greiner

The Implementation of Stress Management Interventions (SMIs) in Polish Enterprises
Dorota Molek-Winiarska
O102  Psychological Interventions of Insomnia among Shift Workers: An RCT Trial in Occupational Health Services
Heli Järnefelt, Mikko Härmä, Mikael Sallinen, Teemu Paajanen, Jussi Virkkala, Kari-Pekka Martimo, Christer Hublin

O103  Laugh a Little: Examining the Respite Potential of a Humour Intervention on Daily Self-control, Performance and Well-being
Deirdre O'Shea, Eoin O'Callaghan, Kate Maxwell

O104  The Implementation and Evaluation of the JOBS Programme in Two Communities in South Africa
Rachele Paver, Sebastiaan Rothmann, Anja Van den Broeck, Hans De Witte

O105  A Meta-analysis of Mental Health, Organisational, and Work-specific Psychosocial Factors as Predictors of Sickness Absence Among Nursing Personnel
Basem Gohar, Michel Larivière, Céline Larivière, Nancy Lightfoot, Elizabeth Wengofoer, Behdin Nowrouzi-Kia

O106  Caregivers’ Co-Production in Treatment: First Evidences of Relationships Among Co-Executing and Co-Planning and Their Possible Determinants
Maria Luisa Farnese, Gabriella Antonucci, Roberta Fida

Coffee
16:00 - 16:15  Reception

Early Career Showcase 2: Technostress and Technological Developments and Intervention/Workplace Changes and Innovations
16:15 - 17:45  C1.04  Chair: Birgit Greiner

EC11  Technostress: What People See is Just the Tip of the Iceberg
Liza M. C. van Dam, Joep van den Eerenbeemt, Laurie M. Hermans, Martine P. van Egmond, G. Lennart van der Zwaan

EC12  Dealing with Technostress: Action Research to Test Technostress Interventions Based on Recent Insights in Dutch Research
Joep van den Eerenbeemt, Liza M. C. van Dam, Martine P. van Egmond, Laurie M. Hermans, G. Lennart van der Zwaan

EC13  Do Wearable Devices Enhance Cognitive Performance of Workers? Theoretical Supports from Technology Acceptance Model
Clément Belletier, Morteza Charkhabi, Gustavo Pires de Andrade Sylva, Kevin Ametepe, Mathieu Lutz, Marie Izaute

EC14  Health Professionals as a Condition for Professionalism in the Social Work
Tatjana Roncolato Donkor

EC15  Implications of Empirical Research on Transformational Leadership and Coaching in the Organizational Environment
Werianney Santiago, Maria Tereza Tomé Godoy, Priscilla Paiva Medeiros Dias, Elisabeth Lemes de Sousa Martins, Helenides Mendonça
Clarifying the Promise of Workplace Mindfulness Training
Larissa Bartlett, Kristy Sanderson, Michelle Kilpatrick, Angela Martin, Amanda Neil

Engagement in Action on the Example of Activities Aimed at Self-Realisation or at Helping Other People
Agnieszka Bożek

A Closer Look into the Dynamics of Work Engagement: Why Psychological Capital of Employees is so Important
Aleksandra Penza

Business Suits: Do They Deliver More than Just 'Smart' Appearance in Organisational Situations? Examining Their Effects on Cognition and Emotions
Anne Turner

Symposium: Craft Industry: Small but Healthy?!
16:15 - 17:45  B1.03  Chair: Christine Busch

S119 Healthy Small Business through Networking
Yanina Mallok

S120 Working and Living Together – Creating Life Domain Balance by Copreneurs
Romana Dreyer

S121 Team Resources in Small Craft Business
Danièle Wittkopf

S122 Health Promotion for Craftworkers - The Role of Working Conditions in Small Businesses
Nicole Deci

S123 Blended-learning Coaching for Entrepreneurial Couples: A Realist Evaluation Study
Christine Busch, Romana Dreyer

Symposium: You Can Walk Away, But You Can Never Leave… Work-related Smartphone Use During Off Job Hours: Implications and Interventions
16:15 - 17:45  B1.04  Chair: Daantje Derks & Michelle Van Laethem

S124 Work-related ICT use during Evenings, Psychological Detachment and Recovery State: A Daily Diary Study
Svenja Schlachter, Ilke Inceoglu, Almuth McDowall, Mark Cropley

S125 Does Late-Night Use of Mobile Devices Impair Sleep? – An Ambulatory Diary Study
Jana Kühnel, Klaus G. Melchers
A Diary Study on Telepressure, Work-Related Smartphone Use and Psychological Detachment: Examining the Role of Empathy
Ruben Cambier, Daantje Derks, Peter Vlerick

Continuous Connectivity in Everyday Life: Exploring Underlying Mechanisms of the Relationship between Smartphone Use and Sleep
Michelle Van Laethem, Anne L. de Bruijn, Debby Beckers

Work-related Smartphone Use During Off Job Hours, Rumination and Stress: An RCT Intervention Study
Daantje Derks, Michelle Van Laethem, Heleen van Mierlo

Oral session: Employee Motivation and Performance I
16:15 - 17:45 B2.03 Chair: Sílvia Silva

O107 Does Injustice Reduce Cognitive Performance? An Experimental Test
Isabel Correia, Ana Raquel Lopes, Patricia Alcântara, Hélder Alves

O108 Exploring the Role of Psychological Resources in Workplace Goal Striving: A Conservation of Resources Approach
Rahman Khan, Jean Pierre Neveu

O109 The Impact of Workaholism on Performance: The Mediating Effect of the Work-Family Interface
Mina Westman, Avi Yanus, Yitzhak Fried

O110 How is Job Insecurity Related to Self-rated and Supervisor-rated Job Performance? A Test of Cross-sectional and Longitudinal Associations
Lena Låstad, Johnny Hellgren, Magnus Sverke

O111 The Daily Spillover Between Needs Satisfied at Work and Needs Satisfied at Home: The Moderating Role of Job Resources
Lynn Germeys

O112 Can Prosocial Motivation Help Dealing with Exhaustion? A Longitudinal Study
Julia Wilkenloh, Daantje Derks, Arnold B. Bakker

Oral session: Organizational Interventions and Outcomes II
16:15 - 17:45 B2.04 Chair: Ieva Urbanavicuiute

O113 Sustainable Return to Work (RTW) After Ill-Health: Personal and Social Factors
Abasiama Etuknwa, Kevin Daniels, Constanze Eib

O114 Safety Training of Migrant Workers in the Construction Sector: A Systematic Review
José Maria Peiró, Felisa Latorre, Karina Nielsen
Employee Assistance Programs: The Perspectives of Management on How EAPs are Used and What is Expected of these Programs
Beulah Joseph, Arlene Walker

Ups and Downs of an Organisational-level Stress Management and Burnout Prevention Program: First Results of a Longitudinal Study
Ágnes Juhász, Noémi Balázs, Réka Szigeti, Réka Bikfalvi

A Systematic Meta-review of Systematic Reviews of Organisational Level Interventions Aiming to Improve Psychosocial Work Environment Aspects, Health and Retention
Birgit Aust, Louise Meinertz Jakobsen, Sofie Østergaard Jaspers, Astrid Jørgensen, Mads Nordentoft, Andreas Brøgger Jensen

Oral session: Work engagement, Commitment, and Performance
16:15 - 17:45  C1.03  Chair: Cristina De Tecco

O115 The Development of an E-competency Framework to Support Agile Working
Christine Grant, Emma Russell, Maria Charalampous

O116 Daily Playful Work Design: A Trait Activation Perspective
Yuri S. Scharp, Arnold B. Bakker, Kimberley Breevaart, Dimitri Van der Linden

O117 Organisational and Job Engagement as Buffers of Job Stress in Psychological Wellbeing Practitioners
Teresa C. D'Oliveira, Jacy Okrah

O118 The Synergistic Influence of Work Engagement and Psychological Well-Being on Employees’ Turnover Intention
Antonio Fernandes, Carlos Botelho, Maria Lurdes Calisto

O119 Crossover of Work Engagement: Investigating the Potential Moderating Role of Agreeableness
Konstantinos Chiotis, George Michaelides

O120 Why do SMEs so Widely Neglect HRM?
Teresa Carla Oliveira, Bruno Cordeiro

Conference Dinner
19:00  Casa do Alentejo Restaurant
Friday, September 7th 2018

Registration
08:00 - 08:30  Reception

Symposium: Digital OHP: Insights from Research and Business into the Development of Online Intervention Tools
08:30 - 09:30  B1.03  Chair: Gregor Jenny

S129  StressPrevention@Work: A Strategy to Manage Work-Related Stress Including A Digital Portal, A Stepwise Approach and Learning Networks
Irene Houtman, Bo Havermans, Cecile Boot, Allard van der Beek

S130  Development and Launch of the Online Employee Survey Tool 'StayEngaged' – Insights from the Business Perspective
Katharina Vogt, Joshua A. Herbst

S131  «wecoach»: Digital Coach Empowering Leaders for Health-oriented Team Development
Georg F. Bauer, Luisa Grimm, Gregor J. Jenny

Oral session: Employee Retention and Sickness Absence
08:30 - 09:30  B1.04  Chair: Louise Thomson

O124  Stressful Work Environment and Burnout: What is the Role of Self-Directedness?
Taina Hintsa, Kia Gluschkoff, Matti Kuittinen, Piia Björn, Marko Elovanio

O125  Perceived Return-to-Work Obstacles and Self-Efficacy for Overcoming Barriers in Workers Suffering from a Common Mental Disorder or Musculoskeletal Disorder.
Marc Corbière, Alessia Negrini, Jean-Philippe Lachance

O126  What Makes Them Stay: A Longitudinal Study of Work Conditions Predicting Social Workers’ Actual Behavior to Stay in their Organization
Jonas Welander, Wanja Astvik, Robert Larsson

O127  A Review of Reviews Supporting a Cross-disease Approach to Return to Work after Common Mental Disorders, Cardiovascular Diseases, and Cancers
Andrea Gragnano, Alessia Negrini, Massimo Miglioretti, Marc Corbière

Oral session: Job Satisfaction and Wellbeing
08:30 - 09:30  B2.03  Chair: Antony Montgomery

O128  Job Satisfaction and Well-being of Teachers in Socially Disadvantaged Schools: Results from a National Survey of French Teachers
Sofia Temam, Nathalie Billadeau, Marie-Noël Vercambre-Jacquot

O129  A Dynamic Dual-path Model of Affective Well-being Trajectories: The Effects of Workload Stress and Social Support
Pia Helen Kampf, Ana Hermández, Vicente González-Romá, José María Peiró
Well-being at Work, Quality of Work Life, and General Well-being as Social Representations: What Makes the Difference?
*Aymeline Rousseau, Franck Zenasni, Jean-Louis Tavani, Nicolas Berland*

Relationship between Bullying, Resilience and Job satisfaction among Pakistani University Employees
*Ivan Suneel*

**Oral session: Leadership and Occupational Safety and Health III**

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<td>Steve Granger</td>
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**O132** Workplace Learning and Leadership Within the Service Sector
*Inga Muehlenbrock, Mirko Ribbat, Goetz Richter*

**O133** Claiming leader identity via Motivation to Lead – motivational profiles and their associations with managers’ well-being among Finnish managers
*Elina Auvinen, Heidi Tsupari, Joona Muotka, Taru Feldt*

**O134** Leadership in the Operating Room: How Surgeon Involvement and Elevation Relate to Surgical Team and Patient Outcomes
*Steve Granger, Nick Tumer, Julian Barling, Amy Akers, Darren Beiko*

**Oral session: Work-life Balance and Work-Family Conflict II**

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**O135** Does Work-Personal Life Interference Predict Turnover Among Male and Female Managers, and do Depressive Symptoms Mediate the Association?
*Anna Nyberg, Paraskevi Peristera, Claudia Bernhard-Oettel, Constanze Leineweber*

**O136** Why Do I Retaliate My Supervisor’s Incivility Towards My Partner at Home? A Dyadic Diary Study
*Sara De Gieiter, Lynn Germeyes, Sara Tement*

**O137** What do Children Think about their Parents’ Jobs? Children and Parents’ Views of Work and Impacts on Children’s Career Aspirations.
*Alexandra Gibbs, Stacey Parker, Mark Griffin, Nicole Nelson*

**O138** Effects of Actual and Preferred Working Time Arrangements on Work-life Balance: A Person-environment Fit Approach
*Corinna Brauner, Anne M. Wöhmann, Vera Engelen, Alexandra Michel*

**Oral session: Workplace Health Promotion**

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**O139** The Primer Workshops as a Tool of Co-Developing and Health Promotion at Workplaces
*Jaana Laitinen, Liisa Batista, Merja Turpeinen, Anne Salmi, Eveliina Korkiakangas*
SMaRT Work: Intervention Results on the Effect of Height Adjustable Desks on Sitting Time and Work Outcomes in NHS Staff
Charlotte Edwardson, Fehmidah Munir, Stuart Biddle, Melanie Davies, David Dunstan, Dale Esliger, Laura Gray, Ben Jackson, Sophie O'Connell, Ghazala Waheed, Tom Yates

Silent Killers: Working with Dangerous Substances
Martine P. van Egmond, Anita Venema, Maartje Bakhuys Roozeboom, Laurie M. Hermans, Wouter Fransman, Roos Schelvis, Remy Franken, Bernice Schaddelee-Scholten, Suzanne Spaan, Maaike Weyers

Supporting Caregiver and Grieving Employees
Daniela Wilks, Ana Sabino, Maria José Sousa, Sônia Gonçalves

Symposium: Building Psychologically Informed Policing to Meet the Changing Needs of a Complex Society
09:30 - 10:45  B1.03  Chair: Noreen Tehrani

S132  It’s Okay Not to Be Okay: Workplace Wellbeing, Not Just the Absence of Ill-health
Ian Hesketh

S133  Enhancing Wellbeing: The Need for a Change in Focus
Romin Tehrani

S134  This Work Hurts: But When Did the Pain Start?
Noreen Tehrani

S135  Making the Case: Building the Engagement of UK Policing
Ian Hesketh, Romin Tehrani, Noreen Tehrani

Symposium: Healthy Enterprise Standard (HES) Evaluation Project
09:30 - 10:45  B1.04  Chair: Hélène Sultan-Taïeb & France St Hilaire

S136  Healthy Enterprise Standard (HES) evaluation: Effects on Adverse Occupational Exposures and Employees’ Health
Caroline Duchaine, Karine Aubé, Marie-Claude Letellier, Anne-Frédérique Lambert-Slythe, David Bellemare, Mahée Gilbert-Ouimet, Michel Vézina, Clermont Dionne, Marie-Michèle Mantha-Bélisle, Caroline Biron, France St-Hilaire, Hélène Sultan-Taïeb, Chantal Brisson

S137  Healthy Enterprise Standard (HES) Evaluation: Psychosocial Safety Climate, Employees’ Exposure to Interventions and Changes in Psychological Distress
Caroline Biron, Myrto Mondor, Hélène Sultan-Taïeb, Chantal Brisson, Michel Vézina, Marie-Michèle Mantha-Bélisle, France St-Hilaire

Hélène Sultan-Taïeb, France St-Hilaire, Aurélie Gaillard, Rébecca Lefebvre, Michel Vézina, Caroline Biron, Caroline Duchaine, Chantal Brisson, Marie-Michèle Mantha-Bélisle
Healthy Enterprise Standard (HES) Evaluation: What if We Choose the Right Remedy for the Right Disease?
France St-Hilaire, Hélène Sultan-Taieb, Rébecca Lefebvre, Michel Vézina, Caroline Duchaine, Chantal Brisson, Caroline Biron, Marie-Michèle Mantha-Bélisle

Symposium: A Second Generation of Tools and Approaches for Supporting Employee Participation in Total Worker Health® Programmes
09:30 - 10:45  B2.03  Chair: Robert Henning & Suzanne Nobrega

S140 Using Leadership Interviews to Assess Organisational Readiness for a Participatory, Well-being Program: The Value of Real-time Inputs to Guide Implementation
Suzanne Nobrega, Tara Lynch, Diana Tubbs, Michelle Robertson, Robert Henning, Laura Punnett

S141 Participatory Action Research in Corrections: Narrowing Down the Focus for Intervention
Sarah Berger, Martin Cherniack, Robert Henning

S142 Finding the Right Balance: Expert OSH Support that Does Not Undermine Participatory Design of Interventions by Employees
Robert Henning, Michelle Robertson, Alicia Dugan

S143 Contextualizing Surveys for American Correctional Officers
Jeffrey Hanrahan, Sarah Berger, Sara Namazi, Taylor Barr, Robert Henning, Martin Cherniack

Symposium: Deconstructing Recovery: Why, How, and When It Occurs (PART II)
09:30 - 10:45  B2.04  Chair: Despoina Xanthopoulou & Ana Sanz-Vergel

S144 Do Older Teachers Benefit More from Workday Break Recovery Than Younger Ones?
Ulla Kinnunen, Jessica de Bloom, Anniina Virtanen

S145 The Interplay of Unfinished Tasks, Work Engagement and Regulatory Focus for Daily Psychological Detachment from Work
Carmen Binnewies, Maria Douneva

S146 How Long Do Active Jobs Make Individuals Vigorous? A Daily Diary Study
Evangelia Demerouti

S147 The Interplay of Psychological Detachment and Aversiveness of Travel During the Commute to Work and Home
Wladislaw Rivkin, Dana Unger
### Oral session: Mental health and the Workplace II

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<td>C1.03</td>
<td>Gro Ellen Mathisen</td>
<td>The Stress Experience of University Teachers in Spain</td>
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<td><em>José María González-González, Emilio Sánchez, Elías García, Antonio Delgado</em></td>
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<td>Is Low Managerial Quality a Risk Factor of Long-term Sickness Absence in the Danish Workforce?</td>
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<td><em>Reiner Rugulies, Jeppe Karl Sørensen, Elisabeth Framke, Mads Nordentoft, Nina Føns Johnsen, Ida E.H. Madsen, Anne Helene Garde</em></td>
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<td>Perfectionists on Vacation: A Respite Study Examining Relationships Between Two Dimensions of Perfectionism and School Teachers' Wellbeing</td>
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<td><em>Shannon Horan, Paul Flaxman</em></td>
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<td>Psychosocial Working Conditions, Anxiety and Loneliness in 12-hour Shift Workers</td>
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<td><em>Grit Müller</em></td>
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<td>Psychosocial Risks, Safety Climate and Organisational Restructuring in the Norwegian Oil and Gas Industry</td>
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<td><em>Gro Ellen Mathisen, Linn Iren Vestly Bergh, Stavroula Leka, Øyvind Lauridsen, Tore Tjora</em></td>
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### Oral session: Workplace Violence, Bullying and Harassment II

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<tr>
<td>09:30 - 10:45</td>
<td>C1.04</td>
<td>Roberta Fida</td>
<td>The Moderating Effect of Perceived Supportive Leadership on the Association between Salutogenic Health and Workplace Bullying – a Two Wave Study</td>
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<td><em>Stefan Blomberg, Michael Rosander</em></td>
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<td>Workplace Bullying in the Portuguese Banking Sector</td>
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<td><em>Ana Verdasca, Elfi Baillien</em></td>
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<td>Ostracism, Emotional Labor, Nurse-Patient Relationship and Turnover Intention: A Model of Workplace Ostracism and Its Consequence in Nursing Professional</td>
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<td><em>Li Gou, Shaozhuang Ma</em></td>
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<td>Friend or Foe? The Impact of High Performance Work Practices on Workplace Bullying</td>
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<td><em>Denise Salin, Guy Notelaers</em></td>
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### Coffee

| Time     | Room | Activity       |
|----------|------|----------------|----------------------------------------------------------------------|
| 10:45 - 11:00 |      | Reception      |                                                                      |
### Symposium: Return to Work: Focusing on What Works and Exploring New Directions

**11:00 - 12:15 B1.03**  
**Chair:** Roxane Gervais

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<th>Session</th>
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<td>S148</td>
<td>Resources Enabling Sustainable Return to Work for Workers with Common Mental Disorders (CMDs)</td>
<td>Karina Nielsen, Joanna Yarker, Fehmidah Munir, Ute Bultmann</td>
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<tr>
<td>S149</td>
<td>Return-to-Work for People with Moderate and Severe Mental Health Conditions</td>
<td>Louise Thomson</td>
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<tr>
<td>S150</td>
<td>Addressing Mental Health, Sickness Absence and Return to Work Through Compassionate Leadership</td>
<td>Fehmidah Munir</td>
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<tr>
<td>S151</td>
<td>The Development and Evaluation of a New Online Toolkit to Support Return to Work Following Mental-ill Health</td>
<td>Joanna Yarker, Fehmidah Munir, Rachel Lewis</td>
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### Symposium: Difference Is Good – Embracing Neurodiversity as a Core Topic in the OHP Community

**11:00 - 12:15 B1.04**  
**Chair:** Almuth McDowall & Harriet Tenenbaum

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<td>S152</td>
<td>Supporting Neurodiversity in the Workplace: Avenues for Research, Practice and Theory</td>
<td>Almuth McDowall, Harriet Tenenbaum</td>
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<tr>
<td>S153</td>
<td>A Systematic Review of Support Interventions for Adults with ADHD, Comparing Pharmacological Versus Behavioural Approaches</td>
<td>Kirsty Lauder, Almuth McDowall, Harriet Tenenbaum</td>
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<tr>
<td>S154</td>
<td>A Narrative Perspective on Career and Work Life Balance of Parents with ADHD and Their Spouses</td>
<td>Jenny Kananov Shayo, Almuth McDowall, Harriet Tenenbaum</td>
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<tr>
<td>S155</td>
<td>Lived Experiences of Dyslexic Speech and Language Therapists: “Can I Trust You Enough to Tell You?”</td>
<td>Daisy Sunderalingam, Almuth McDowall</td>
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### Symposium: Age, Health, and Retirement: The Role of Human Resources Management Practices

**11:00 - 12:15 B2.03**  
**Chair:** Sara Ramos & Donald Truxillo

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<thead>
<tr>
<th>Session</th>
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<tr>
<td>S156</td>
<td>The Role of Subjective and Chronological Age in Affecting the Retirement Planning and the Expected Adjustment</td>
<td>Sara Zaniboni, Gabriela Topa</td>
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<tr>
<td>S157</td>
<td>Performance Management Systems and Their Relationship with Absenteeism and Presenteeism</td>
<td>Gregor Bouville, Silvia Dello Russo, Mariella Miraglia</td>
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</table>
Is Age Just a Number? The Impact of Age-Diversity Practices and Workers’ Age on Health and Well-being
Inês C. Sousa, Sara Ramos, Helena Carvalho

I’m I too Young to Think about Retirement? The Relationship between Human Resources Management Practices, Work Ability and Retirement Intentions
Sara Ramos, Nelson Ramalho, Ana Maria Pinto, Donald Truxillo

Symposium: Successful Aging at Work: The Effects of Age on Performance and Well-Being
11:00 - 12:15  B2.04  Chair: Darya Moghimi & Cornelia Wieck

The Role of Emotional Job Demands in Age-Related Differences in Empathy
Cornelia Wieck, Susanne Scheibe, Ute Kunzmann

Job Satisfaction Despite Negative Work Events? Context-Dependent Action-and Emotion-Regulation at Work and the Role of Age
Darya Moghimi, Susanne Scheibe

Daily Positive Emotions and Daily Work Behaviors: The Role of Age
Silvia Dello Russo, Mirko Antino, Sara Zaniboni, António Caetano, Donald Truxillo

The Active Role of Older Workers in Daily Work Engagement and Job Performance: Daily Job Crafting in Active Jobs
Dorien Kooij, Helen Nijssen, Matthijs Bal

Oral session: Overtime, Working Hours and Time Pressure II
11:00 - 12:15  C1.03  Chair: Juliet Hassard

Changes in Objective Working Hour Characteristics are Linked with Parallel Changes in Work-Life Conflict of Hospital Employees
Kati Karhula, Aki Koskinen, Anneli Ojäärvi, Annina Ropponen, Sampsa Puttonen, Mika Kivimäki, Mikko Härmä

Towards a Recovery Hygiene Agenda: Psychophysiological Markers of Circadian Stress and Fatigue in Cabin Crews
Teresa C. D’Oliveira, Carmine Pariante, Ricardo Zambujal, Tânia Ferreira de Oliveira, Gonçalo A. Oliveira, Rui F. Oliveira

The Impact of Extended Shifts on Wellbeing and Organisational Outcomes as Employees Adapt and Respond to Change
Jane Suter, Tina Kowalski

Shift Work Disorder among Hospital Personnel with Night Shifts - Insomnia and Excessive Sleepiness on Days Off
Päivi Vanttola, Sampsa Puttonen, Mikko Härmä

Cognitive and Affective Functioning as a Result of Work Onset after Partial Sleep Deprivation
Ingvild Saksvik-Lehouillier, Eva Langvik, Simen Berg Saksvik, Torhild Anita Sørengaard, Alexander Olsen
### Oral session: Psychometrics in Occupational Health Psychology

**11:00 - 12:15  C1.04  Chair: Michael Leiter**

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<th>Session ID</th>
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<tr>
<td>O157</td>
<td>Mental Health Literacy in the Workplace: Translation and Validation of a German Version of the MHL-W Scale</td>
<td><em>Ines Catharina Wulf, Sascha Alexander Ruhle</em></td>
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<td>O158</td>
<td>The Third Version of the Copenhagen Psychosocial Questionnaire</td>
<td><em>Hermann Burr, Hanne Berthelsen, Salvador Moncada, Matthias Nübling, Emilie Dupret, Yücel Demiral, John Oudyk, Hans Joachim Lincke, Clara Llorens, Anne Pohrt</em></td>
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<tr>
<td>O159</td>
<td>Developing the E-Work Well-Being Scale (EWW): A Multi-Dimensional Approach to Well-Being at Work</td>
<td><em>Maria Charalampous, Christine Grant, Carlo Tramontano</em></td>
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<tr>
<td>O160</td>
<td>The Validity and Reliability of the Danish Psychosocial Working Environment Questionnaire (DPQ)</td>
<td><em>Thomas Clausen, Ida E.H. Madsen, Karl Bang Christensen, Jakob B. Bjorner, Otto M. Poulsen, Thomas Maltesen, Vilhelm Borg, Reiner Rugulies</em></td>
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### Keynote: Is the well-being at work possible for all? The case of temporary agency workers

**12:15 - 13:00  Grande Auditorio  Chair: Sílvia Silva**

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<td>K3</td>
<td>Is the well-being at work possible for all? The case of temporary agency workers</td>
<td><em>Maria José Chambel</em></td>
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### Lunch and Poster Session

**13:00 - 14:30  Lunch Building**

### Poster session: Engagement, satisfaction and positive states at work

**13:00 - 14:30  Lunch Building**

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<tr>
<th>Session ID</th>
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<tr>
<td>P127</td>
<td>Professional Empowerment for Managing Work-related Stress Risk in Complex Health Facilities</td>
<td><em>Silvia Rongoni, Salvatore Zaffina, Maria Rosaria Vinci, Guendalina Dalmasso</em></td>
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<td>P128</td>
<td>Overlooked Voices: The Relationship Between Job-demands, Satisfaction and Commitment of NHS Scientists and Technicians</td>
<td><em>Roy Deborah, Andrew Weyman</em></td>
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<td>P129</td>
<td>Relationship Between Organisational Climate and Job Satisfaction in Workers of a Furniture Company in Jalisco, Mexico</td>
<td><em>Juan David Alvarez Salazar, Rogelio Vicente Gomez Sanchez, Enriqueta Rosas González, Adriana Angélica Gómez Carrillo</em></td>
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</table>
Compensation Schemes and Motivation: An Integrative SDT-based Investigation of the Relation Between Financial Incentives, Autonomous Motivation, and Employee Well Being
Konstantinos Papachristopoulos, Despoina Xanthopoulou

Work Engagement in Hospital Workers in Guadalajara, Mexico
Cecilia Colunga-Rodríguez, Jesús Dario Enríquez-Hernández, Mario Ángel-González, Bertha Alicia Colunga-Rodriguez, Julio César Vázquez-Colunga

Engaging Leadership and Work Engagement: The Mediating Role of Job Resources and Basic Psychological Need Satisfaction
Vivi Gusrini Rahmadani, Wilmar Schaufeli

Employee Engagement: A Re-look for Content and Measurement
Sónia Gonçalves, Carlos Botelho, Manuela Faia Correia

Do Mental Health Workers Have a Risk Type, and Is There a Link with Resilience?
Sonia Shah

Energy at Work – A Meta-Analytic Approach to Human Energy Constructs and Work-Related Concepts
Ann-Kathrin Seipp, Antje Schmitt, Sandra Ohly

Positive Thinking and Well-being or Why It May Be Harmful to Promote Optimism: An Integrative Literature Review
Shafag Garayeva

Does Team-level Social Capital Predict Work Performance, Work Engagement and Psychological Wellbeing in Industrial Settings?
Thomas Clausen, Annette Meng, Vilhelm Borg

What Matters While Striving for Night Work Engagement: A Motivational Resources-Based Approach
Rahman Khan, Jean Pierre Neveu

Antecedents of Daily Engagement in Actions That Go Beyond Basic Professional Duties
Agnieszka Bożek

Comparative Study on Work Engagement among Firefighters and Police Officers
Cristina Queirós, Jorge Sinval, Alexandra Marques-Pinto, João Marôco, Natália Vara, Fernando Passos

Does a Psychological Detachment Intervention Help Educational Professionals to Stay Work Engaged?
Odette Bunnik, Daantje Derks, Arnold B. Bakker, Jessica van Wingerden

Engaging in Meaningful Work: Perceived Calling and Work Engagement in Nursing
Arunas Ziedelis

Measurement Instrument for the Collective Zone of Proximal Development - The Antecedent for Team Flow
Weiwei Wang, Angeli Santos
Organisational Commitment and Attitudes Towards Organisational Changes
Katarina Suvajdžić, Mirjana Franceško, Ana Sentov

Professional Empowerment for Managing Work-related Stress Risk in Complex Health Facilities
Silvia Rongoni, Salvatore Zaffina, Maria Rosaria Vinci, Guendalina Dalmasso

Overlooked Voices: The Relationship Between Job-demands, Satisfaction and Commitment of NHS Scientists and Technicians
Roy Deborah, Andrew Weyman

Poster session: Workplace health behaviors and promotion
13:00 - 14:30  Lunch Building

Emotional Dissonance and Sickness Absence: A Study among Employees Working with Customers and Clients. Investigating Possible Mechanisms
Anne-Marthe Indregard, Morten Birkeland Nielsen, Stein Knardahl

The Impact of Rumours of Change on Musculoskeletal Pain Depends on the Combination of Fair Leadership, Predictability, and Decision Control
Jan Olav Christensen

Predictive Psychophysiological Stress Symptoms in Dentists at a Social Security Institution in Mexico
Jorge Gregorio Bautista González, Blanca Elizabeth Pozos Radillo, María de los Ángeles Aguilera Velasco, María Ana Valle Barbosa, Martín Acosta Fernández

Illness Perceptions During Presenteeism and Absenteeism
Luke Anthony Fiorini, Amanda Griffiths, Jonathan Houdmont

Firefighter Health Study – Trend Analysis for Absenteeism Due to Illness Among Brazilian Fire Fighters (2004-2012)
Eduardo de Paula Lima, Alina Gomide Vasconcelos, Laura Thompson, Kevin Teoh, Ada Ávila Assunção, Elizabeth do Nascimento, Tom Cox

Readiness for Return-To-Work Scale in a South Korean Setting: Exploring Factor Structure and Psychological Properties for Workers with Musculoskeletal Injuries
Subin Yoo, Jeong-eun Lee, Jaho Leigh

The Health Behaviours Of Estonian Police Officers
Ülle Parm, Anna-Liisa Tamm, Ksenia Barkova, Olga Bazukova

The Influence of Health Behaviors on Sleep Quality and Quantity in a Canadian Mining Workforce
Alexie Dennie, Zsuzsanna Kerekes, Céline Larivièere, Courtney Lessel, Caroline Dignard, Lisa Schutt, Alyssa Smith, Monika Tiszberger, Tammy Eger, Behdin Nowrouzi-Kia, Michel Larivièere

Emotional balance, positivity and Type D Personality on the motivation for physical exercise of men and women with cardiovascular disease in function of laboral situation
Carmen Tabernero, Esther Cuadrado, Bárbara Luque, Rosario Castillo-Mayen, Tamara Gutiérrez, Sebastian Rubio, Alicia Arenas
“Listen to Me!!” A Mixed Methods Study of the Experiences of Norwegian Breast Cancer Survivors Returning to Work  
Eli Selback, Tina Kowalski

Physical Health and Psychological Well-being of Ill and Injured Canadian Armed Forces Members and Veterans  
Lisa Williams, Alla Skomorovsky, Jennifer Lee

The Importance of Perceived Organisation’s Commitment to Workplace Health Promotion: Investigating the Relationship Between Working Conditions and Emotional Exhaustion  
Grit Tanner, Carolin Baur, Marlies Gude, Eva Bamberg

Physical Work Capacity Assessment to Encourage Health Habits Among Finnish Firefighters  
Eveliina Korkiakangas, Sirpa Lusa, Anne Punakallio, Jaana Laitinen

The Effects of Counselling Delivered Through Mobile Application on Work Ability and Work Recovery Among Micro-Entrepreneurs  
Jaana Laitinen, Eveliina Korkiakangas, Johanna Ruusuvuori, Harri Oinas-Kukkonen, Matti Muhos, Kirs Heikkilä-Tammi, Tuula Oksanen

Socioeconomic Status, Sociodemographic Factors and the Eating Behaviours of Civil Service Employees: A Cross-Sectional Study.  
Judith Grant, Jonathan Houdmont, Fehmidah Munir, Robert Kerr, Ken Addley

Which Factors Influence the Participation of Blue-collar Workers in Worksite Health Promotion Programmes Within the Construction and Transport & Logistics Sector  
Sarah Detaille, Ariana van Velzen, Annet de Lange

Poster session: Workplace health promotion
13:00 - 14:30 Lunch Building

Selective Optimisation with Compensation (SOC) at the Individual, Group, Immediate Management, and Organisational Level – Better and Longer Work Life  
Annette Meng, Iben Karlsen, Vilhelm Borg, Otto M. Poulsen

Effects of Aging on Tolerance and Recovery from Shift Work: A Systematic Review  
Teresa C. D’Oliveira, Mauricio Araya-Ruiz

The Aged Civil Aviators’ Personality Functions in Relations to their Successful Aging and Job Performance  
Chian-Fang G. Cherng

Evidence of Curvilinear Relationships between Age and Job Performance  
Maria Karanika-Murray, Natalie Harrison, Dimitra Gkiontsi, Thom Baguley, Marc van Veldhoven

Associations Between Executive Functions and Work Ability: Implications for an Aging Workforce  
Guy Potter, Daniel Hatch, Uwe Rose, Gabriele Freude
How does Age Moderate the Relationship between Recovery Experiences after Work and Well-being?  
*Anniina Virtanen, Ulla Kinnunen, Jessica de Bloom*

How Individuals May Benefit from the Experience of Emotions at Work? Evidence from a Double Moderating Model  
*Ana Junça-Silva, António Caetano, Rita Rueff-Lopes*

The Relationship Between Absence from Work and Job Retention in Older Workers Aged 45 or Over.  
*Alessia Negrini, Jacques Perron, Andrea Gragnano, Marc Corbière*

Moral Conflicts as a Motor of Moral Identity Development at Work: Self-Awareness and Micro Processes in Weekly experiences  
*Mari Huhtala, E. Saskia Kunnen*

Personality and Insomnia as Predictors of Anxiety and Depression among Norwegian Nurses: The SUSSH Study  
*Torhild Anita Sørengaard, Eva Langvik, Ståle Pallesen, Bjørn Bjorvatn, Siri Waage, Bente Moen, Håvard Karlsen, Ingvild Saksvik-Lehouillier*

A Workplace-Specific Measure of the Dark Tetrad  
*Tabatha Thibault, E. Kevin Kelloway*

Woman, Work and Health: The Role of Woman Leadership in Wellbeing at Work Promotion. Spanish Women Entrepreneurs Focus Groups  
*Maria D. Villaplana García, Yolanda Gonzalez*

Leadership Style Operationalized by Using STILRUK Scale: A Two-dimensional Approach  
*Mirjana Franceško, Marija Manasijević, Jasmina Nedeljković*

ICG-OHP Meeting

13:30 - 14:30  B1.04

Portuguese Psychological Society

13:30 - 14:30  B1.03  
**Chair: Samuel Antunes**

Sp3  
Promoting Healthy Workplaces in Portugal  
*Samuel Antunes*

Early Career Showcase 3: Health Behaviours, Wellbeing and Absenteeism - What can we learn from our own PhD process?

14:30 - 16:00  C1.04  
**Chair: Birgit Greiner**

EC20  
Intangible Outcomes of the Work with a Doctoral Thesis  
*Annika Nordin*

EC21  
Eating Behaviours and the Workplace: The Role of Socioeconomic and Sociodemographic Characteristics.  
*Judith Grant*
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<th>The Impact of Time Constraints on Food Choice in the Workplace, a Behavioural Economics Perspective</th>
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<td>Camille Massey, Laure Saulais</td>
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<td>Workplace Resilience: A Multi-Level Perspective</td>
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<td>Angelique Hartwig</td>
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<td>EC24</td>
<td>Investigating the Association between Stress and Resilience in the Workplace</td>
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<td>Lucie Ollis, Mark Cropley, David Plans</td>
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<td>EC25</td>
<td>Do psychosocial working conditions affect employee's management of long-term health conditions in the workplace?</td>
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<td>Sally Hemming</td>
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<td>EC26</td>
<td>Stress and Well-being in Workers of Healthcare Sector: Contribution of Individual and Organisational Factors</td>
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<td>Inês Cardoso</td>
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<td>EC27</td>
<td>From Sleep to Technology, how to Survive your PhD Studies and on What After</td>
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<td>Michelle Van Laethem</td>
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**Symposium: Recent Developments in Research on the Antecedents of Work Engagement and Commitment**

14:30 - 16:00  B1.04  Chair: Sandrine Schoenenberger & Jari Hakanen

- **S164** Who Is Engaged at Work? A Large-scale Study in 30 European Countries
  - Jari Hakanen, Annina Ropponen, Wilmar Schaufeli, Hans De Witte

- **S165** The Link Between Support Provision and the Provider's Work Engagement: The Role of the Receiver's Emotional Demands
  - Marijntje Zeijen, Paris Pareskevas, Arnold B. Bakker

- **S166** Job Crafting as a Recipe for Boosting Engagement? Effects of a Training among Civil Servants
  - Maria Peeters, Machteld Van den Heuvel, Evangelia Demerouti

- **S167** How Organisational Commitment Progresses after an Organisational Change: The Impact of Attitude to the Change in an Intensive Care Unit
  - Sandrine Schoenenberger, Damien Ramez

**Symposium: Occupational Health Psychology: The Challenge of Industry 4.0**

14:30 - 16:00  B2.03  Chair: Jose M. Leon-Perez & Adalgisa Battistelli

- **S168** Occupational Health and Well-being in the 21st Century Workplace
  - Guillaume Déprez, Marie Andela, Adalgisa Battistelli

- **S169** Psychosocial Risk Assessment in the Industry 4.0
  - Jose M. Leon-Perez, Jose M. Leon-Rubio
Gamification and Virtual Intelligent Agents: Monitorizing Health and Presenteeism at Work  
*Aristides Ferreira, Sara Lopes, Rui Prada*

Quasi-Experimental Study to Evaluate an Online Workplace Bullying Intervention  
*Whitney Van den Brande, Elfi Baillien, Tinne Vander Eist, Hans De Witte, Lode Godderis*

Managing Aging at Work: Effectiveness of Interventions Based on Occupational Health Psychology  
*Marisa Salanova, Isabella Meneghel*

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**BPS Division of Occupational Psychology Invited Symposium**

14:30 - 16:00  
**B1.03**  
**Chair:** Gail Kinman & Roxane Gervais

**S170**  
Mental Health at Work: The Stigmatisation of Helpseeking and Ways to Overcome It  
*Niel Greenberg*

**S171**  
Job Demands, Violence and Mental Health in UK Prisons  
*Gail Kinman, Andrew Clements, Jacqui Hart*

**S172**  
Capturing the Everyday Negotiations of Work-life Boundaries and Transitions  
*Rebecca Whiting, Gillian Symon*

**S173**  
Who Wants to Be a Millionaire? (Why Well-being at Work can Mean Everyone Wins)  
*Ashley Weinberg, John Hudson, Anne Pearson, Sabirah Chowdhury*

**S174**  
Implications - Making a Business Case for Improving Mental Health at Work  
*Roxane L. Gervais*

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**Oral session: Employee Motivation and Performance II**

14:30 - 16:00  
**B2.04**  
**Chair:** Despoina Xanthopoulou

**O161**  
Does Pay for Performance Increase Employee Motivation and Performance? Results from a Longitudinal Study in a Swedish Industrial Company  
*Johnny Hellgren, Anders Eriksson, Magnus Sverke*

**O162**  
Staff Retention in the UK National Health Service - Determining the Relative Salience of Drivers of Early Exit  
*Andrew Weyman, Deborah Roy, Neil Woolford*

**O163**  
Eudaimonic and Hedonic Orientations as Motives for Engagement: The Utility Value of Work, a Future Time Perspective  
*Aly Kelleher, George Michaelides*

**O164**  
From Teacher Burnout to Engagement: Using Appreciative Inquiry Interviews to Discover the Positive Core of the Teaching Profession  
*Ekaterina Pogrebtsova, Craig Leonard, Ashley De Oliveira, Gloria González-Morales*
Adopting Financial Incentives in Primary Health Care and Life Cycle Implications  
*Teresa Carla Oliveira, Carmo Neves*

**Oral session: Inequalities in working conditions and health**

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<th>Time</th>
<th>Session Code</th>
<th>Chair: Irene Houtman</th>
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| 14:30 - 16:00 | O166       | Differential Effects of Diverse Constellations of Job Demands on Workers’ Health  
*Hannes Mayerl, Erwin Stolz, Wolfgang Freidl* |
| 14:30 - 16:00 | O167       | Associations Between Fixed-term Employment and Occupational Health and Behaviours: What Are the Mechanisms?  
*Dorota Żołnierczyk, Sylwia Bedyńska* |
| 14:30 - 16:00 | O168       | Working Conditions and Psychosocial Risks in Migrant Ecuadorian Workers in Spain  
*David Ortega, Luis E. Alvarado, Francisco D. Bretones* |
| 14:30 - 16:00 | O169       | Precarious Employment: On Its Definition and Measurement  
*Christian Seubert, Lisa Hopfgartner, Jürgen Glaser* |
| 14:30 - 16:00 | O170       | Trajectories of Insecurity: Young Adults’ Employment Entry, Health and Well-Being  
*Katharina Klug, Sonja Drobnič, Hilke Brockmann* |
| 14:30 - 16:00 | O171       | A Meta-analysis of Demographic, Lifestyle, and Physical Health Factors as Predictors of Sickness Absence Among Nursing Personnel  
*Basem Gohar, Michel Larivière, Nancy Lightfoot, Céline Larivière, Elizabeth Wenghofer, Behdin Nowrouzi-Kia* |

**Coffee**

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<td>16:00-16:15</td>
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**Symposium: Work-family (Life) Relationship in Contingent Jobs**

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<th>Time</th>
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| 16:15 - 17:30 | S178       | Does Organizational Affective Commitment Buffer the Relationship Between Work-Personal Life Conflict and Burnout in Temporary Agency and Permanent Workers?  
*Sílvia Lopes, Maria José Chambel, Daniela Geraldes* |
| 16:15 - 17:30 | S179       | Demands, Resources and Well-being in a Contact Centre: Does the Workers’ Family Characteristics Matter?  
*Filipa Sobral, Maria José Chambel, Vânia Sofia Carvalho* |
| 16:15 - 17:30 | S180       | Job Characteristics and Well-being at Work Through Work-family Conflict and Enrichment: The Case of Temporary Agency Workers (TAW)  
*Vânia Sofia Carvalho, Maria José Chambel* |
Symposium: Psychosocial Risk Management: Monitoring Data Supporting Action

16:15 - 17:30  B1.04  Chair: Irene Houtman

S182  Management of Psychosocial Risks in European Workplaces: Drivers and Barriers in a National and Cultural Context
Swenne Van den Heuvel, Maartje Bakhuys Roozeboom, Iris Eekhout

S183  Job Demands, Job Resources and Innovative Work Behaviour: A European Union Study
Vlad Dediu, Stavroula Leka, Aditya Jain

S184  Psychosocial Risk Management and the Role of Drivers and Barriers: Results from a Multilevel Joint Analysis of Three European Surveys
Irene Houtman, Iris Eekhout, Anita Venema, Maartje Bakhuys Roozeboom

S185  Patterns of Worker Participation in the Management of Psychosocial Risks in European Countries - A Qualitative Case Study
Michael Ertel

Practitioner Focus Session

16:15 - 17:30  B2.03  Chair: Peter Kelly

Sp4  The Journey of a Occupational Health psychological Practitioner, Teacher and Educator
Katrina Thomas

Sp5  A cross sectional intervention study of a national approach to managing work related stress in primary and Secondary education: UK Management Standards in Education
Peter Kelly

Oral session: Antecedents of Stress and Wellbeing IV

16:15 - 17:30  B2.04  Chair: Gregor Jenny

O172  Is Job Control a Double-Edged Sword? Analysing the Interplay of Quantitative Workload, Emotional Dissonance, and Job Control on Emotional Exhaustion
Anne-Kathrin Konze, Wladislaw Rivkin, Klaus-Helmut Schmidt

O173  Engaging Under Pressure: The Effects of Change, Role Stress and Illegitimate Tasks on Disengagement in UK Academic Staff
Siobhan Wray, Gail Kinman

O174  The Effect of Job Involvement on the Physical and Psychological Wellbeing of Secondary School Teachers
Siobhan Wray, Gail Kinman

O175  What is More Problematic: Experiencing Emotions or Regulating Their Expression? Implications of the Measurement Confound in Research on Surface Acting
Norbert K. Semmer, Franziska Tschan
A Daily Diary Investigation on the Job-related Affective Experiences Fueled by Workaholism

Cristian Balducci, Paola Spagnoli, Lorenzo Avanzi

Oral session: Mental Health and the Workplace III

16:15 - 17:30  C1.03  Chair: Eduardo de Paula Lima

O176  A Daily Diary Investigation on the Job-related Affective Experiences Fueled by Workaholism

Cristian Balducci, Paola Spagnoli, Lorenzo Avanzi

O177  Depressive Symptoms and Non-Participation in Work - Results from the Longitudinal Study on Mental Health at Work (S-MGA)

Uwe Rose, Dagmar Pattloch, Hermann Burr

O178  An Exploration of Trauma-related Symptoms among Workers in High-risk Industrial Occupations

Keandra Sutherland, Zsuzsanna Kerekes, Caroline Dignard, Behdin Nowrouzi-Kia, Lisa Schutt, Michel Larivière

O179  Perceptions of Justice, Victim’s Dehumanisation and Burnout in School Teachers

Marta Abreu, Isabel Correia

O180  Firefighter Health Study (FHS): Do Young Fire Fighters Selected on Health Criteria Experience Mental Health Symptoms?

Alina Gomide Vasconcelos, Eduardo de Paula Lima, Laura Thompson, Kevin Teoh, Elizabeth Nascimento, Tom Cox

O181  Predicting Subjective Career Success Using Career Resources

Madeleine Haenggli, Andreas Hirschi

Oral session: Workplace Violence, Bullying and Harassment III

16:15 - 17:30  C1.04  Chair: Juliet Hassard

O182  Preventing Psychological Violence/Harassment at Work Through Enhanced Occupational Safety and Health (OSH) Management Systems

Manal Azzi

O183  The Relationship Between Witnessed and Instigated Incivility – an Exploration of Mediating and Moderating Factors

Kristoffer Holm, Eva Torkelson, Martin Bäckström

O184  Workplace Bullying in Medicine: Routes to Resolution

Chris Woodrow

O185  The Contribution of Work to Social Inequalities in Bullying Exposure: Evidence from France

Gregor Bouville, Eric Campoy

O186  The Economic Cost of Work-related Psychosocial Aggression: A Systematic Review of Cost of Illness Studies

Juliet Hassard, Kevin Teoh, Gintare Visockaite, Philip Dewe, Tom Cox

Closing Ceremony

17:30 – 18:30  Grande Auditorio
Considerable research has explored and often demonstrated an association between human resource management (HRM) and both individual and organizational performance. Recently there has increasing interest in the scope for mutual gains whereby HRM enhances both performance and employee wellbeing. The results to date are somewhat equivocal. However, the primary focus has invariably been on HR practices most likely to enhance performance rather than wellbeing with many HR practices that might be expected to affect wellbeing ignored and a lack of concern for a stakeholder perspective. This presentation offers an analysis of HRM that is explicitly designed to promote employee wellbeing. It starts from a conceptual and then an empirical analysis of the HR practices that are likely to serve as antecedents of wellbeing. This results in a distinctive model of HRM. Utilising this model, the presentation then explores the scope for mutual gains, testing the proposition that a wellbeing oriented set of HR practices can
result in both high wellbeing and, both directly and indirectly, higher performance. This leads to a call for a focus in research on a wider range of HR practices. It is further argued that this perspective, giving primacy to employee wellbeing and an effective employment relationship offers both a more ethical perspective and a greater chance of mutual gains.

**A Review of Work-Family and Job Stress Workplace Interventions within Total Worker Health and Occupational Health Psychology Frameworks**

Leslie B. Hammer

*Portland State University, Portland, USA. Oregon Health & Science University, Portland, USA*

Leslie B. Hammer is a Professor of Psychology in the Department of Psychology at Portland State University and a Professor in the Oregon Institute of Occupational Health Sciences at Oregon Health & Science University. Her work focuses on workplace programs that reduce work-life stress and she has been involved with numerous workplace intervention randomized controlled trials evaluating the effectiveness of supervisor support training.

Dr. Hammer is the Director of the Center for Work-Family Stress, Safety, and Health, formerly funded by grants from the National Institute for Child Health and Human Development and the National Institute for Occupational Safety and Health (NIOSH). This center is one of six centers that make up the national Work, Family, and Health Network that recently completed a cluster randomized trial of workplace policies and programs that impact worker health. Dr. Hammer is also the Director of the Occupational Health Psychology graduate training program at Portland State University that is funded through a training program grant from NIOSH.

She is an Associate Director of the NIOSH-funded Oregon Healthy Workforce Center (OHWC), one of six centers of excellence in Total Worker Health. She served as the Founding President for the Society for Occupational Health Psychology, and she is a Fellow of the American Psychological Association and the Society for Industrial and Organizational Psychology. Most recently Dr. Hammer was awarded grants from the Department of Defense to study ways to: a) increase supervisor support and enhance employment retention for veterans reintegrating into the workforce, testing the effectiveness of a supervisor training workplace intervention, and b) increase supervisor support for sleep, testing the effectiveness of a supervisor training sleep leadership intervention.

**Abstract:**

Drawing on Occupational Health Psychology (OHP) and Total Worker Health® (TWH) frameworks, this talk will review the impact of work-family and job stress on health, safety, wellbeing, family, and organizational outcomes. TWH is defined as policies, programs, and practices that integrate protection from work-related safety and health hazards with promotion of injury and illness prevention efforts to advance worker wellbeing. OHP concerns the application of psychology to improving the quality of work life, and to protecting and promoting the safety, health and wellbeing of workers. I will present evidence on the known effects of workplace stress on such chronic health outcomes as cardiovascular disease, obesity, musculoskeletal disorders, mental health, and safety, as well as the evidence behind OHP and TWH interventions that are aimed at preventing such work and non-work related risk factors. Discussion of the economic impact as well as the impact on families of psychosocial and environmental risk factors, and of interventions aimed at reducing occupational hazards will be part of this presentation. Finally, a review of the essential elements of TWH, and how those converge with OHP will be presented. The emphasis will be on a review of the work-family and job stress workplace interventions within the TWH and OHP frameworks.
Is the wellbeing at work possible for all? The case of temporary agency workers

Maria José Chambel
Universidade de Lisboa, Lisbon, Portugal

Maria José Chambel is Professor of Human Resources, Work and Organizational Psychology in the Faculty of Psychology in the University of Lisbon. She coordinate the research group Career and Organizations at the CicPsi (Research Centre of Psychology Science). Her research interests lie within the area of the construction of work context that promotes health and well-being. She is particularly interested in the evaluation of contingent workers and employees' in risk context (i.e. militaries, firefighters, professionals of emergency).

She has published more than 100 articles, books and book chapters. She has published her work in journals such as Journal of Organizational Behavior, Stress & Health, International Archives of Occupational and Environmental Health, Career Development International, European Journal of Work and Organizational Psychology.

She is currently the principal investigator on the “Work–Family boundary dynamics in non-traditional jobs” on how individuals (i.e., workers who need to be away from their families for certain periods of time or who are in a temporary employment situation) integrate the relationship between work and family and to provide an empirical base for multi-systemic interventions designed to achieve a balance between these two life dimensions, a co-researcher on the “The relational job characteristics and teachers’ well-being” a collaborative project led by Carlos Costa from IMED, Brazil and funded by The Education Department of the Camâra Municipal (Town Hall) and co-researcher on the “Militaries motivation’s antecedents and consequences: A longitudinal study” led by Coronel Oliveira-Cruz funded by Science and Technology Foundation of Portuguese Government.

Abstract:
In recent years there have been profound changes in the characteristics of employment, specifically in the increase of temporary jobs. From a traditional perspective of segmentation, temporary workers are considered to have worse conditions - salary, tasks, career, support - and more job insecurity, which will reflect in worse levels of wellbeing. However, empirical research has not been conclusive. Some studies have shown lower levels of wellbeing in temporary workers, while other studies have refuted this or did not find differences between fixed and temporary workers. As with fixed workers, temporary workers’ wellbeing depends on numerous variables within the work context and the workers themselves, which have not been taken into account in previous research. In this sense, our research in Portugal seeks to investigate some variables of the worker’s background and work environment: his/her motivation to have a temporary job; tenure in this type of employment; overqualification; some characteristics of the work context. It was observed that when temporary work is more of a voluntary option - acquiring personal objectives (i.e flexibility and conciliation with the family or with the studies) and/or a way to develop competencies and acquire a better job in the future - it will guarantee higher levels of wellbeing. The higher the temporary worker’s tenure is, the lower worker’s wellbeing is. When temporary work is a way to get a job, although it is below the worker's training, skills or experience (i.e. overqualification), it will decrease his/her voluntary motivations and, consequently, it will diminish his/her wellbeing. Improving the contractual situation for a less insecure situation does not necessarily lead to an improvement in the work characteristics, which in consequence, does not lead to higher levels of wellbeing. Practical implications and future ways of research with temporary workers will be presented.
SPECIAL SESSIONS
Sp1: Lunch time workshop: How can we promote research on OHP? How can the EAOHP promote research in OHP?

Karina Nielsen
Sheffield University Management School, Sheffield, United Kingdom

Karina Nielsen was elected Chair of the EAOHP Research Forum at the Athens conference in 2016. She would like to invite you to an interactive workshop on how the EAOHP can promote research in Occupational Health Psychology. Come along and discuss what kind of activities may help foster a vibrant research community in OHP. Ideas could be activities both at our conferences but also activities between conferences. Ideas could be organising workshops to facilitate joint collaborations, both networks and research projects or it could be organising small group meetings. The floor is yours so come along and let us discuss how we can promote OHP research.

I look forward to seeing you there,
Karina Nielsen
Chair of the EAOHP Research Forum and member of the Executive Committee
Director of the Institute for Work Psychology, University of Sheffield.

Sp2: Funding opportunities at the European Research Council for top scientists from anywhere in the world

Diana Francisco
European Research Council Executive Agency, Brussels, Belgium

The ERC aims to stimulate scientific excellence in Europe by supporting the very best scientists, scholars and engineers in any field of research. Through Europe wide peer reviewed competition with scientific excellence as the sole selection criterion the brightest ideas at the frontiers of knowledge are funded. There are neither thematic priorities, nor geographical quotas. The competitions are open to top researchers from anywhere in the world, provided they are based in or are moving to Europe.

The ERC has a set of funding instruments providing opportunities to the most promising and top researchers. ERC Starting and Consolidator Grants aim to support up-and-coming research leaders who are about to establish or consolidate a proper research team and to start conducting independent research in Europe. ERC Advanced Grants allow exceptional established research leaders of any nationality and any age to pursue ground-breaking, high-risk projects that open new directions in their respective research fields or other domains. In addition, the ERC launched in March 2011 the "Proof of Concept" initiative aiming at providing ERC grantees with additional funding to bridge the gap between their project and early stage of innovation. Moreover, ERC Synergy Grants are intended to enable minimum two to maximum four Principal Investigators and their teams to bring together complementary skills, knowledge, and resources in new ways, in order to jointly address ambitious research questions.

The presentation will include more about the granting schemes, proposals’ structure, the evaluation process and tips for preparing the proposal. [https://erc.europa.eu/](https://erc.europa.eu/)

Sp3: Promoting Healthy Workplaces in Portugal
Samuel Antunes
Portuguese Psychologists Association, Lisbon, Portugal

The Portuguese Psychologists Association (an association which represents the Portuguese psychologists), in the scope of the Workplace Mental Health Promotion Program, has been developing, since 2014, a series of initiatives at the national level aimed at promoting physical, mental health and wellbeing in the workplaces. This program includes four major initiatives:

1. Raising the awareness among government officials and parliamentarians, managers, business leaders and employees of the importance of promoting health in the workplace as well as how to promote healthy workplaces. This initiative involved conferences and joint actions with business associations and trade unions;
2. Creation of a platform that allows psychologists to evaluate, free of charge, the psychosocial risks in their organizations using COPSOQ II;
3. Creation of an annual prize to raise awareness and highlight companies (small, medium and large) that implement good health and safety practices in the workplace. This award is promoted in partnership with the local authority of EU-OSHA.
4. Development of a Program for Primary Prevention of Psychosocial Risks and training of Psychologists in this program.

Through this communication, the author intends to share the results of this program in Portugal, namely results obtained in terms of psychosocial risk assessment, results of the Healthy Workplaces Award (currently in the 4th edition) and the experience of promoting healthy workplaces in public and private organizations.

Practitioner Focus Session
Chair: Peter Kelly
Health and Safety Executive, Liverpool, United Kingdom

Sp4: The Journey of an Occupational Health Psychological Practitioner, Teacher and Educator
Katrina Thomas
Goldsmiths, London, United Kingdom

When you are teacher you are not just a person who teaches a subject, you are not just a history teacher, an art teacher, a drama teacher, a science teacher, you commit to becoming a guide, a supporter, a listener, a clown, a motivator a go to for advice on professional and personal needs, an opener of doors into a world that could not be seen until learnt. You roughly spend 7 hours with a group of people that you see develop, change, overcome obstacles, fall and get up, leave, come back, push against you and push with you.

The consistent drive of a teacher to inspire a class, inspire a school is truly an admirable trait; yet a tiring one, because not only are we, as teachers, required to be all of the above, we are also required to be office administrators, exam invigilators, multi taskers, flexible conformists, receptionists, researchers, with the ability to work within different subject areas, work with challenging behaviours, increasing mental health, work through redundancy threats and issues with, remaining calm, centred and with a healthy work-life balance. What seems to be happening with teachers is that they are worked until they are burnt out and not treated with professional respect. The excessive workload and the ongoing attack on pay are driving away those who truly love their job and those who strive to make a difference to new generations.
My presentation will aim to explore the ways in which occupational psychology and academia can join and work collectively, to improve mental well-being and to develop healthy working environments. As a teacher and a business psychologist, I am looking into the ways in which we can do that by the language we use and interventions, not just from the tertiary level, but also from the primary level.

**Sp5: A Cross-Sectional Intervention Study of a National Approach to Managing Work-related Stress in Primary and Secondary Education: UK Management Standards in Education**

Peter Kelly  
*Health and Safety Executive, Liverpool, United Kingdom*

The presentation will present the initial findings of a 20 school intervention study being undertaken by the UK Health and Safety Executive. The Education sector in the UK has high levels of work related stress in primary, secondary and higher Education. There is lack of studies into work related stress interventions and education and those that do exist are based at the tertiary level rather than the Primary Level. This intervention study seeks address paucity of studies and encourages further research in the sector.

The UK Management Standards for Work Related Stress is a primary intervention and, in this intervention study the Health and Safety Executive is seeking to establish sector wide interventions through a 2-year study.
EARLY CAREER SHOWCASE
EC1: Work– and Family–Related Stress: On challenges and Highlights of Turning Long–Term Research Results into Internet Intervention  
Ewelina Smoktunowicz  
SWPS University of Social Sciences and Humanities, Warsaw, Poland

In the presentation I will showcase my path from research rooted in occupational health psychology to e–mental health, and specifically to designing and verifying the effectiveness of web– and app–based interventions aimed at enhancing resources (such as self–efficacy and social support) in order to decrease work–related stress and job burnout, and increase positive outcomes such as work–family enrichment and work engagement.

As performing multiple life roles has become more of a standard than exception, identifying the mechanisms responsible for this process was a goal that early on I considered important both from scientific and social perspectives. The overarching aim of my PhD project was to test whether the consequences of demands imposed on a person in one life domain (work or family) impacted perceived stress also in other domains (in a process of spillover) and perceived stress of other people (in a process of crossover). Building on two models from the field of occupational health psychology—Job Demands–Resources model (Demerouti, Nachreiner, Baker, & Schaufeli, 2001) and Spillover–Crossover model (Bakker & Demerouti, 2013), I conducted two two–wave studies with three months intervals. In Study 1 the participants (N = 100) were individuals who were both employed and living with a partner, and in Study 2 the respondents were working and cohabitating couples (N = 130). In Study 1 I found that both job and family demands were associated with higher perceived stress in the domain they originated from and they spilled over to another life domain. These relationships were indirect: demands first increased work–family and family–work conflict, which in turn depleted self–efficacy to manage conflicting demands. In Study 2 I was mostly focused on testing whether the demands experienced by one person in a couple can cross over and increase the stress perceived by the partner. I found that job demands experienced by women increased the stress perceived by their partners at home and at work. However, men’s stress remained unaffected when women experienced high demands at home. In turn, women’s stress at home was higher when their partners experienced high family demands.

I used these findings to design an online, self–guided intervention aimed to facilitate managing demands imposed on people at work and at home. With “work–life balance” being a fashionable subject it is easy to find self–help tools, yet few of them are evidence–based. Internet interventions have an advantage of reaching many users who would otherwise not have an access to the professional help and are accessible in place and at the time most convenient for the them. In the presentation I will discuss the challenges associated with turning the results of long–term studies into interventions and highlight the benefits that make it worth the effort.

EC2: “Too Stressed Out to Become Active?!” – How and When Can Employees Benefit From Physical Activity as a Recovery Activity?  
Kristina Hilckmann  
Westfalian Wilhelm's University, Münster, Germany

This dissertation will put light on physical activity as a recovery activity. Research on relationships between physical activity and job stress offer inconsistent results. Some reported negative associations of physical activity and job stress, others reported positive associations (see Sonnentag, Venz & Casper, 2017 for an overview). Many studies show evidence for the positive
impact of physical activity on wellbeing and recovery outcomes. Although physical activity seems to be a benefit for recovering from job stress, only few employees get active in stressful times. During my research I will put light on the circumstances that influence if physical activity becomes a beneficial recovery activity. I will examine relevant predictors of getting active in stressful times and the characteristics of physical activity and the person that mediate the beneficial effect of physical activity for recovering from work. Thereby I will focus on physical activity during worktime (such as active microbreaks) as well as physical activity during leisure time (such as going to a gym). A distinction of physiological and psychological recovery will be considered.

In a first study I examined the relationship between volitional variables (self-efficacy, action planning and action control), wellbeing (positive affect, negative affect, serenity, quality of life, emotional exhaustion) and time spent physical active on an intra- and interindividual-level. Participants aged 18 to 61, who intended to get more active, took part in this study. Over twenty-eight days I collected daily survey data from 68 study participants. Before and after collection of the daily data a general questionnaire was presented. The pre-questionnaire included an action-planning intervention. Every evening participants rated their volition to get active the next day, their actual affect and the time spent active this day. Hierarchical linear modelling showed that daily time spent active was positive associated with daily positive affect and serenity and negative with negative affect. As hypothesized daily volition and time spent physical active were positive related. Comparison of the pre- and the post-data showed that, as intended, the participants weekly activity time raised over the time span of four weeks. This higher activity came along with higher reported life-quality, positive affect, serenity and lower reported negative affect and exhaustion. This study underlines the positive impact physical activity could have in the recovery process.

Further studies will take the predictive effect of the affect and job-stress as well as the beneficial effect of physical activity into account by more than one daily assessment of these variables. The quality of the recovery process by distinguishing physical and psychological recovery processes will be examined in a further study. Job related and personal factors as well as the quality of the physical activity will be also included in this research.

EC3: Getting the Work-life Interface You Are Looking For: The Importance of Work-nonwork Boundary Management Fit
Yanne Bogaerts¹, Rein De Cooman², Sara De Gieter³
¹KU Leuven, Leuven, Belgium. ²KU Leuven, Antwerp, Belgium. ³Vrije Universiteit Brussel, Brussel, Belgium

Work-life interface issues are a central concern in everyday discourses. Both employees and employers have been experimenting with the use of family-friendly HR-practices. Despite the growing academic interest in the topic and its practical relevance, work-life scholars and practitioners still do not fully understand why and for whom available family-friendly practices contribute to a satisfactory work-life interface (Kelly et al., 2008). Scholars increasingly agree that contemporary one-size-fits-all family-friendly practices do not meet the needs of all employees (Powell et al., 2018). Employees’ personal needs (partially) stem from their individual preference in managing boundaries between work and nonwork life and vary from segmentation to integration (i.e., the degree to which aspects of one role are kept separate or become intermingled with the other role). Likewise, family-friendly practices and organisational cultures differentially foster a certain degree of segmentation or integration and therefore cannot meet the diversity of needs among employees (Rothbard, Phillips, & Dumas, 2005). Thus, different calls have been made to study congruence between boundary preference and work environment supplies (e.g. family-friendly practices) and how this affects employees’ work-life interface (e.g., Matthews, Wayne, & McKersie, 2016). To this end, we have introduced the construct of and developed a measure for work-nonwork boundary management fit, referring to an employee’s perceived congruence between his/her personal boundary management preference and his/her
work environment supplies. Work-nonwork boundary management fit builds on the needs-supplies fit framework that finds its origin in person-environment fit theory and stems from an underlying process of cognitive comparison (Edwards & Rothbard, 1999). In the particular context of the work-life interface, we expect that a fitting work environment allows employees to shape their work-life interface in a way that meets their own needs and thus facilitates the reconciliation of work and nonwork demands and empowers employees to create their ideal work-nonwork interface (Kreiner, 2006). These propositions will be empirically tested in various studies that examine the impact of work-nonwork boundary management fit on both work- and family-related outcomes and work-life conflict.

This new concept of work-nonwork boundary management fit allows us to address a central question in work-family research: Why do different employees experience the same work environment as beneficial or harmful for their work-life interface. Studies in the work-life domain have consistently shown that the same combination of work-life practices and organisational culture affects employees differently (e.g. Foucreault et al., 2016; Rothbard et al., 2005). Family-friendly practices will thus contribute to a satisfactory and enriching work-life interface when employees perceive that these practices meet their personal boundary management needs. This implies that one-size-fits-all programmes may have drawbacks for employees who do not perceive that these programmes fit with their boundary management needs. Therefore, organisations should strive to help employees meet their individual needs and carefully select employees that fit in the overarching and dominant culture to improve employees' work-life interface. In sum, work-nonwork boundary management fit has the potential to significantly progress the contribution work-family scholars and practitioners make toward the prevention of work-life conflicts and achieving a satisfactory work-life interface.

EC4: ‘My Work Feels Like Home’: Dogs at the 2020 (Home-)Workplace
Joni Delanoeije, Marijke Verbruggen
KU Leuven, Leuven, Belgium

Background: The role of companion dogs in the lives of employees and the potential benefits for organizations when facilitating employees’ caring for their dog has been largely neglected in research to date (Barker, 2005). However, the new labour market generation of millennials surpass baby boomers as the largest dog owning generation and will make up for approximately half of the workforce by 2020. Organizations could respond to this reality in two main ways. First, companies may allow dogs on site. While companies small and large are already adopting this practice, no empirical research to date has studied its effects on employees, their co-workers and the dogs. Second, companies may allow employees to work from home. Dogs in the home-workplace may hinder cited drawbacks of telework, such as the risk for social isolation or too little detachment from work while at the same time allowing for its benefits on employee wellbeing. While telework is becoming increasingly prevalent, no research to date has studied the effects of dogs in the home-workplace.

Design/Methodology: In two daily diary studies, we will test the effects of dogs at work on employees, their co-workers, and their dogs, and the effects of dogs at the home-workplace on employees and their dogs. We will collect data at the beginning and the end of the workday as well as throughout the workday through self-reports and physiological measures using surveys and smart wearables (i.e., smartwatches and smartcollars). Daily studies using physiological data may be a promising method to capture employee and dog wellbeing at work.

Expected results: As psychological and physical benefits of dogs continue to be cited, we assume that dogs at the (home-)workplace may have beneficial effects for their owners or co-workers (Barker et al., 2012; Colarelli et al., 2017), yet we also expect potential harmful effects for co-workers or dogs depending on co-worker and dog characteristics. Organizational benefits of dogs at the workplace may be thwarted because of negative co-worker reactions. In addition, the dog wellbeing part could raise concerns.
Contributions: Our study contributes to the understanding and the measurement of effects of dogs at the (home-)workplace. More knowledge on beneficial and harmful effects and their moderators is a first step in formulating guidelines and protocols for HR-managers to effectively design, implement, and evaluate dog-at-work or work-at-home policies. Our results could lead to a breakthrough in the development of specific tools for organizations to assess the impact of “office dogs”.

EC5: Autonomy, Self-regulation and Wellbeing in ICT-enabled Boundaryless Work Environments
Edo Meyer
University of Vienna, Vienna, Austria

In recent decades, working life has been subject to far-reaching changes. Although these changes are diverse and manifest themselves in different ways, one common feature is a tendency towards flexibility and ‘boundarylessness’ (Kossek et al., 2012; Rosa, 2003). In particular, recent advances in information and communication technology (ICT) have made it possible to execute particular types of work nearly everywhere and at any time (Allvin et al., 2013). The dissolution of boundaries and the associated increase in flexibility in these work arrangements lead to new possibilities and challenges that research has not captured in its full extent yet. Even though research has examined flexibility in the workplace for a considerable amount of time, we still find ambiguities on various levels within the published literature. There is, for example, a profound contrast between a quite unrestrained enthusiasm about the benefits of flexibility for the workers, predominantly advocated by management research, and more critical studies, pointing towards increased demands (Allvin et al., 2013).

This thesis is part of an interdisciplinary DOC-team project funded by the Austrian Academy of Sciences. In a group of four doctoral students (two psychologists and two sociologists), we will study the impact of “ICT-enabled boundaryless work” on household arrangements, work organisation, self-control, detachment, recovery and wellbeing as well as the construction of identity through a psychological and a sociological lense.

My doctoral thesis consists of three modules of which two are oriented psychologically and one is planned as an interdisciplinary approach. To establish a solid base, I will first study the definition and measurement of flexible work since there is a variety of approaches on how to capture the phenomenon accurately and in its full extent. The distinctions between availability, use and control of flexible work arrangements (FWA) is still quite inconclusive in the literature. The second module will shed light on a phenomenon known as the “autonomy paradox” and its relation to work identity. Autonomy as a basic psychological need is generally beneficial for the employee (Ryan & Deci, 2000) but there has been evidence that in certain circumstances workers limit their own autonomy with the help of ICT (Mazmanian et al., 2013). How this behaviour interacts with the work identity and what this implies for a successful life domain balance, will be examined.

Along with the deregulation of work, an increasing demand for self-governance or self-control is discussed (Allvin et al., 2013). Due to the deregulation of work processes, external control is reduced and replaced by results-oriented work assignments. As a consequence, the use of FWA requires employees to efficiently organise their work and therefore regulate their attention, behaviour, and emotions (Prem et al., 2016). This successful self-control may be thwarted by the variety of working times and places in flexible work arrangements, since workers have less constant cues to develop energy-saving routines (Ohly et al., 2017). The connection between FWA, self-control and routinised behaviour will be explored.
Technological advances have changed how we work. As mobile phones and laptops have become ubiquitous mediums of connectivity, an increasing number of employees are exposed to new forms of working. Flexible work arrangements (FWA), allowing to work detached from time and place, have widely received positive press as business panacea for employee wellbeing (Golden & Elia, 2017), and are linked with fostering job satisfaction and reducing turnover intent (Gajendran & Harrison, 2007).

However, increased physical distance seems to come along with feelings of social isolation, limited identification with coworkers (Fay & Kline, 2011), and impeded workplace friendship development (Sias & Cahill, 1998). Face-to-face interactions are often substituted by media-mediated communication, making it more difficult for employees to access tacit knowledge (Lee, Shin, & Higa, 2007), informal, and sensitive information (Ellison, 2004). According to cues filtered-out theories, the quality of social interactions decreases as the number of available verbal and non-verbal cues decreases (Culnan & Markus, 1987).

As FWA modify the social environment of work, they change the way people interact (Taskin & Bridoux, 2010). This poses the question of whether the need for relatedness, as identified by self-determination theory (SDT; Deci & Ryan, 2000), can be satisfied in FWA where face-to-face contact is limited. In this context, social support (including information, instrumental, and emotional support) is seen as important social resource as it refers to relational characteristics between colleagues (Schaufeli & Taris, 2014).

In my research, I aim to clarify if and how social needs can be satisfied in FWA. Using longitudinal and daily diary study designs, within-person variability of relatedness need satisfaction, as well as underlying mechanisms can be examined. First, I attempt to extend the literature on social support in the context of FWA, focusing on the question if media-mediated social support can fulfill the need for relatedness. I propose that in terms of emotional support, media-mediated communication fails to provide the amount of intimacy (Holtzman et al., 2017). Drawing from ideas of work-home compensation, I would further like to investigate whether the lack of relatedness satisfaction at work can be compensated through other life-domains. Employees in FWA might benefit from relatedness need satisfaction at home on days when their need for relatedness could not be satisfied at work (see Hewett et al., 2017). Finally, I would like to integrate crafting behaviour, which suggests that people can actively shape their work (job crafting) and private life (leisure crafting) and thus, influence their relatedness need satisfaction (Petrou & Bakker, 2016).

I expect to add value to knowledge in terms of processes that take place in face-to-face versus media-mediated support interactions (Holtzman et al., 2017) influencing relatedness need satisfaction. Also, I would like to contribute to the SDT literature by suggesting a compensation mechanism across life-domains for relatedness need satisfaction in the context of FWA. Ultimately, employees working flexibly may modify social aspects of their work or non-work domain according to their relatedness need satisfaction, suggesting that employees should be offered opportunities to craft social relationships.
EC7: Flexibility vs. Structure: The Role of a Personal Need for Structure in an ICT-enabled Deregulated World of Work
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The application and usage of information and communication technology (ICT) profoundly affects and changes the organisation of work and establishes new parameters of agency and power in organisations. Thus, ICT-enabled work can increase workers’ autonomy about when, where, how and in collaboration with whom they perform their work tasks in order to fulfill their job duties. As the workers’ scope of choice and action increases, fewer external guidelines are provided by the employing organisations. Thus, many contemporary jobs performed with the help of ICT are characterised by deregulation and a lack of organisational structure (Allvin et al., 2013).

Increased autonomy and flexible work arrangements are often praised as key helping workers to manage their work and nonwork responsibilities (Allen et al., 2013), but there are also indicators that work autonomy increases the perception of work ambiguity, especially for workers with a high personal need for structure (Elovaino & Kivimaki, 2001). Individuals with a high need for structure are characterised by a generally intense desire for clarity, certainty and predictability (e.g., Thompson et al., 2001). Work ambiguity and work unpredictability are symptoms of a lack of rules, routines and structuring and are known to foster occupational strain (Elovaino & Kivimaki, 2001), which is also associated with workers’ (usually detrimentally) repetitive thinking about work matters during leisure time (Cropley & Purvis, 2003). The question remains, whether modern ICT-enabled work autonomy in terms of time, place, performance and collaboration also pushes workers with high need for structure into rumination about work and into a cognitive work-nonwork conflict via a considerable increase of work ambiguity and unpredictability.

In this dissertation project, three empirical studies will look into the relationship between work ambiguity and unpredictability with workers’ (mostly detrimental) cognitive reactions with regard to their personal need for structure, mainly drawing on the Stressor-Detachment Model (Sonnentag & Fritz, 2015). Firstly, I will test how daily work ambiguity and unpredictability affect daily work rumination during leisure time while considering workers’ need for structure as a trait moderator variable. Secondly, a quantitative longitudinal study will shed light on the proposed mediating effect of work ambiguity and unpredictability in the relationship between work autonomy and the cognitive work-to-nonwork conflict. Finally, I plan to conduct a cross-legged study with dual earner couples to investigate the influence of both partner’s need for structure in the association of work ambiguity and unpredictability with both partner’s subjective wellbeing. This effect is possibly buffered by their role-referencing behaviour (i.e., if the partners mention some aspects of their life role as a worker when engaged in their private life role as a spouse; Nippert-Eng, 1996).

EC8: Teachers’ Recovery Processes: Investigating the Role of Different Breaks from Work for Wellbeing and Health among Ageing Teachers
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My research project is part of a larger research project called New Lessons in Recovery: Investigating the Role of Different Breaks from Work for Healthy, Happy and Creative Ageing Teachers, financed by the Finnish Work Environment Fund (PI: U. Kinnunen). The project comprises three sub-studies focusing on recovery from work among Finnish teachers. Teachers are typically highly stressed and greatly affected by today’s changing working conditions. In addition, their possibilities to have self-scheduled breaks during working days are limited, restricting their within-working day (internal) recovery and increasing the risk of burnout and other stress complaints. My dissertation project will consist of three articles, one based on each sub-study.
This research project has three major aims. The first aim is to look at the role of ageing in recovery from work. Scientific evidence of this important topic still remains very limited. In my first article I will look at how age moderates the relationship between six recovery experiences (based on the DRAMMA model) and wellbeing outcomes in a cross-sectional sample of 909 teachers and headmasters. Secondly, we aim to gain new insights on the interrelations of different types of recovery. The so-called external recovery occurring outside working hours has been studied more often than the internal recovery occurring during breaks during working hours. My second article will focus on the interplay between internal and external recovery in a sample of 107 teachers using a one-week diary study design. Thirdly, we examine whether it is possible to increase and to prolong the beneficial effects of longer recovery episodes. Previous studies have shown that the beneficial effects of vacations on wellbeing tend to fade out quickly after getting back to work. My third article will focus on our third sub-study: an e-mental health intervention study, where we aim to identify strategies to strengthen and prolong beneficial effects of vacations with the help of a smartphone app.

The overall aim of my dissertation project is to gain new knowledge about recovery processes during working days, off-job time and vacations as well as their interplay in workers with particularly challenging and societal important jobs. This knowledge could help in formulating practical guidelines for more successful recovery among teachers of different ages.

**EC9: Time Pressure in Daily Working Life**

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Time pressure has become an integral part of modern working life that affects large parts of the working population. As a challenge stressor, time pressure has been shown to have both beneficial as well as adverse relationships with work outcomes. Although such ambivalent relationships with work outcomes are well documented in the literature, previous evidence is largely based on cross-sectional data that does not permit to draw conclusions about within-person processes. However, it can be assumed that both the beneficial and the adverse relationships of time pressure with work outcomes actually stem from within-person processes that unfold on the day level. Thus, the three main publications of the present doctoral thesis investigated such within-person processes in daily working life using diary study designs. The first publication investigated motivational and strain-related processes that link time pressure to task performance simultaneously on the person level as well as the day level. The results indicated that not all person-level relationships might actually stem from within-person processes, suggesting that future research might benefit from further investigations of within-person processes triggered by time pressure. Thus, the second publication took a closer look at the adverse relationships of time pressure with job strain. It revealed that time pressure leads to ego depletion via a serial process of state anxiety and self-control effort. Finally, the third publication focused on the beneficial effects of time pressure and investigated cognitive appraisal processes in the link between time pressure and both components of thriving at work. The results showed that although time pressure fosters learning at work, it does not affect employees’ vitality at work, indicating that time pressure does not promote thriving at work in a strict sense. Overall, the present doctoral thesis sheds light on the within-person processes triggered by time pressure in daily working life. Implications for both scholarly knowledge as well as occupational practice are discussed.
Psychological fatigue is the subjective experience of tiredness and the aversion to further expansion of effort (Earle, 2004). It results in impaired cognitive processing and the tendency to gravitate towards lower effort strategies (Lorist et al, 2015). Fatigue is a significant concern in modern occupational settings (Fletcher et al, 2015). Without appropriate intervention it can have catastrophic consequences for health, wellbeing (Frone & Tidwell, 2014) and in extreme work environments, it can put safety at significant risk (Lee & Kim, 2018).

The offshore wind industry (OSWI) presents a new and unique working environment. Wind turbines require regular maintenance and are located in marine settings which are exposed to extreme weather conditions (Bruno et al, 2013). Operations and maintenance (O&M) technicians face mental and physical challenges throughout the course of rigorous shift patterns (e.g. boat transfers, climbing turbines, engineering work). Fatigue poses a risk for safety in the short term and for health and wellbeing in the long term.

The effects of fatigue on safety will first be considered. Fatigued individuals revert to lower effort strategies (Boksem & Tops, 2008). This means that they are more likely to take short cuts, bypassing important safety considerations (Earle et al, 2015). Motivation and task engagement can moderate fatigue (Hockey, 1997). However, this will cause attention to deteriorate on subsequent tasks (Earle et al, 2015). This may mean that fatigue will not seem to affect an individual in their present task (e.g. inspecting a turbine blade), but could lead to unsafe behaviour on their next task (e.g. climbing down the turbine). The fatigue/effort relationship in the context of the OSWI will be investigated to determine the point at which fatigue is likely to become dangerous.

It is vital to consider the long term impacts of fatigue on the health and wellbeing of O&M technicians. When an individual becomes fatigued, long term goals (e.g. finishing a task) face increased competition from short term goals (e.g. the maintenance of health) (Boksem & Tops, 2008). Although these short term goals can be overridden; the consistent overriding of these is likely to lead to stress and burnout (Bazazan et al, 2018). Fatigue can also lead to severe physical health issues (Knutsson et al, 2010).This project will suggest preventative interventions for the long term implications of fatigue.

Thus, psychological fatigue can have devastating consequences for both short-term safety, as well as long-term health and wellbeing for O&M technicians. However, its affects within the OSWI are unknown. Therefore, the current project aims to identify causes and consequences of fatigue within OSWI. These insights are then to be used for implementing and testing planned interventions for fatigue management.

The project has four planned stages:

- **Stage 1:** Review of existing literature on fatigue and its effects in occupational settings.
- **Stage 2:** Field research in the OSWI to establish the main causes of fatigue and potential solutions.
- **Stage 3:** Lab based studies to trial potential solutions for fatigue management.
- **Stage 4:** The creation of a bespoke fatigue management plan for the OSWI.
EC11: Technostress: What People See is Just the Tip of the Iceberg
Liza M. C. van Dam, Joep van den Eerenbeemt, Laurie M. Hermans, Martine P. van Egmond, G. Lennart van der Zwaan
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Introduction: Technological disruptions keep advancing, with almost unlimited applications for our daily and working life. Associated with this development is the increasing opposition of criticasters, pointing out that technology may have enabled us, but it has also enslaved us. A broad understanding is needed on how to manage technology, communication, and the changing demands this poses on workers’ availability and capacities. Therefore this exploratory study aimed to (1) describe a relatively new construct named technostress and (2) to assess the impact of “technostress” on the Dutch working population.

Methods: This study used several methods to gather information. After an apprehensive literature study, interviews were conducted with a group of employees. During the interviews, participants were asked about their knowledge of technostress, the effects of technology on their daily lives and how they used technology in the workplace. Lastly an interview with a group of Dutch experts on the subject of technostress was broadcasted live to raise awareness.

Results: During this study, it became clear that technostress is an intricate construct, manifesting itself in various ways depending on the situation and use of technology. Therefore, to describe technostress as a whole, not one but multiple themes were extracted from the data. These themes describe the different ways in which technostress can be experienced by individuals. The themes are mentioned below, including a short explanation.

- **Dealing with technology**: Stress that arises from dealing with faulty technology or being unable to keep up.
- **Distractions, stimuli and the fear of missing out**: Stress that results from the constant use of a smartphone and missing certain messages or events.
- **Work-life balance**: Stress that results from being able to work at any time or place.
- **Expectations and organisational culture**: Stress that arises as a result of not being able to set boundaries and being available at all times.

The first theme describes what most individuals associate with the term technostress. However, when participants in our study were asked to more thoroughly describe other instances of feeling stressed due to the use of technology, the other themes were always mentioned. The latter three themes seem to influence our stress-levels in a more detrimental way. However, this influence is often less noticeable and not immediately associated with use of technology.

Conclusions and/or implications: The majority of the participants in this study were either (1) not aware that technostress existed or were (2) under the impression that technostress referred to stress that arises from working with faulty technology (telepressure). This, as we now know, is only the tip of the iceberg. Therefore the most important finding is that, first of all, more awareness on technostress is needed. In addition, interventions on technostress are required, particularly in the areas of:

1. developing ways of dealing with the constant stream of distractions and stimuli,
2. maintaining a good work-life balance despite being able to work everywhere and at all times, and
3. changing the organisational culture surrounding the need for constant availability of employees.
EC12: Dealing with Technostress: Action Research to Test Technostress Interventions Based on Recent Insights in Dutch Research

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Introduction: Use of technology at work is advancing at a rapid pace, seeping into all aspects of our daily working routine. Though new technologies often make our lives easier, it also enables us to work harder, faster and at any place or time. At first glance, these possibilities seem to only positively influence our working lives. However, these benefits can also induce technology related work stress, or technostress. Last year, TNO identified the main themes causing technostress. Technostress originates from (1) a lack of knowledge on dealing with technology, (2) dealing with its constant distractions and the fear of missing out, (3) being able to work at any place or time, and (4) the organizational culture.

A study will be carried out this year, focusing on developing interventions to prevent (or reduce) technostress at work. In addition, the effects of several interventions that have been implemented in other EU states will be studied.

Proposed interventions: Looking at the main themes in technostress within the Dutch population, TNO has identified three different interventions that fit the needs of employers and employees. Firstly, an intervention originating from France will be repeated. This intervention involves blocking the employers email servers at night, making it impossible to email others during off-hours. Secondly, TNO will develop a ‘Concentration bubble’, this software program helps identify and block unwanted or unnecessary technological stimuli. Lastly, an intervention on organisational culture is proposed, which focusses on setting boundaries and fair treatment. These interventions can be adjusted during the action research to better fit the needs and requirements of each setting.

Methods: This study will be conducted in three steps: Understanding the needs of both employers and employees for technostress reduction. At least three separate organisations (commercial / governmental / non-profit) will provide these insights. Adjusting existing interventions or developing new interventions that fit the individual needs of the different organisations. TNO aids the implementation of the interventions by collaborating with local teams. To adjust interventions to the needs of companies and further increase the effectiveness, data will be collected at multiple moments during the study. Analysing both the qualitative and quantitative data. Interviews with employees, management and employers will help understand the effectiveness of the interventions. TNO will combine these results with the quantitative data to be able to study whether the intervention effectively reduces (or prevents) technostress.

Conclusions and/or implications: Technostress is affecting the health - and as a result the sustainable employability – of workers everywhere. To prevent (or reduce) technostress, interventions have to be developed and tested. These interventions have to fit the needs and specific problems within organisations. With this in mind, it is expected that the current methodology fits this need. However, as this study has yet to start, we cannot speculate on the effectiveness of our proposed interventions. During our presentation we hope to make great use of the expertise of the crowd and their own experience with technostress to provide us with new insights to incorporate within the upcoming interventions.
EC13: Do Wearable Devices Enhance Cognitive Performance of Workers? Theoretical Supports from Technology Acceptance Model
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Background: Technology is changing how we live and how we work. In the recent decades, the rapid technological innovations have significantly influenced the complexification and automatisation of the work lines. These alterations led human operators to perform less repetitive operations and more diverse activities in regulating and supervising complex industrial machines. As such, the current workplaces demand not only the physical capabilities of the workers, but also they demand specific psychological profiles of workers to be able to analyse, integrate and maintain information from multiple sources and react quickly. To facilitate this adaptation between workers and job demands new technological advances such as ultra-wearable interfaces, augmented reality, RFID readers, and virtual assistants have been developed. According to our literature review, a growing number of industries and organisations are applying these technological devices to reach an optimal level of cognitive load among workers.

Method: The aim of this review is twofold. First, we attempt to expand our theoretical knowledge on how using these technological advances aid companies to distribute the necessary information to the right worker, at the right moment, at the right place, and in the right format. Second, we argue that theories extracted from cognitive and organisational psychology may help to explain how these cognitive assistants discharge or overload the cognitive system of the human operators leading to various outcomes.

Results: Our review suggests that the current models of working memory give precise indications concerning the way in which information should be displayed to minimise the cognitive cost of wearable devices and reduce the cognitive workload. Also, these models aid us to further develop methods to measure the cognitive load. In addition, we argue that using wearable devices would enhance both cognitive performance and wellbeing of human operators. Finally, we suggest that the current theoretical frameworks, such as Technology Acceptance Model, provide solid theoretical explanations in support of these technological advances in the industrial workplaces.

Conclusion: The proposed framework provides suggestions on how to apply wearable devices in a way to reduce the cognitive workload and the cognitive limitations of workers in the workplaces. While we expect that human users, due to their cognitive limitations, may not always exhibit their best cognitive performance, these technological advances still are likely to reduce the cognitive limitations and to enhance the cognitive performance of human operators.

EC14: Health Professionals as a Condition for Professionalism in the Social Work
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With the increase in the present flight and migration movement it turns out that modifications in operation concepts has become necessary in the field of children and youth welfare. Complex challenges arise especially in the field of unaccompanied minor refugees as qualified employers have to deal with high clients numbers, unclear orders by politicians, withdrawals in standard processes and limited scopes of action. On basis of intersectoral studies results, it turns out that high work requirements and low autonomy can have a negative effect on employers health. Furthermore, the burnout risk is particularly high with head of the youth welfare facilities services, social workers and educators. The data regarding protective factors and resistance resources of
this working group is tendency low. The thesis on hand wants to close this research gap and achieve an integral view at the named field. The aim is to find charging factors and relieving factors of social workers by using guide supported expert interviews with the help of the grounded theory methodology. Moreover, on basis of the Salutogenesis and the Job-demands-ressource model, subjective health experiences are determined, in order to make the present workload of social workers transparent and to clarify the interaction of health and working constitution. About this action recommendations could be formulated in the context of an occupational health support. In the end, the vision is to develop a smartphone app which helps social workers in their daily work to promote their health wellbeing by using instruments of reflection. As health treatment costs are high, this opportunity could be a flexible solution regarding burnout prevention and other mental illnesses. Facing current integration challenges in Europe, the health of social workers is of great importance, as their contribution will make a difference in social life and social peace.

EC15: Implications of Empirical Research on Transformational Leadership and Coaching in the Organizational Environment
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Emerging dynamics in the world of work require leadership skills that can transform the environment and change reality in order to promote wellbeing and organizational productivity. From this perspective, managers have used different methods of promoting leadership skills, such as coaching. Coaching is a systematic process of self-reflection, learning and personal growth and is associated with the promotion of organizational results and behavioral change. This article aims to identify and analyze, through a systematic review, the relationship between Coaching and transformational leadership in empirical studies, the role of coaching in the development of transformational leadership and the behavioral competencies of transformational leadership. We analyzed 6 articles that demonstrate the possibility that transformational leadership can be developed in the organizational environment. In general, leadership is approached as a type of competence that can be promoted, developed, and empowered through training.

EC16: Clarifying the Promise of Workplace Mindfulness Training
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There is a growing body of evidence that indicates training in mindfulness leads to reduced stress, improved mental health and wellbeing, and performance-related outcomes such as increased prosocial, attentional and meta-cognitive abilities. In combination, these outcomes are appealing to employers, as they potentially address both human resources and productivity targets. But the standardized training protocols on which most evidence of mindfulness training is based require a considerable time commitment to class attendance and daily practices. Adaptations are therefore frequently made so that workplace mindfulness training (WMT) can fit within the demands of contemporary work, leading to a proliferation of 'low-dose’ WMT programs using a range of delivery methods. This variability in intervention format is a commonly reported limitation for WMT research, as is a lack of quality controlled studies in work settings, limited understanding of who benefits most from training, the minimum dose required for positive effects, and an over-reliance on self-report outcome measures.

The objective for this doctorate is to help clarify the potential of workplace mindfulness training (WMT) for employee wellbeing and work performance. To achieve this goal, three core projects are pursued.
First, to more clearly understand what the best evidence says, a meta-analysis of randomized controlled trial (RCT) data of WMT programs has been conducted. Outcomes studied were mindfulness, mental health, stress, wellbeing and work performance. The moderating influence on stress of intervention dose, delivery mode and industry sector were investigated.

The second project is the development of a peer-report observed mindfulness measure (the OMM). The OMM – once validated – may provide a scalable, inexpensive instrument to support WMT research by providing another source of data for validating self-reported results. The OMM may also be a useful instrument for assessing whether WMT leads to external effects, like leadership, teamwork and other prosocial behaviors.

The third study flows on from the meta-analytic findings. In this study, app-based WMT will be assessed for effects for employee stress in a three-arm RCT in an Australian public sector workforce. Mindfulness apps can offer a low dose, highly accessible training path, but despite growing availability and use, this approach to cultivating mindfulness skills is not yet well evidenced. Self-guided use of an app-based WMT program with and without supporting seminars will be compared with a waitlist control in a sample of 210 employees. This study addresses questions of dose and delivery mode in WMT. The characteristics of the workforce will enable examination of effects by role type, and app usage data will provide an objective measure of dose received and allow assessment of effects by adherence. Self-report effects for stress, mental health, performance, productivity and quality of life will be correlated with observer reports of organizational citizenship and mindfulness.

Together, these three projects should help to clarify what the current RCT data says about WMT, extend the evidence base to include app-based WMT, and offer an instrument for use in future research into the potential effects of mindfulness training that go beyond personal mental health.

**EC17: Engagement in Action on the Example of Activities Aimed at Self-Realisation or at Helping Other People**

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The main objective of the project is to develop and verify a model of engagement in action that goes beyond the basic professional duties. This understanding of engagement refers to thoughts, emotions and behaviours related to taking action on one’s own initiative and includes activities that do not result from the baseline work requirements of the organisation in which they are undertaken. The implementation of the project should help to answer the following research questions:

1. What are the motives of engagement in action?
2. What are the characteristics of the subject of action, the goal of action and situation in which the action takes place, that influence consistent and intensive engagement?
3. What are the links between the determinants of engagement in action? The results may also help to obtain answers to the question of how to shape and strengthen engagement in action. The proposed project has therefore application potential.

The research will be carried out among professionals, women and men, aged between 21 and 45, who are representatives of aid professions (members of associations and foundations, employees of social assistance), whose work is primarily focused on the welfare of others; and the creative professions (architects, interior designers, graphic designers) whose work is primarily focused on self-realisation - 100 people per group. The recruitment of the research subjects will be continuous.
The research will be carried out using questionnaire methods (single measurement) and the daily diary method (multiple measurement). In the first stage the subjects of both groups will fill in a set of questionnaires measuring the overall level of engagement in actions beyond basic professional duties and variables such as self-efficacy, persistence, value system and sense of meaning of undertaken actions. The survey will be conducted using the online questionnaire application surveymonkey.com. In the next stage, for 6 consecutive days of the week, the subjects will fill in an electronic diary with the questions about daily engagement in actions that go beyond professional job duties, daily autonomy in action, sense of competence, feedback from others, and positive affect during action.

The obtained data will be subjected to a multilevel analysis using hierarchical linear modeling and other statistics in order to single out the determinants of engagement in action and the relationships between them.

Undertaking research in the proposed area is important for cognitive, social and economic reasons. Firstly, it should contribute to a better understanding of the phenomenon of engagement in various activities and identify its motivational and personality mechanisms. Secondly, the study results and the final model may form the basis for a program of individual interventions aimed at strengthening engagement in action and improve the subjective quality of life of society. Thirdly, a better understanding of this phenomenon could become the basis for the development of correct attitudes towards work and activities for the local community.

EC18: A Closer Look into the Dynamics of Work Engagement: Why Psychological Capital of Employees is So Important
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The aim of the thesis is to investigate the role of Psychological Capital in the relationship between events, which occur in daily work, and employees’ emotional reactions to them and their work engagement. Psychological Capital (PsyCap) is defined in line with the Job Demands-Resources Theory focusing on personal resources such as hope, self-efficacy, resilience and optimism (Luthans, 2002). According to current empirical findings (Bakker & Bal, 2010; Bledow, Schmitt, Frese, & Kühnel, 2011; Xanthopoulou & Bakker, 2012), work engagement is considered a dynamic and floating process, which can increase and decrease over short periods of time. My research project aims to gain novel insights into how this dynamic micro process differs between individuals depending on their personal resources. I propose that psychological capital makes employees both less dependent on positive events and secures them from reduced work engagement when negative events occur. Moreover, I would like to investigate if the abovementioned effect is universal while taking into account different types of occupations based on The Prediger’s classification of occupations (work with tools, work with data, work with people, and work with ideas; Prediger, 1999). Finally, I am interested in extending knowledge on development of psychological capital through targeted training interventions. There is still not enough evidence showing the effectiveness of Psychological Capital Interventions (PCI), especially when different occupations and work environments are considered. My research program will be divided into two parts. First, based on experience sampling method, I plan to measure negative and positive events occurring in work, employees’ emotional reactions to them and their daily work engagement over a period of at least ten workdays. As PsyCap as a whole construct seems to have higher rank-order stability than emotional states, it will be measured only once, before the measurement of other variables. This part of my project will be carried out in various companies in Poland in order to examine the role of PsyCap regarding different types of occupations and work environments. The second part focusing on how PCI can impact on
fluctuation of work engagement, will be conducted in quasi-experimental model. In this study I also plan to use experience sampling method with daily measure of occurring events, emotional reactions and work engagement, however participants in the treatment group will be asked to fill the web-design questionnaires twice during the research period - before PCI (Time 1) and after PCI around one month later (Time 2). There will be also the control group namely employees who will complete daily measurements twice but will not participate in PCI. PsyCap will be measured twice with the similar procedure as in the first part of my research program. The intervention will closely follow the PCI guidelines described in Luthans, Avey, Avolio, Norman, & Combs (2006). Accordingly, it will be a workshop lasting about two hours and mainly focusing on goal-setting exercises and a small-group session for positive thinking. To sum up, this research will provide additional evidence for the importance of PsyCap in influencing employees’ work engagement.

**EC19: Business Suits; Do They Deliver More than Just 'Smart' Appearance in Organisational Situations? Examining Their Effects on Cognition and Emotions**

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Traditional business suits may have a reduced presence in current workplaces, being replaced by 'casual', 'business-casual' clothing or organisational uniforms (Cardon and Okoro 2009). The change has been swept along by initial attempts to satisfy employees, rather than an organisational desire to heighten corporate identity (Bart 2016). However, the full effect of workplace clothing on emotions and behaviours, in particular, the business suit, had previously been dominated by literature examining perceptions associated with wearers (Behling 1991; Kwon 1994a; Peluchette and Karl 2007). This research resulted in robust support linking business suits and perceptions gained through seeing and wearing one. Perceptions are strongly embedded in cognitive processes, formed through e.g. social interactions and experiences, resulting in schemas (Hannover and Kuhnen 2004), which have been recorded somewhat subjectively. However, objective measures of wearing a business suit were lacking. Sensory input from embodying garments had also not been explored in the context of a business suit. Additionally, extant research had argued that emotional responses to clothing and sensory perceptions attained through them were not always congruent; suggesting, what the heart said didn't always match how the body responded (e.g. Lu and Chen 2013). This suggests that the physical experience of wearing clothing may be underestimated and not considered in the understanding of clothing’s effects on behaviours.

Research had touched upon the effect of the clothing (e.g. business suit) in the workplace and argued that wearers can experience enhanced affectivity and mood, and use it to control and convey attributes (e.g. Frith and Gleseson 2008; Howlett et al. 2012; Karl et al. 2013). However, direct effects of clothing were often blurred by secondary experiences, e.g. wearing a business suit resulted in heightened feelings of 'performance', yet this performance was not measured objectively, therefore its impact was implied. However, behaviour and cognition have recently begun to be investigated as a direct result of wearing particular items of clothing (Adam and Galinsky 2012; Slepian et al. 2015; Stockum and DeCaro 2014). Using Enclothed cognition theory (Adam and Galinsky 2012) as a framework, the present research examined was the effect of wearing a business suit in an anxiety-inducing situation - one that's a common entry port into the workplace - a face-to-face interview. Anxiety, mood levels and cognitive performance were measured to assess the effect of the business suit on them. In addition, unconscious physiological responses (pulse rate) were also measured. The results showed that cognitive processes were significantly enhanced when participants wore a business suit jacket, mood and anxiety were positively affected but did not reach always reach significance. Conclusion thus far are that wearing a business suit positively affects somatic, cognitive and
emotional processes in garment-congruent contexts, some of which are not in conscious awareness. Implications for the workplace are that when implementing work-place clothing or dress-codes, consideration should be given to the full effects on wearers' subsequent emotions and wellbeing, e.g. feelings of self-expression, congruence, anxiety reduction. Future research will examine the effect of enforced clothing (uniforms - e.g service industry) on wearers emotions and behaviours.

Early Career Showcase 3: Health Behaviours, Wellbeing and Absenteeism - What can we learn from our own PhD process?
Chair: Birgit Greiner
University College Cork, Cork, Ireland

EC20: Intangible Outcomes of the Work with a Doctoral Thesis
Annika Nordin
Jönköping University, Jönköping, Sweden

In October 2017 I successfully defended my doctoral thesis with the title “Expressions of shared interpretations - Intangible outcomes of continuous quality improvement efforts in health- and elderly care”. The thesis is grounded in improvement science, a pragmatic and interdisciplinary research field describing and exploring real-life improvement. To evaluate and monitor this kind of organisational improvement the use of tangible performance measures are heavily emphasised. In my thesis, I describe how continuous quality improvement efforts (CQI-efforts) also lead to intangible outcomes; qualitative effects that are not easily captured with traditional performance measures. Research has shown that it is advantageous that those performing CQI-efforts have some kind of “sharedness”, e.g. shared cognitions, understanding, knowledge, interpretations or frame of reference. These diverse concepts have mainly been described as prerequisites for change. In my thesis however, I study intangible outcomes on collective level as outcomes of CQI-efforts. Scholars have stressed the importance of evaluating the effects of CQI-efforts taking a clear customer perspective. To get a comprehensive understanding of all effects of CQI-efforts, I highlight the need to study intangible outcomes among those performing the change, i.e. the workers. Different theoretical frameworks are used in this effort: team cognitions (Paper 1), sensemaking theory (Paper 2), cognitive shifts (Paper 3) and programme theories (Paper 4). Overall, my thesis adds value to improvement science by describing and exploring new perspectives of the research field. All papers are published.

“Was the effort worth it?” is almost an ironic question in the context of my thesis. The task to write a doctoral thesis can be understood a major personal CQI-effort leading to both tangible and intangible outcomes. The PhD diploma itself, and the new employment are tangible outcomes, but also the reduced income during the (nine years) of studies. However, the intangible outcomes overweight. I believe to have become more empowered (corresponding results presented in Paper 1). I also believe I have undergone cognitive shifts (corresponding results presented in Paper 3). I no longer see my self as a practitioner, but as a researcher with a solid ground in practice. Finally, I have developed my expectations on my work (corresponding results presented in Paper 4). Therefore, the effort was indeed worth it. However, in my thesis the centrality of sensemaking in CQI-efforts is described and I believe the question whether it was worth it or not is for every single PhD student to answer.
EC21: Eating Behaviours and the Workplace: The Role of Socioeconomic and Sociodemographic Characteristics.

Judith Grant  
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The overall aim of the doctoral research was to explore the role of socioeconomic status (SES: defined in terms of education, salary and job grade) and sociodemographic factors (age, gender, number of dependants and Body Mass Index (BMI)) in the eating behaviours of employees, and to explore the barriers and facilitators to healthy eating in the workplace. Much of the academic research in this area focuses on community interventions. However, understanding eating behaviours in a workplace setting will enable the design of targeted interventions to improve dietary knowledge and habits, and thus improve employee health for the benefit of the individual, the workplace and the community.

The present quantitative analysis was part of a wider study designed to track a cohort of employees working for Northern Ireland Civil Service (NICS). NICS is a public sector organisation employing around 27,000 full-time employees. The current study involved two surveys of the entire NICS workforce: The 2012 survey attracted 6,091 responses and in 2014 there were 6,206 responses, both representing a 22% response rate. To further explore the results identified in the quantitative analysis a qualitative study was carried out on employees of a large (134,000 employees), recently privatised, organisation that reflects many of the organisational characteristics of NICS: Royal Mail Group.

All variables in the quantitative analysis were measured using a single self-report anonymous questionnaire. In addition to collecting data on demographic and occupational variables, the questionnaire assessed a wide range of constructs of interest within the occupational health psychology domain. The focus of the current doctoral investigation is on items concerning eating behaviours – fruit and vegetable consumption and healthy eating (measured in 2012 and 2014) and the cost of food influencing purchasing behaviours and eating past the point of feeling full (measured at 2014).

A descriptive epidemiology identified the importance of demographic factors, in addition to the measures of SES in relation to eating behaviours. To explore relations between SES and eating behaviours, cross-sectional, prospective, and longitudinal analysis was carried out. Relations between SES, sociodemographic factors and eating behaviours were observed in all three analyses. Further analysis explored the extent to which eating behaviours differed between age groups and BMI categories in order to establish whether interventions may benefit from demographic tailoring for high-risk groups.

In light of findings from the quantitative analyses, and to better inform interventions to improve eating behaviours in the workplace, a qualitative study was conducted in 2017. Participants were asked to consider the barriers and facilitators to eating a healthy, well-balanced diet, and their perceptions of the role of the employer in promoting healthy eating. Thematic saturation was reached upon completion of 15 interviews. Five main themes were identified, each containing multiple sub-themes: (1) knowledge, (2) behaviour, (3) access, (4) workplace culture and (5) responsibility (government and organisational responsibilities).

The research raises interesting questions on the role of the employer in the targeting of health promotion activities at specific socioeconomic and sociodemographic groups in the workplace.
As illnesses related to poor diet are on the rise, promoting healthy food choice constitutes a global priority (OECD, 2017). Employers have a stake in it, as diet-related illnesses have a direct cost for them. Yet, food consumption in the workplace has been overlooked in research about away-from-home food consumption (Laporte & Poulain, 2014). Considering that most working adults do eat during their workday, typically for lunch, on a regular basis, such gap in our understanding is arguably prejudicial to workers. It is also a missed opportunity for facilitating healthy food choices, as it limits the ability to tailor interventions to this specific environment, even as literature has praised the workplace for being a practical, effective, logical place for diet interventions (Wanjek, 2005).

One pervasive experience for individuals in both the working and the private spheres in Western societies is the feeling of lacking time to achieve one’s tasks, or time pressure (Szollos, 2009). It has been shown to impact diet in a variety of ways outside the workplace. For example, it limits time available for meal preparation and consumption, thereby increasing reliance on takeaway and ready-to-eat foods, which are often energy-dense (Celnik, Gillespie, & Lean, 2012). Time pressure also affects the very processes of choice leading to food selection, making it likely to impact food decisions even when dishes are served ready to consumers, as is the case in foodservice. For example, research suggests that under high time pressure, individuals tend to opt for rich, affect-laden snacks rather than for reasonable options (Shiv & Fedorikhin, 2002). Such findings also suggest that time management skills are not sufficient to counter the effects of time pressure, as cognitive reasoning is weakened, arguing in favor of a more comprehensive approach.

This PhD aims to provide a better understanding of the impact of time constraints on food choice in the workplace. More specifically, this PhD project will focus on how worksite cafeterias’ characteristics influence food choice of workers in relation with time, building on findings in behavioral economics on the effects of context on decision-making. The first, ongoing, stage of this PhD is the development of an analytical tool drawing from the choice-architecture literature (‘nudges’), for characterisation of worksite cafeterias as choice environments in relation with time, through observation and reliance on secondary, professional data. The development of a questionnaire assessing the impact of time pressure on food choice at lunch among workers is ongoing as well. The objective of this first stage is to establish thorough, theory-backed examination of individual and environmental elements likely to activate individual biases in relation with time and food choice. The second, later stage will consist in testing the hypotheses stemming from the first stage in several worksite cafeterias in France. The overall practical objective of this PhD is to accompany practitioners in the development of worksite environments that facilitate healthy food choices.

The ongoing global changes that followed a period of economic recession may have contributed to increased demands on employees across private and public sectors. Current times require individuals to effectively respond, cope and adapt to a high-pressure work environment. The detrimental effects of severe pressure on employees’ health and performance are widely recognised. For example, the latest HSE (2017) statistics found work-related stress to account for 40% of work-related ill health. Hence, the interest in research on workplace resilience as a way of facilitating positive adaptation to adversity and preventing its’ negative effects on
employees has never been greater. Due to diverging conceptual approaches and absence of a commonly accepted theoretical framework regarding workplace resilience, advancements in this line of research have been impeded. Indeed, the body of empirical literature on the antecedents and outcomes of workplace resilience has remained modest. In order to address the abovementioned shortcomings, the present research will comprise a series of studies exploring the conceptual nature of workplace resilience. Specifically, the studies shall contribute to current knowledge by clarifying the conceptual basis of workplace resilience and laying the theoretical foundation for a meaningful practical application of the concept within the organisational context.

Thus far, research has largely focused on individual resilience, paying less attention to this concept on the team level. There is need for research examining how teams jointly respond to setbacks as most jobs are team-based and require employees to collectively manage difficulties to avoid team performance losses. As with personal resilience, the effective management of adversity is central to the construct. Yet, it is the team interactions and shared mental models that may determine how well the team as a whole overcomes adversity. Team resilience has been mostly studied independently from personal resilience, with no attempts to synthesise their conceptual relation. Thus, a systematic literature review will be conducted as the initial part of this project, aiming to summarise previous conceptual and methodological approaches to individual and team level workplace resilience. Subsequently, a comprehensive theoretical framework shall be generated which appropriately reflects the multi-level nature of the concept.

Although individuals' capacity to overcome adversity may affect team resilience, it has been argued that team resilience encompasses more than a mere aggregation of team members' individual resilience scores. Hence, it has been suggested to be best operationalised as a separate construct. To support this notion, a qualitative event-contingent diary study will be employed to explore the process of how employees' working in various types of teams collectively manage adverse events over time. Subsequently, the results will be incorporated in a scale-development study with the aim to design a team resilience measure. The study will address current shortcomings of methodological approaches to team resilience and provide an empirical instrument that can be utilised in practice. The outlined series of studies will contribute to the current body of literature by producing a more comprehensive picture of the workplace resilience phenomenon and equipping researchers with a rigorous practical tool for applied research at work.

**EC24: Investigating the Association between Stress and Resilience in the Workplace**

**Lucie Ollis**, Mark Cropley, David Plans  
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**Background:** Resilience has been defined as a stable character trait characterised by positive adaptation despite significant threat, severe adversity or trauma (Cicchetti, 2010; Luthar et al., 2000). However, there is not complete agreement within the literature. Recent research has suggested that instead of a static character trait, resilience should be considered an interactive process influenced by individual assets and the environment (Liebenberg et al., 2017). As a result, the relationship between workplace stress and resilience is of great interest. Liebenberg et al. (2017) suggest that resilience occurs in both acute and chronic stress situations. It has also been proposed that resilience and vulnerability should be positioned at either end of a spectrum, supporting the idea that resilience is a continuous process (Kulig, 2000; Rutter, 1985).

The aim of this research is to examine in a longitudinal study, the co-variation of stress and resilience over time. Within an occupational setting, we will test whether resilience is a stable construct, independent to stress, or whether it develops or decreases with stress exposure. Jackson et al. (2007) implied that if individuals were able to develop their personal resilience, they could reduce their vulnerability in stressful situations.
**Method:** Participants will complete an online questionnaire including measures relating to stress, resilience, psychological distress, work-related rumination and job demands. Data will be collected at baseline (T1) and at three (T2) and six (T3) months using the same measures as the initial questionnaire at T1. The participants will be required to be working more than thirty hours per week.

**Expected added value:** It is expected that the current research will broaden the knowledge of resilience in the field of psychology due to the reported issues with the definition of resilience in terms of its ambiguity and because of terminology used to describe the phenomenon. Furthermore, resilience is often investigated during periods of extreme stress such as natural disasters and terrorist attacks whereas this research focuses on stress individuals would encounter in everyday life. In addition, the focus of previous research has been conducted in the field of developmental psychology, but researchers have recently found variation in the experiences of children which were thought to be resilient (Luthar, et al., 2000), questioning the common idea that resilience is a character trait.

**Future research:** Researchers have identified the need for more research to determine the biological determinants of resilience as currently, the majority of work investigating resilience is restricted to subjective measures (Connor & Davidson, 2003; Russo et al., 2012). Future research on this project will aim to identify the biological determinants of resilience with the aim of using this data to help individuals to build their resilience and reduce stress due to their ability to recognise their bodily responses to stress. The results of this research could help improve the design of future interventions aiming to increase resilience due to the increased knowledge of biological markers of resilience and their effects on stress.

**EC25: Do Psychosocial Working Conditions Affect Employee’s Management of Long-Term Health Conditions in the Workplace?**

**Sally Hemming**  
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**Background:** 5 million people in England have a long-term health condition (LHC) including musculoskeletal (MSK) and mental health disorders (i.e. stress, depression and anxiety). MSK’s affect around 9.6 million adults in the UK, with an economic impact of 10.8 million lost working days. Mental health disorders affect one sixth of the UK population at any one time with 12.7% of sickness absence days attributed to this illness. It is projected that the number of people diagnosed with at least one LHC will increase to 18 million by 2025. A majority of LHCs are acquired at working age yet employment rates of those with an LHC are persistently low. Having quality employment is vital for the health and wellbeing of people, and for many countries where the pensionable age has increased, keeping people healthy and productive at work for longer is important for employers. Whilst research has focused on the issues around workers with LHCs, little research has examined contextual factors of work, dynamics of workplace relationships, mechanisms of support and its influence on employees’ self-management activities to keep themselves healthy and productive at work.

**Objective:** To identify the workplace self-management support needs of employees with an LHC, and the workplace dynamics that empower people to manage their LHC in work. The following hypothesis will be tested, that poor psychosocial working conditions (i.e. low control, high demands) will be related to low patient activation and higher risks of poor self-management.

**Design:** The research adopts a purposeful sampling approach recruiting currently employed (actively working) participants with a minimum of one diagnosed LHC. The research is split into three phases with four interrelated studies including: phase 1, a cross-sectional online employee
survey study utilising the Patient Activation Measure (PAM®) and UK Health and Safety Executive (HSE) Management Standards Indicator Tool (MSIT); phase 2 was a longitudinal 10-week employee online diary study and; phase 3, an employer semi-structured interview study and employee narrative interview study.

Findings: In study 1, 700 participants took part in the online survey of which 44% (n=306) report at least one formally diagnosed LHC. Mental health (n=108) and musculoskeletal (n=83) disorders are most prevalent in the group. Furthermore, 16% (n=115) are affected by other LHCs including lung, cardiovascular, metabolic, endocrine, lung, digestive and neurological disorders. Findings will be presented on the HSE scores between the condition and non-condition groups, and regression analyses will be run to test the hypotheses that poor psychosocial working conditions will be related to low activation and higher risks of poor self-management at work. Qualitative data from the diaries and employer interviews will also be presented.

EC26: Stress and Wellbeing in Workers of Healthcare Sector: Contribution of Individual and Organisational Factors
Inês Cardoso
Universidade de Coimbra, Coimbra, Portugal

Background: Burnout is one of the main areas of research about healthcare professionals. But occupational stress and wellbeing are less studied, being the research focus on professionals of medical and nursing areas and in their tasks. Other professionals in the health sector can suffer for occupational stress and a lack of wellbeing, having different tasks and responsibilities in the same institution, for example allied health professionals and administrative staff. Besides sharing the same sector (health), some organisations are good examples of best practices in the workplace and others have high rates of professionals with burnout. That shows that organisational characteristics, the climate, the culture, the teams the professionals are integrated in play an important role in the individual level of stress and their wellbeing.

Objectives: The study intent to explore the individual and organisational factors that can contribute to cause stress (moderate or high levels) and/or wellbeing in professionals.

Methods: An observational correlations study was carried out. Mixed methods was used to study groups of different professionals from diverse types of health organisations.

Future contributions: We believe that this study can be useful for understanding antecedents of stress and wellbeing and the importance of different factors. The results of the study may contribute to build more effective interventions to reduce occupational stress and increase wellbeing and promote mental health in the workplace.

EC27: From Sleep to Technology, how to Survive your PhD Studies and on What After
Michelle Van Laethem
University of Amsterdam, Amsterdam, Netherlands

Already early on as a Bachelor student, I was fascinated by the behaviour of workers and its influence on health, which eventually motivated me to pursue a career in Occupational Health Psychology. I was especially captivated by the phenomenon of sleep: even though sleep is so important, we still do not know very much about why we sleep. The main goal of my PhD was to disentangle the relation between work-related stress(ors) and sleep over time, which means I was also interested in a reverse relation: previous research had mostly supported the idea that work stress(ors) impact sleep, but had often neglected whether sleeping poorly also affects how we experience and deal with work-related stress. Next to the reciprocal relation between work
stress(ors) and sleep, I wanted to investigate possible underlying mechanisms such as rumination. During my years as a PhD student I performed several studies: I started my project by carrying out a systematic review of previous longitudinal research on work stress(ors) and sleep, I performed two long-term longitudinal studies (in collaboration with national and international partners) and a short-term longitudinal diary study. With these studies I was able to reach my goal: most of my studies supported a reciprocal relationship between work stress(ors) and sleep, and rumination was an underlying mechanism in this relationship.

Looking back, even though my time as a PhD student was very stressful and frustrating at times it was definitely worth it. I learned how to do ‘good’ research and built my professional network, from which I still benefit on a daily basis. Of course, I will also share my most important tips for surviving your PhD studies (e.g., ambitious time plans, coffee breaks, dealing with missing knowledge).

After my PhD studies, I did not hesitate to stay in academia, even though many PhD students do. I think the main reason is my continued passion for research in Occupational Health Psychology. I accepted an assistant professorship, where I further built upon my research line on work stress and wellbeing. Additionally, I am developing new research lines. One research line focuses on modern technology, which is, in my opinion, a very fascinating and relevant topic, especially in relation to sleep and employee wellbeing. Currently, I am conducting several intervention studies to limit or reduce the impact of smartphone use on health during the evenings, and teach employees to adequately deal with modern technology.

At times, I notice that I suffer from impostor syndrome: the idea that one is not cut out for a career in academia and that one’s accomplishments are solely due to luck. But knowing this, I can always convince myself that I am good enough and that I am passionate enough about research to succeed in academia. After all, even though there are many ups and downs, I love doing research and love doing my job on a daily basis.
SYMPOSIA
Symposium: Women-dominated work: New perspectives and challenges, Part 1
Chair: Britt-Inger Keisu
Umeå University, Umeå, Sweden

State of the art: Sweden have one of the most gender segregated labour markets in Western Europe. In the Year 2012, only 14 percent of the women worked in occupations with an even gender distribution (occupations were no gender exceed 60 percent). Only three out of the 30 largest occupations in Sweden have an equal gender distribution. The occupations that are most women dominated is assistant nurses and hospital orderlies (93 percent women). One alarming problem with the gender segregated labour market is that women have an increasingly higher sickness absence than men. The highest rates of sickness absence are found among human service and care occupations.

We know that the main cause of this gender difference is to be found in the work environment, and as women and men work in different occupations the work environment differs accordingly. But there is still a large knowledge gap to the more specific causes of this gender differences; which specific factors in the work environment, which kind of organisational changes, which work conditions could contribute to more healthy workplaces. In addition, there is a need to deepen gender theoretical perspectives within this research field.

New perspectives/Contributions: The four presentations in this symposium is part of the Swedish research council for health, working life and welfare's (FORTE) research programme on work environment in women-dominated sectors. The presentations contributes to the literature on work environment in women-dominated professions and workplaces by shedding light on a number of identified gaps in previous research. The first presentation adds on the literature on how work schedule may impact on health from a gender perspective. The second presentation explores how organisational and psychosocial factors develop in industries with different gender composition. The third presentation focus on workplace factors that are important to consider for sustainable change, and the last presentation studies the prevalence and consequences of conflicts in women-dominated workplaces. Together, these presentations generate new knowledge in areas that have, so far, been understudied.

Research implications: The symposium enhances our understanding of the influence of work environment within women-dominated professions and workplaces in different ways, which will deepen our understanding concerning health in the gender segregated labor market. This is important, given the escalating ill-health and sick leave numbers in women-dominated workplaces. Three important lesson can be learned; 1) what organisational factors explain ill-health amongst women; 2) how gender, work environment and health are linked to power relations; 3) how practitioners can organise work environment to counteract ill-health within these professions and workplace. Altogether, the knowledge from this symposium may be used to create better and more equal working conditions in women-dominated workplaces in the future.

S1: Gender Differences in the Association Between Work Schedule and Health
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Preliminary analyses addressed two questions: (1) Is the psychosocial working environment of shiftworkers in female dominated (FD) occupations (i.e. where > 60% of the workforce is female) more or less ‘healthy’ than that of shiftworkers in male dominated (MD) occupations (i.e. where < 40% of the workforce is female): and (2) If there is a difference, does it correspond with health differences between the two groups? The analyses were conducted on data from three waves (2008, 2010 & 2012) of the Swedish Longitudinal Occupational Survey of Health (N=7325-9756).
In order to address the first question, cross-sectional analyses of variance examined Occupational Gender Composition (OGC: FD occupations versus MD occupations) and Work Schedule (categories: ‘Daywork’, ‘Nightwork’, ‘Shiftwork excluding nights’, and ‘Flexible / unregulated hours’) as predictors of job strain (also considered in terms of its components job demand and decision authority), social support, work time control and effort-reward imbalance. Among those working nights, strain was higher in MD occupations than in FD occupations (job demands were similar in both occupational categories, while decision authority was lower in MD occupations). The opposite trend was observed among dayworkers, with strain being higher in FD occupations than in MD occupations (again, job demands were similar in both occupational categories, but in this instance decision authority was lower in MD occupations). There were no effects of OGC on job strain among those working shifts without nights (both job demands and decision authority were higher in FD occupations, compared to MD occupations). There were no interactions between OGC and work schedule in the analysis of social support, effort-reward balance or work-time control.

In order to address the second question, a series of logistic regressions examined Occupational Gender Composition and Work Schedule as predictors of subsequent (i.e. two years later) mild depression, self-rated health, short-term sickness absence (self-reported), sleep disturbance and sleep duration. The analyses adjusted for age, employer type, full-time work status and presence of a chronic illness. Among those working shifts (either with or without nights), workers in MD occupations were more likely to report short sleeps than those working in FD occupations. There was also a non-significant trend for shiftworkers in MD occupations to be more likely to report mild depression, compared to those working in FD occupations. Conversely, among dayworkers, those in FD occupations were more likely than those in MD occupations to report mild depression, sleep disturbance and short sleeps. There were no interactions between Work Schedule and OGC in the analyses of self-rated health or short-term sick leave.

In conclusion, differences in strain between MD occupations and FD occupations tended to parallel differences in mental health and sleep quantity. Among shiftworkers, those in MD occupations tend to report poorer wellbeing and less sleep than those in FD occupations, while among dayworkers, those in FD occupations tend to experience higher strain and poorer wellbeing than their counterparts in MD occupations. Results of on-going analyses addressing these issues using fixed effects analyses will be presented at the symposium.

### S2: Development of Organisational and Psychosocial Work Factors Across Industries with Different Gender Composition in Sweden, 2003-2013

Sara Cerdas¹, Annika Härenstam¹, Gun Johansson², Anna Nyberg¹

¹Stockholm University, Stockholm, Sweden. ²Karolinska Institute, Stockholm, Sweden

**Background:** In Sweden, the development of mental ill-health and sickness absence has been poorer in female-dominated industries compared to others. One possible explanation is the different developments of psychosocial working conditions across industries. Men and women appear to react similarly to the same psychosocial exposures at work, but differences in exposure patterns may prevail. There is to date a lack of studies on the extent to which psychosocial work exposures are associated with the gender segregation on the Swedish labour market at the industry level. This study aims to investigate how organisational and psychosocial work factors have developed over time across industries with different gender composition in Sweden from 2003 to 2013, and to what extent these factors differ between industries.

**Methods:** The present study is based on repeated cross-sectional data from the Swedish Work Environment Survey (SWES). SWES is conducted biennially by Statistics Sweden (SCB) and includes Swedish workers aged 16-64 years. Six waves from 2003 to 2013, comprising a study sample of 45,631 subjects, were analysed. Industries were categorised according to gender.
composition and divided into seven categories: 1) Goods and energy production; 2) Machine handling; 3) Manual services; 4) Public administration; 5) Knowledge intensive services; 6) Education; 7) Health and social care. Proportions of men and women in each industry who were exposed to adverse or positive organisational and psychosocial work factors were calculated for each of the six waves. Logistic regression analyses, adjusted for age, educational level and year of response to SWES were performed on the full sample (all six waves), in order to estimate the odds of being exposed to organisational and psychosocial work factors in each industry using the knowledge intensive service industry as the reference category.

Results: Preliminary results show that in female dominated industries (Education and Health and social care), many organisational and psychosocial work factors developed poorly over the study period. Higher odds of exposure to adverse or positive organisational and psychosocial work factors were found for several industries when using the industry of Knowledge intensive services as the reference category.

Conclusion: This study is one of the first of its kind analysing the development of organisational and psychosocial work factors, as well as differences in these factors between industries with different gender compositions in Sweden.

S3: Risk and Preventive Factors for Noise and Stress Exposure in Education and Health Care Services - Results from Focus Group Interviews
Kerstin Persson Waye, Sofie Fredriksson, Kristina Gyllensten
University of Gothenburg, Gothenburg, Sweden

In many female-dominated professions employees are exposed to high noise levels originating from human voices and activities. Studies show that pre-school teachers and healthcare professionals are at increased risk of developing hearing damage, such as hyperacusis, auditory fatigue and tinnitus, and noise disturbance is reported by intensive care staff. In jobs which demand a high level of communication it is difficult to use personal hearing protection and it is not possible to attenuate the noise from human activities by conventional measures. There is limited research of the risk of developing hearing damage in these professions and how hearing damage affects function at work, including the ability to work fulltime, to work to retirement or avoid sick leave. Furthermore, noise and stressful psychosocial working conditions may affect physical and mental health, including hearing. Current methods of assessing noise, and to some extent stress, need though to be tailored to female-dominated workplaces. We also need to better understand how these work environments can be adapted so that employees are not at risk of hearing damage or reduced physical and mental health and, in the long term, reduced work function.

In a cohort of 11,000 females within teaching, health and social care professions we intend to 1) elucidate the connection between noise exposure, with and without the presence of stress, and the impact on physical and mental health and work function; 2) identify both protective and risk factors for maintaining physical (primarily hearing) and mental health and work function; 3) elucidate and evaluate these protective and risk factors through a qualitative study; 4) implement an intervention based on the findings of 2) and 3) with the aim of achieving a sustainable working environment. The intervention will be implemented and evaluated in teaching and health and social care professionals in collaboration with employees and employers. We will present results from focus group interviews with women working in preschool, intensive care units and obstetrics care and a group of middle management within these occupations.
S4: Understanding the Challenges of the Female Dominated Sector by Focusing on Workplace Factors
Anne Richter¹, Marta Roczniewska¹, Ulrica von Thiele Schwarz¹,², Henna Hasson¹
¹Karolinska Institutet, Stockholm, Sweden. ²Mälardalen University, Västerås, Sweden

The Swedish healthcare sector is one of the sectors, which is most segregated, with approximately 93% of all employees being women. Within the female dominated sectors, employees are exposed to more and other kinds of demands and often lack resources making it challenging to handle work demands. At the same time it has been noticed that women are more frequent and longer on sick-leave as well as report higher work-related stress, which has become a societal concern. To acknowledge the environment employees share at their workplace as an important factors that influences health and wellbeing of employees; we need to investigate workplace factors at the workplace level to be able to understand how workplace factors affect employees’ health and wellbeing in the female dominated sectors, which is the aim of this research project, which is part of the Swedish Research Council for Health, Working Life and Welfare’s special call on research on the female dominate sector. In this study we will investigate how team work as well as qualitative job insecurity at the workplace level affect employees’ individual and organisational wellbeing by studying job satisfaction and stress experiences over time. A sample with 54 team distributed on 1084 employees is used to investigate the research question with a six-months time lag. Preliminary multi-level analyses have been conducted and show promising results. This project and this study generate important findings how workplace level factors affect individuals’ health and wellbeing that can be used to design organisational interventions that may help in the long run create a better work environment for employees in the female dominated sector.

Symposium: Novel Perspectives on Burnout: Patterns, Long-term Development and Recovery
Chair: Michael Leiter
Deakin University, Geelong, Australia

The serious stress syndrome of burnout, which represents a work-related state of ill-being characterised by the symptoms of exhaustion, cynicism, and reduced professional efficacy (Maslach, Jackson, & Leiter, 1996), has been intensively studied since it was first presented in the psychological literature in the mid-1970s (see Leiter, Bakker, & Maslach, 2014; Schaufeli, Leiter, & Maslach, 2009). Knowledge has accumulated on burnout symptoms, their predictors and the effectiveness of interventions. However, most studies have been variable-oriented, cross-sectional in design, and used only the quantitative methods. This symposium includes five papers that address the fundamental issues on burnout: multidimensionality and long-term development of burnout at the intra-individual level, and prevention and recovery of burnout.

Leiter and Maslach will present person-centered analyses based on cluster analysis identifying distinct patterns on the Maslach Burnout Inventory (MBI). The presentation considers ways in which the identified profiles point towards specific workplace crises, which would suggest different approaches to preventing or alleviating distress at work. A particular focus in this presentation is the extent to which various MBI profiles are associated with distinct patterns of collegial and supervisory relationships. Next, Mäkikangas and Kokko will use longitudinal data across two decades (from age 36 to 50) to identify subgroups of employees characterised by long-term burnout. The study will also investigate a broad spectrum of potential antecedents of burnout, including individual factors (e.g., personality traits), work characteristics (e.g., time demands), and career events (e.g., stable vs. unstable career line). The study offers novel insights on the burnout development across career. Day and Hartling consider the implications for leaders’ transformational leadership behaviours for both subordinates’ burnout and the supervisors’ burnout. The analysis considers transformational leadership within the context of workplace stressors’ for leaders.
Two presentations concern burnout interventions. Maslach and Leiter will present a proposal for better strategies to prevent burnout. Although the value of employees’ resiliency as part of such a strategy has been widely acknowledged, resiliency alone is not sufficient to offset burnout in cases of excessive job demands and inadequate resources. The current proposal utilizes three principles. First is the value of extending an ergonomics approach to the social and psychological work environment, as well as to the physical one. Second is the significance of developing solutions within one or more areas of work life, including workload, control, reward, community, fairness, or values. Third is the focus on the satisfaction of core psychological needs through the performance of the job. Next, Salminen and Mäkikangas will seek to deepen the understanding of burnout recovery by investigating both self and couple perspectives. Although specific factors conducive to recovery from burnout have already been identified in previous research, spouses' experiences have remained largely unexplored. The current qualitative study used a hermeneutic-phenomenological approach to assess the experiences of eleven couples, with respect to one member's burnout and subsequent recovery: how spouses perceived the other person's recovery and how recovery affected the inter-sposual relationship.

S5: Change in MBI Profiles of Exhaustion, Cynicism, and Efficacy: A Person Centered Perspective
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Recently interest has grown in person-centred approaches to job burnout as analyses have identified distinct profiles of scores in addition to the burnout syndrome’s negative scores on exhaustion, cynicism, and efficacy. Identifying additional profiles leads readily to the question of their development over time. Are there systematic trends and are such trends related to distinct features of the work environment.

Healthcare providers (N= 805) completed surveys assessing job burnout, workplace social encounters, and evaluations of management issues on one-year intervals. Following Leiter and Maslach (2016) cluster analysis identified five profiles at each time: Engaged (positive on all three subscales), ineffective (negative only on efficacy), overextended (negative only on exhaustion), disengaged (negatively only on cynicism), and burned out (negative on all three). Time 1 profile membership was systematically related to Time 2 profiles (c2(16) = 450.89, p<.01) The analysis determined engaged to be the most stable with 72.5% of those in the engaged profile at Time 1 in the engaged profile at Time 2. Burnout was the least stable with only 20.9% in the same profile after one year. Only 5 of the 91 employees in the burnout profile at Time 1 were in the Engaged profile at Time 2; none of the 157 employees in the engaged profile at Time 1 changed to burnout at Time 2.

Following Mäkikangas et al., (2011) the analysis took a second perspective by including both Time 1 and Time 2 of the MBI subscales in a cluster analysis to identify patterns of change over the one-year interval. A five profile solution identified distinct patterns: Steady Engaged, Steady Disengaged, Steady Burnout, Worsening to Burnout, and Less Overextended. For Worsening to Burnout, in addition to significant changes in the three MBI subscales, scores became more negative for control, turnover intention, coworker incivility, and workgroup civility. For Less Overextended, in addition to significant changes in the three MBI subscales, scores became more positive for workload, control, turnover intention, and respect. For Steady Engaged and Steady Burnout, the other variables remained constant. For Steady Disengaged the other variables remained constant except for civility that became more positive.
These patterns indicate that profiles change over time against a background of stability in the MBI subscales as well as in qualities of their work environments, including the quality of social encounters with coworkers. The changes evident suggest that most often one of the three aspects measured by the MBI changes; rarely do all three subscales shift from one extreme to another. However, this analysis did not identify a definitive sequence or stage development quality to profiles' development over time. However, it does point towards areas of worklife and qualities of social encounters at work as integral to the change process.

S6: Exhausted across Mid-Career Years? Investigation of Job-, Career-, and Person-related Predictors of Exhaustion Trajectories
Anne Mäkikangas¹, Lea Pulkkinen², Katja Kokko²
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Despite decades of burnout research, the temporal and developmental aspects of burnout remain controversial (for a review, see Mäkikangas & Kinnunen, 2016). Originally, burnout was theorised as a dynamic ongoing process involving employees' psychological responses to untreated long-lasting work-related stress (Maslach, 1982). Nowadays, based on variable-oriented studies, it tends to be conceived as an enduring and chronic state. In order to obtain profound understanding of the development of burnout over time, the present study investigates the development of the core symptom of burnout, i.e., exhaustion, over the period of 14 years, using a statistically innovative person-centered approach. Moreover, the study also investigates a broad spectrum of potential antecedents of exhaustion, including individual factors (e.g., personality traits), job characteristics (e.g., time demands), and career events (e.g., stable vs. unstable career line).

The database used is the Jyväskylä Longitudinal Study of Personality and Social Development (JYLS), from which the current study utilises three surveys and covers the age span from 36 to 50 years (n = 291). Latent profile analysis (LPA) was used to investigate profiles based on the levels of and changes in exhaustion from age 36 to age 50. LPAs were performed using Mplus (version 8; Muthén & Muthén, 1998-2017). Differences between the exhaustion profiles in job-, career-, and individual-related predictors were investigated using the BCH command implemented in Mplus (Asparouhov & Muthén, 2014).

The LPA analysis yielded four exhaustion trajectories: (1) low stable exhaustion (72%), (2) decreasing exhaustion (19%), (3) increasing exhaustion (6%), and (4) high exhaustion followed by recovery (3%). Time pressures at work, work-family conflict, high level of neuroticism and low level of agreeableness predicted the unfavorable development of exhaustion. Neither sociodemographic factors nor career stability associated with exhaustion trajectories.

The study offers novel insights on the burnout development across mid-career. The current findings show that multiple exhaustion trajectories exist and can be systematically modelled. Further, these trajectories can be predicted by both individual- and job-related characteristics. From the practical point of view, the results help to identify those who suffer from severe and increasing exhaustion thus offering directions for developing effective intervention programs.

S7: Leader Behaviours, Healthy Workplaces, and Burnout
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Introduction: The role of leadership on workers' wellbeing is well documented—both in terms of its positive and negative effects. Positive forms of leadership behaviours (such as transformational leadership) have been associated with positive worker outcomes (see Kelloway
& Barling, 2010 for a review). Conversely, toxic leadership is associated with decreased performance and wellbeing, and it may exacerbate the negative effects of other work stressors (Day, Penney, & Hartling, 2017). Attention has focused on how we can help leaders to improve leadership behaviours (e.g., Brown et al., 2012), which may in turn improve employee functioning. However, it also is important not to ignore the impact of organizational stressors on the leaders’ levels of burnout.

Methods: We focused on leadership and burnout data from an intervention study that involved leaders (n = 59) and their subordinates (n=574). We examined the leaders’ experiences of workplace stressors and burnout, as well as their subordinates’ levels of wellbeing (emotional exhaustion, cynicism, and professional efficacy). We also examined the extent to which workplace factors and training impacted these relationships.

Results: Higher levels of leaders’ transformational leadership behaviours were associated with lower subordinate burnout, as well as with lower levels of burnout within the leaders. Moreover, leaders’ own levels of exhaustion, cynicism, and efficacy were differentially related to workplace stressors (i.e., lack of control, organizational support and overload).

Discussion: These studies address the call for more longitudinal research (Skanon et al., 2010) and multi-method evaluations of intervention research (e.g., Nielson et al., 2010), and we extend work on the relationship between leadership and burnout. Implications for how we train leaders, and the call to take both leader and subordinate wellbeing into consideration.

S8: Improving Burnout Interventions
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As “burnout” among workers has gained attention in the popular media, a conventional wisdom has developed around avoiding it. Essentially, the advice is to “take care of yourself.” Be healthy. Be strong. Be resilient. Be smarter about time management. Don’t let the stressors get to you—fight on and overcome them. Although certainly everyone can benefit from a healthy lifestyle, regular sleep and mindful practice, the underlying message conveyed by this type of advice is troubling, namely that burnout is only a personal problem and “you just have to tolerate stressful workplaces.”

Highly stressful workplaces are often poorly designed, socially toxic, and exploitative environments. Research shows stressors beyond an individual’s control—such as too many demands, unrealistic deadlines, unpredictable schedules, difficult interactions with colleagues or customers, and technology challenges—all contribute to burnout. Rather than being a sign of personal weakness, burnout is a warning sign that things are not going well in the relationship between people and their jobs. As with any relationship, both sides need to be part of the solution. An improved framework for developing potential solutions for burnout rests on three basic principles — ergonomic approach, critical areas of job-person fit, and satisfaction of core psychological needs. Ergonomics, which examines the relationship between workers and their physical environments, offers one way to create healthier workplaces. We should aim to extend this design approach to the social and psychological environment at work.

The Areas of Worklife model identifies six critical areas in which more positive job-person “fits” can lead to less burnout and greater engagement. These include sustainable workload demands, choice and control, recognition and reward, a supportive work community, fairness and respect, and clear values and meaningful work. The translational link between the person and the job can be framed in terms of the satisfaction of core psychological needs, including:
autonomy, belongingness, competence, psychosocial safety, positive emotions, fairness and meaning. The challenge is to design and modify workplaces in ways that will support the satisfaction of these needs through the performance of the job.

The always-on, overextended, and demanding culture of many contemporary workplaces is a very unhealthy place for the people who work there. The personal consequences include ongoing stress experiences, physical exhaustion and illness, sleep deprivation, depression and anxiety, and disruptions of personal life. Notably, the organizational outcomes do not include significant gains in productivity, quality, and creativity. A good business model should not be based on extracting such high personal and social costs from its employees. Instead, it should be designed to support a healthy work environment in which the workers will thrive and thus the business will succeed.

S9: Experiences of a Spouse's Burnout and Recovery
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Background: The role of family members’ support in the burnout recovery process has been recognized in several studies (Fjellman-Wiklund, Stenlund, Steinholtz, & Ahlgren, 2010; Hålstam, Stålnacke, Svensen, & Löfgren, 2015; Salminen, Mäkikangas, Häätinen, Kinnunen, & Pekkonen, 2015). In particular, emotional support provided by the spouse has been found to be significant in reducing burnout levels, especially for men (Livingston, 2014). For women, the impact of emotional work performed by husbands did not have alleviating effect on burnout (ibid.). Although crossover of burnout and emotional support have been investigated, the partners’ experiences of the individuals’ burnout and recovery have remained largely unexplored. To fill this research gap the study aims to provide in-depth knowledge of the experiences of spouses of individuals who have a history of burnout and are recovering from it by participating in a rehabilitation course.

Material and methods: Ten couples, in which one of the spouses had previously suffered and had recovered or was recovering from burnout in a national rehabilitation course, were interviewed in person or by phone between September 2017 and January 2018. Semi-structured interviews comprised the main research material and were subjected to Interpretative phenomenological analysis (IPA).

Results: Preliminary results show that the spouses were vicariously affected by the individuals’ burnout and recovery. The spouses shared their concerns about and at the same time their helplessness in alleviating the symptoms of burnout. They were able to provide significant support, especially when the couple relationship and interpersonal communication were well-functioning. In the recovery phase, the positive changes in the individuals’ wellbeing were transferred in the relationship, and were perceived by both spouses as an increased ease, self-mercy and self-control.

Conclusions: The negative effects of burnout on spouses have not been studied sufficiently, and thus no measures have been taken to minimise those effects. Knowledge of the spouses’ experiences will allow their possible inclusion in the rehabilitation programme and their training in recognizing the symptoms of burnout in their close ones. This will enable individuals and their spouses to be better equipped to prevent the full development of burnout and to initiate a timely search for professional help.
Symposium: Job Crafting and Beyond: Recent Insights in Crafting Research
Chair: Piet van Gool & Evangelia Demerouti
Eindhoven University of Technology, Eindhoven, Netherlands

State of the art: The goal of this symposium is to present recent insights in job crafting research. Despite the growing research attention for job crafting, we still have limited knowledge on its role in specific processes both within and outside work. Moreover, we lack knowledge on the effectiveness of interventions aimed at stimulating crafting behaviour. In this symposium we zoom in on the role of job crafting in the processes of job search, newcomer socialisation and social networks, and evaluate two interventions aimed at stimulating crafting behaviour.

New Perspectives/Contributions: The symposium consists of a four-wave study, a three-wave and diary study, an ego network study and two intervention studies. People seem to craft their job search process in a similar way as they craft their job. Reemployment crafting is a promising new avenue in crafting research. It is positively related to job search performance, buffers lack of resources, and can be stimulated using a training intervention. For those who just found a job, job crafting seems to facilitate their socialisation process, providing more meaning and a higher organisational insider status. Personality and leadership behaviour are important predictors of newcomer job crafting. In the social process of job crafting, employees shape their social relations to be more resourceful and challenging, providing them with more contact-specific energy and ideas. Finally, a job crafting intervention based in the theory of planned behaviour was successful in modifying cognitions underlying job crafting behavior.

Research/Practical Implication: These studies highlight the importance of job crafting in specific processes (job search, newcomer socialisation and social networks). Its elaborate designs uncovered that people who proactively change their environment in these processes, have more beneficial process specific outcomes. They furthermore show that this proactive behavior can be enhanced using training interventions.

S10: How Newcomers with High Core Self-Evaluations Achieve Work Meaning and Insider-status: The Role of Job Crafting and Leader Coaching Behaviour
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Purpose: Job crafting theory offers implications for newcomer socialisation. In this study, we examine the role of job crafting as an individual proactive tactic in facilitating the process of getting socialized in the organisation. Specifically, we propose that newcomers’ job crafting in the forms of seeking resources and seeking challenges will help them achieve more meaning from their work and higher insider-status in the organisation. We also propose that newcomers’ personal characteristics (i.e., core self-evaluations) and social contexts (i.e., leader coaching behaviour) will affect the extent to which newcomers engage in job crafting. Finally, on the basis of trait activation theory, we expect that leader coaching behavior will strengthen the positive relationship between core self-evaluations (CSE) and job crafting.

Design/Methodology: Four-wave data were collected in a sample of 125 Chinese employees in their first half-year of employment. Structural equation modelling was used to test the hypotheses. Previous levels of variables were controlled in the analyses.

Results: As hypothesised, newcomers engaging in seeking resources and seeking challenges experienced greater work meaning and perceived higher organisational insider status; newcomers’ CSE was positively related to their job crafting behaviour. Leader coaching behaviour, however, did not have a main effect on job crafting, but it did strengthen the positive association between CSE and job crafting.
Limitations: The study was based on self-reported measures, which might raise concerns of common-method bias.

Research/Practical Implications: Our findings suggest that both individual personalities and leadership behaviour are important predictors of newcomer job crafting. The interaction effect supported the notion that situations (e.g., leadership) influence individual expressions of personality traits (e.g., CSE) through actions (e.g., job crafting). Our study demonstrated that job crafting may be a useful strategy that newcomers can utilize to adapt to a new work environment. Our findings provided implications for organisations that aim to promote job crafting among newcomers.

Originality/Value: In this research, we examined newcomer adaption from the lens of job crafting theory, adding to the understanding of organisational socialisation. By adopting an interactionist approach to employee job crafting behavior, our study went beyond previous research examining either individual differences or job characteristics as antecedents of job crafting.

S11: Reemployment Crafting: How to Proactively Shape One’s Job Search
Inge Hulshof, Evangelia Demerouti, Pascale Le Blanc
Eindhoven University of Technology, Eindhoven, Netherlands

Purpose: We introduce the concept of reemployment crafting: the proactive, self-initiated behaviours undertaken by the unemployed to shape their job search in a way that aligns with their wishes and preferences and examine whether reemployment crafting is positively related to job search performance (i.e., career exploration and networking behavior) and reemployment chances. Moreover, we examine whether contingency factors (i.e., social support and subjective goal attainment) affect the effectiveness of reemployment crafting.

Design: We used two longitudinal studies to examine the above. Study 1 was a three-wave study over a three months period, N = 278. Study 2 was four day diary study, N = 200, days = 627. Data were analysed using a full cross-lagged panel design in AMOS and multilevel analyses in MLwiN.

Results: Results in both samples confirmed that the unemployed craft their job search in similar ways as employees craft their job. Reemployment crafting was positively related to job search performance, both over time and within days, and reemployment crafting was especially beneficial on days when social support and goal attainment were low. Lastly, networking behavior was predictive of reemployment chances, as on a daily basis networking quality was related to reemployment status, while over time, networking intensity seemed more effective.

Limitations: We mostly relied on self-reported measures, resulting in a higher risk of common method bias. Moreover, for Study 2 we cannot completely rule out alternative models, as we cannot establish causality.

Implications: Our study shows that the unemployed craft their job search in a similar way as employees craft their job. Moreover, reemployment crafting has indirect positive effects on job search performance and reemployment status. This is not only theoretically relevant, it is also of great importance for the unemployed themselves, as they can integrate reemployment crafting into their job search to enhance their performance.

Originality/Value: We are among the first to examine whether a leading framework in industrial and organisational psychology (i.e., the JD-R model and subsequent job crafting literature) can be ‘translated’ to the context of being unemployed.
S12: Who to turn to? Crafting Creative Contacts
Piet van Gool, Gerrit Rooks, Evangelia Demerouti
Eindhoven University of Technology, Eindhoven, Netherlands

Purpose: Despite the growth in research attention for job crafting over the last years, relatively little is known how job crafters shape their social relations, and what makes some relationships energising and spark new ideas whereas others only seem to drain energy. We study how purchasing professionals shape their core network, more specifically what effect job crafting has on (1) resources that are extracted from the network, and (2) demands that the network poses on the professional. We expect that job crafters change contact-specific demands and resources which in turn provide them with energy and creative ideas.

Design/Methodology: We collected ego-network data of all participants. A name interpreter was used to measure demands (challenging and hindering), resources (work related help), relational energy and idea generation associated with each contact in the participant’s ego-network (N=1048 contacts). Job crafting was measured at the participant level (N=213). Multilevel analysis (contacts nested within individuals) was used to test our hypotheses.

Results: Contact-specific resources and challenges partially mediate the relationship between respectively seeking resources and seeking challenges, and both idea generation and relational energy. Hindering demands partially mediates the relationship between reducing demands and relational energy but not for idea generation. At the contact level, contact-specific resources and challenging demands are positively associated with energy and idea generation, whereas contact-specific hindering demands are negatively associated with energy and idea generation.

Limitations: Because of the cross-sectional nature of the data no conclusions about causality can be drawn.

Research/Practical Implications: Employees in need of new ideas or energy can use expansive job crafting strategies (seeking resources and seeking challenges) to create a more resourceful and challenging network. Turning to contacts that provide the employee with more resources and pose challenges but do not hinder them, is more likely to give them new ideas and energy.

Originality/Value: This study provides insight into how employees shape their social relations, and what makes some relationships energising and creative, yet others merely drain employees’ energy. Moreover, it is one of the first to study contact-specific demands and resources.

S13: The JSD-R Intervention: A Crafting Intervention to Enhance Wellbeing, Job Search Behaviour and Reemployment Chances among the Unemployed
Pascale Le Blanc, Inge Hulshof, Evangelia Demerouti
Eindhoven University of Technology, Eindhoven, Netherlands

Purpose: This study evaluates the effectiveness of a training intervention among the unemployed that focused on enhancing levels of reemployment crafting and psychological capital (PsyCap) in order to increase wellbeing, job search behaviour and reemployment chances.

Method: One hundred and forty-six unemployed people participated in a three-day training intervention. The control group was made up of 275 unemployed people. Data were analysed using General Linear Modelling (GLM) in SPSS. Moreover, we examined the indirect effects of the independent variables (reemployment crafting and PsyCap) on the outcome variables using MLwiN.
**Results:** Our results showed that the intervention was able to enhance participants' levels of reemployment crafting (seeking resources and seeking challenges) and PsyCap. Moreover, the intervention had a positive effect on job search behaviour, goal setting and wellbeing. Most of these effects could be explained via reemployment crafting and/or PsyCap, ruling out a Hawthorne effect. However, the intervention had no effect on reemployment status within six months after the intervention, implying that participants did not have a higher chance of finding reemployment than their counterparts in the control group.

**Limitations:** The response rate to participate in the intervention was low (11.2%). Therefore, we cannot rule out some sort of selection bias. Furthermore, our intervention was examined among people previously holding white-collar jobs. We, however, do not know what the effects of the intervention will be among ex-blue-collar workers.

**Implications:** Our study shows that reemployment crafting and PsyCap can be developed using relatively short training interventions. Moreover, despite the non-significant effects on reemployment status, the intervention is a promising tool to enhance job search behaviour and wellbeing among the unemployed.

**Originality:** This study is among the first to explore the potential of crafting and PsyCap in the context of being unemployed. Doing so, we show that concepts that are originally developed in the work domain, can be transferred to the context of being unemployed.

**S14: A Job Crafting Intervention Based on the Theory of Planned Behaviour. Effects on Cognitions, Behaviour and Work Engagement**

Arianna Costantini\(^1\), Evangelia Demerouti\(^2\), Andrea Ceschi\(^1\), Riccardo Sartori\(^1\)

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**Purpose:** Drawing on the Theory of Planned Behaviour as a prominent framework for conducting behaviour change interventions, in this quasi-experimental study we designed and tested the effect of an intervention aimed at enhancing job crafting behaviours, (i.e. increasing resources, seeking challenges, reducing and optimising demands) and behaviour change (i.e., goal setting and planning) in a sample of employees from different sectors. The intervention aimed at stimulating reflection on behavioural, normative, and control beliefs (i.e., the cognitive antecedents of behavioural intention to craft in terms of attitudes, social norms, and perceived behavioural control) referred to job crafting behaviours and at supporting the implementation of job crafting behaviours through diverse behaviour change methods.

**Design/methodology:** Participants received training and worked for three weeks on self-set job crafting goals. Participants in both the intervention and control groups completed a baseline questionnaire and three questionnaires to be filled in at the end of the three weeks after the date of the workshop.

**Results:** The results of a series of repeated measures ANOVA showed that participation in the job crafting intervention based on the Theory of Planned Behaviour was associated with increases in perceptions of positive descriptive and injunctive social norms toward job crafting behaviours, and higher seeking challenge behaviours. In addition, compared to the control group, participants in the intervention group reported higher levels of work engagement during each of the three weeks after the intervention, and of increasing resources after the intervention.

**Limitations:** Even though this study provides empirical evidence of the effectiveness of interventions to modify cognitions underlying job crafting behaviours, it relies on self-reported measures that can result in common method biases. Future studies should expand the use of objective measures to test the effectiveness of the intervention.
**Originality/value:** This study provides evidence of the effectiveness of job crafting interventions based on the Theory of Planned Behaviour to promote job crafting behaviours. To our knowledge, this is the first study assessing the effect that interventions focused on enhancing positive attitudes, social norms, and high perceived behavioural control has on subsequent job crafting behaviours, and on work engagement.

**Symposium:** Life at the Beach: Research on Work Roles and Occupational Health Psychology in a Coastal Tourist Destination  
Chair: Prudence Millear  
*University of the Sunshine Coast, Sippy Downs, Australia*

The Sunshine Coast of Queensland, Australia is world famous for its beautiful beaches, lush subtropical climate, and laid-back lifestyle. Regardless of the delightful location, the usual responsibilities of the working adult remain – to find interesting and challenging employment with sufficient income to support this lifestyle and provide a future for one’s family. The employment market is more fragmented than in Australian cities, with only a few very large employers in the region (e.g., the university, a new teaching hospital). In contrast, more people work in small and medium enterprises (SMEs) which operate in the building, service, and tourism industries and new migrants to the area often buy or start their own business to provide an income for themselves and their families. Drawing on a wide range of occupational health psychology (OHP) research (e.g., JD-R, illegitimate tasks, psychosocial safety climate (PSC)), this symposium will showcase research based on the Sunshine Coast.

Paper 1 examined the barriers to employment, finding that lack of education and previous unemployment, in addition to young children and ill-health can limit how successful individuals’ feel about their careers, lessening the benefits of having self-efficacy and being adaptable in one’s approach to developing a career. Paper 2 explored the part-time work of university students and found that younger employees were no more narcissistic than older employees and they benefited from the same types of job conditions (e.g., more skill discretion) valued by full-time employees. In Paper 3, the experiences of people who are working in SMEs were explored, finding that senior management and owners perceived greater PSC and fewer illegitimate tasks than lower tiers of employees, although for all involved, illegitimate tasks, over and above PSC, job demands, and personal and job resources made employees more cynical and exhausted and reduced their job satisfaction and work engagement.

Paper 4 examined entrepreneurs running SMEs, to understand how entrepreneurial demands and resources influenced their feelings of financial and social success, findings that greater demands (e.g., difficult clients) increased strain and reduced success, whilst their resources increased work engagement. Finally, Paper 5 considered employee behaviours in communal workplace kitchens as additional sources and markers of social support, focusing on how work colleagues interact in their kitchen environments (e.g., keeping it tidy, welcoming new employees). Exploratory factor analysis found four factors (‘Collegiality’, ‘Messy kitchen’, ‘Someone else’s problem’, and ‘Participation’). First, ‘Collegiality’ and ‘Someone else’s problem’ significantly predicted job satisfaction and organisational commitment, and second, with the usual measures of a positive workplace, collegiality, internal work locus of control, positive workplace climate and job social support then predicted these outcomes.

These diverse studies showcase OHP research from the perspective of regional Australia and the issues of working in and running business here. The findings highlight the similarities of the constituents of good working conditions to larger workplaces and in different cultures. Life at the beach may be relaxed but working conditions can still be improved by sufficient resources and fewer demands to maintain positive work outcomes for employers and employees alike.
Introduction: Research about career satisfaction has generally emphasised control beliefs, such as career self-efficacy. More recently, Protean Career Orientations (PCO) and greater Career Adaptability (CA) have also been included as significant predictors of greater career satisfaction in highly dynamic, contemporary labour markets. However, barriers, due to disabilities, childrearing responsibilities, having a history of unemployment, or experiencing financial adversity can reduce opportunities for employment and reduce PCO, CA and positive outcome expectations. The current study used the Social Cognitive Career Theory (SCCT) to explore the influence of cognitive appraisals and positive career development behaviours, along with past and current situational barriers on career satisfaction. It was expected that over and above being protean, adaptable and having a positive career mindset, past and present situational factors (e.g., young children, previous unemployment) would constrain the individual’s career satisfaction.

Methods: Volunteers (N=150, 80.1% female) who were working or not working (e.g., due to ill-health or childrearing duties, but who not retired) were recruited by snowball sampling and ranged from 18 to 71 years (M=37.4, SD=11.4). Participants completed an online survey of their demographics, current work status (e.g., full- or part-time, unemployed), career self-management (PCO, CA), dispositional optimism, career development self-efficacy, external work locus of control (WLOC), and proximal (e.g., young children, family support) and distal (e.g., education, unstable employment history) barriers, and their career satisfaction. Hierarchical multiple regression (HMRs) were used to predict career satisfaction, with variables entered as demographics and optimism (Block 1), cognitive appraisals about employment (Block 2, external WLOC, self-efficacy), career self-management (Block 3, PCO and CA), and proximal (Block 4, age of children, financially insecurity) and distal career barriers (Block 5, low education, previous unemployment).

Results: Participants were mostly employed (84.2%, M=29.7 hours/week, SD=17.9) and in full-time (40.1%), part-time (16.3%), causal (11.6%), or contract (7.2%) employment or self-employed (9.9%). The sample consisted of non-parents (51%) and parents (49.0%). Parents mostly had one (27.8%), two (43.1%), or three (20.8%) children, and about half the parents had children under 6 years (45.8%). Correlations were in the expected directions, although gender and age had non-significant correlations with all other variables. The HMR explained large and significant variance (Adj $R^2=.398$, $p<.001$) in career satisfaction, with higher levels associated with more career self-efficacy and adaptability, internal rather than external WLOC, and the absence of barriers to employment (all $\beta$s>.20). Interestingly, the benefits of having employment were mediated by presence of distal barriers, whilst the effect of dispositional optimism was mediated by external WLOC and career self-efficacy.

Discussion: The current study found that external career barriers can limit career satisfaction, above and beyond benefits of positive cognitive appraisals and career self-management approaches. Individuals with lower education, a history of unemployment, or who are raising young children, or have a disability and face financial adversity have significantly lower levels of career satisfaction, moderating the benefits of actively constructing one’s employment options. These findings suggest that researchers and career councillors should consider the constraining effect of situational factors that moderate satisfaction with career progression.
S16: The Effect of Narcissism and Social Media on Work Outcomes Amongst Part-time Employees, Over and Above Their Demands and Resources

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Introduction: Gen Y (born 1977-1995) and Gen Z (born after 1996) are often characterised as self-absorbed and technology-obsessed workers who are more narcissistic and less engaged than older employees. The current study explored whether narcissism and social media use (over and above personal resources, demands and resources at work) predict work engagement, organisational commitment, job satisfaction, and turnover intentions. It was hypothesised that narcissism and use of social media would be significantly higher amongst Gen Y and Z and that more narcissistic individuals would be less engaged, committed and satisfied in their work, and more likely to leave, over and above their individual differences and working conditions.

Methods: Volunteers (N=218, 81.7% female) were recruited from a convenience sample of part-time, employed undergraduate students at a regional Australian university. Participants completed demographics (e.g., age, gender), personal characteristics (dispositional optimism, general self-efficacy, narcissism [Narcissistic Personality Inventory, Ames, Rose & Anderson (2005), 16 forced-choice statement pairs]), workplace characteristics (e.g., job demands, hours/week, job autonomy, skill discretion, co-worker support, ease and use of technology), and whether their use of social media (SM) was helpful or interfered with their workday. The outcomes were work engagement, job satisfaction, affective commitment, and turnover intentions, with hierarchical multiple regressions (HMRs) used to explore their predictors. Variables were added in the following order: demographics and personal characteristics (Block 1), workplace characteristics (Block 2), and effects of social media use (Block 3).

Results: Participants were aged from 17 to 64 years (M=25.9, SD=10.9) and worked part-time between 3 and 44 hours/week (M=16.84, SD=8.71) in mostly casual (65.1%) positions. Most used Facebook (92.7%) or Instagram (63.8%) than other forms of SM and did so several (57.3%), a few times (21.6%) or once (7.8%) a day. Narcissism had a slightly negative, but non-significant correlation with age (r=-.088, p=.197), but significant positive correlations with finding technology useful (r=.159, p=.019) and easy to use (r=.209, p=.002), and with SM interfering (r=.170, p=.012) or being helpful (r=.182, p=.007) for work. The HMRs had large and significant effects, explaining substantial variance, e.g., job satisfaction, 59.4%. Narcissism did not significantly predict any of the outcomes, nor did participants’ age, hours worked, whether they found technology easy to use, or if SM interfered or was helpful for work. In the final models, greater autonomy, skill discretion, and co-worker support (all ps < .001) significantly predicted greater work engagement, more job satisfaction and affective commitment and fewer turnover intentions. Additionally, increasing job demands were strong and significant predictors of reduced job satisfaction.

Discussion: The current study explored narcissism within the workplace. Rather than being associated with a generation, narcissism appears more likely to be a dispositional trait. Part-time employees of any age or disposition will remain engaged in the work, satisfied with the conditions, and feeling committed and likely to remain when they have sufficient autonomy and ability to use their skills, they have supportive co-workers, and their work involves reasonable, rather than excessive, demands.
S17: The Effects of Psychosocial Safety Climate and Illegitimate Tasks in Small and Medium Enterprises in Australia
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Introduction: Small and medium enterprises (SMEs) are a large part of the Australian economy, but organisational research often focuses on large employers. Using the Job Demands-Resources (JD-R) model, Bern Illegitimate Tasks Scale (BITS), and Psychosocial Safety Climate scale (PSC), the current study focused on Australian small to medium businesses. It is hypothesised that individuals with more personal resources (e.g., optimism) and job resources (e.g., PSC), with fewer job demands (e.g., illegitimate tasks) would have greater job satisfaction and work engagement, and less emotional exhaustion and cynicism.

Methods: Volunteers (N=353, 75.1% female) were recruited through social media to complete an online survey. Participants reported demographics, personal resources, job role (i.e., owner/senior management, supervisor, or employee), hours/week, job demands and resources, and the outcomes (job satisfaction, work engagement, emotional exhaustion (EE), and cynicism). First, ANOVAs explored PSC and illegitimate tasks by job role. Second, hierarchical multiple regressions (HMRs) were used to predict the outcomes, with variables were entered as Block 1 (demographics, personal resources), Block 2 (PSC), Block 3 (job demands and resources), and Block 4 (illegitimate tasks).

Results: Participants ranged in age from 17 to 73 years (M=44.53, SD=11.79) and worked from 2 to 85 hours/week (M=36.8, SD=13.8). Job roles varied from team member/employee (56.1%), manager/supervisor (18.1%), to owner/senior manager (25.8%). Owners and senior management reported significantly better PSC and fewer illegitimate tasks (all ps<.001) than either supervisors and employees (ns from each other). Correlations were in the expected directions, e.g., significant, positive association between illegitimate tasks and cynicism and EE, although age and gender were non-significant for the outcomes. All HMRs explained large and significant variance (all Adj R²≥.40***). Both types of illegitimate tasks increased EE and cynicism and reduced job satisfaction, with more unnecessary tasks also reducing work engagement, over and above personal and job resources and demands and PSC. The benefits of PSC to greater job satisfaction and work engagement and less EE were mediated by greater job resources and fewer illegitimate tasks. More personal and job resources and fewer demands were also associated with more positive outcomes. Interestingly, having a more senior job role still predicted less cynicism and greater job satisfaction, after considering the conditions of the job itself.

Discussion: The current study investigated how job demands and resources, in particular illegitimate tasks, impacted individuals in SMEs. Too many unnecessary and unreasonable tasks made employees more cynical and more exhausted and less satisfied with work, over and above the job's resources and demands and the PSC. Seniority was associated with a more positive view of both the PSC and the lack of illegitimate tasks, which may be of concern if only senior managers, business owners, or CEOs are surveyed about their businesses, rather than the lower tiers of employees who experience more of these demands. Retaining staff in SMEs should recognise that with fewer employees, ill-defined jobs may risk the perception of greater unnecessary and unreasonable tasks, counteracting the collegiality and flexibility of working in smaller workplaces.
Introduction: Entrepreneurs play an essential role in the Australian economy, to drive innovation and create new businesses. However, they face many challenges and are as likely to fail as succeed, which highlights the need to understand what factors may be important for entrepreneurial success to occur and for entrepreneurs to remain in business. Using the Job Demands-Resource (JD-R) framework, it was hypothesised that greater personal and work resources and fewer entrepreneurial demands would increase work engagement and reduce work-related strain, which would consequently increase social and financial success for entrepreneurs.

Methods: Entrepreneurs (N=109, 57.8% female) were recruited by snowball methods from Chambers of Commerce and entrepreneurial Facebook groups to complete an online survey. Participants reported demographics, personal (e.g., proactive personality, optimism) and entrepreneurial work (e.g., ‘freedom to carry out work activities’) resources, entrepreneurial demands (e.g., ‘contact with difficult clients or patients in your work’), work engagement, job-related strain, and entrepreneurial success (i.e., the business has achieved success in financial (e.g., ‘healthy turnover/sales’, ‘profit growth’) and social (e.g., ‘employee satisfaction’, ‘strong customer relationships’) areas). Hierarchical multiple regressions tested the predictors of work engagement, strain (e.g., ‘I find it difficult to relax at the end of a working day’), and entrepreneurial success as personal resources (Block 1; age, gender, optimism, self-efficacy, proactive personality), entrepreneurial demands (Block 2) and entrepreneurial resources (Block 3).

Results: Participants ranged from 17 to 65 years (M=43.6, SD=10.9) and were mostly married or had a partner (79.8%). They worked alone (38.5%), with 1-3 employees (36.7%), or with 4-20 employees (22.0%) and mostly in regional (42.2%) or urban (51.4%) areas. Most had a trade (33%), undergraduate (29%), or postgraduate (19.3%) qualifications and many (70%) had some management experience before starting self-employment. Size of business only affected entrepreneurial success, rather than work engagement or strain, with owners of businesses with 4-20 employees feeling significantly more successful than sole traders or those with 1 to 3 employees. The HMRs explained highly significant variance in work engagement (49.7%), job-related strain (39.0%), and entrepreneurial success (23.2%). Greater work engagement was predicted by increased personal resources, specifically as a more proactive personality and more optimism, and greater resources at work, and for women (rather than men). In contrast, entrepreneurial demands alone increased job-related strain (by mediating effect of greater optimism) and reduced feelings that success had been achieved by the business (by mediating effect of greater self-efficacy).

Discussion: The JDR was used to frame the work experiences of entrepreneurs, with resources adding to work engagement, whilst demands specific to entrepreneurial businesses strongly predicting increased job-related strain and reduced whether the entrepreneurs felt they achieved success in their business. The findings highlight areas in which entrepreneurs may be assisted to remain feeling engaged, rested, and successful. Providing training to manage demands around workloads, interruptions, and time pressure, as well as to building personal skills and their businesses, which allow creativity, and better business planning, may ensure that entrepreneurs continue in business in the longer term, benefiting themselves, their families and the economy more generally.
S19: ‘Someone Else’s Problem’: Behaviour in Communal Kitchens as an Expression of Social Support in the Workplace

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Introduction: Social support is central to theories about the workplace, with positive interactions buffering work demands and stressors. The current study explored whether active and cheerful involvement in shared workplace kitchens can be considered as distinct forms of social support and further increase the individuals’ own job satisfaction and organisational commitment, over and above more common and general measures of job social support.

Methods: Volunteers (N=103, 90.3% female) completed an online survey about interactions with colleagues in communal workplace kitchens, along with measures of work climate and job social support (e.g., ‘if necessary, can you ask your co-workers for support?’), demographics, work locus of control (WLoC), and the outcomes of job satisfaction and organisational commitment. Following exploratory factor analysis (EFA) of the kitchen behaviours, hierarchical multiple regressions (HMRs) were used to find if these behaviours first, directly predicted job satisfaction and organisational commitment, and second, predicted the outcomes over and above age, WLoC, job social support, and work climate.

Results: Participants ranged from 23 to 65 years (M=41.8, SD=11.0), were mostly married or living with their partner (71.6%), and worked from 7 to 70 hours/week (M=37.6, SD=12.8) in wide variety of occupations (mostly in education (31.4%) or health (29.4%)). Despite the modest sample size, the EFA showed good fit (KMO=.801, explaining 55.7% variance) for four factors; two positive – ‘Collegiality’ (e.g., ‘it feels like a genuine team’) and ‘Participation’ (e.g., ‘I participate in the social activities in my work area’) and two negative – ‘Messy kitchen’ (e.g., ‘kitchen never stays clean long’) and ‘it’s Someone Else’s Problem’ (e.g., ‘the cleaners should be looking after the kitchen’). Correlations were in expected directions. In the first HMR, the four factors explained substantial variance in job satisfaction (35.9%) and organisational commitment (40.9%), and both outcomes were strongly predicted by greater collegiality and where the kitchen was not ‘someone else’s problem’. The second HMRs again explained substantial variance (job satisfaction, 68.2%, organisational commitment, 55.9%). Collegiality remained a significant predictor of both outcomes, with the effect of ‘It’s Someone Else’s Problem’ mediated by internal WLoC. Both outcomes were predicted by greater internal WLoC, and where participants reported greater collegiality and a positive work climate, with job satisfaction additionally predicted by older age and more job social support.

Discussion: The current study found that social support, specifically as collegiality or more generally as positive work climates and reliable managers and co-workers, and internal work locus of control strongly and positively predicted both satisfaction and commitment to one’s job. The additional items about being pleasantly involved with work colleagues and specifically to be helpful around the communal work kitchen added to the explanation of social support. The items also indicate areas in which interventions could target work cultures, such as fostering team cohesion and collegiality as well as encouraging fun within the work environment. Future research will test the structure of the factors of kitchen behaviours in larger populations, and in samples that include more men, to confirm the factor structure and usefulness of the new scales.
Chair: Britt-Inger Keisu
Umeå University, Umeå, Sweden

State of the art: Sweden have one of the most gender segregated labour markets in Western Europe. In the Year 2012, only 14 percent of the women worked in occupations with an even gender distribution (occupations were no gender exceed 60 percent). Only three out of the 30 largest occupations in Sweden have an equal gender distribution. The occupations that are most women dominated is assistant nurses and hospital orderlies (93 percent women). One alarming problem with the gender segregated labour market is that women have an increasingly higher sickness absence than men. The highest rates of sickness absence are found among human service and care occupations.

We know that the main cause of this gender difference is to be found in the work environment, and as women and men work in different occupations the work environment differs accordingly. But there is still a large knowledge gap to the more specific causes of these gender differences; which specific factors in the work environment, which kind of organisational changes, which work conditions could contribute to more healthy workplaces. In addition, there is a need to deepen gender theoretical perspectives within this research field.

New perspectives/Contributions: The four presentations in this symposium is part of the Swedish research council for health, working life and welfare’s (FORTE) research program on work environment in women-dominated sectors. The presentations contribute to the literature on working environment in women-dominated professions and workplaces by shedding light on a number of identified gaps in previous research. The first presentation adds on the literature on working conditions within elderly care and disability services. The second presentation examines the prevalence and consequences of Intragroup conflicts in women-dominated work, and the last presentation explore emotions in relation to wellbeing in and at work by focusing on conflicts within health care, social service and compulsory school. Together, these presentations generate new knowledge in areas that have, so far, been understudied.

Research implications: The symposium enhances our understanding of the influence of work environment within women-dominated professions and workplaces in different ways, which will deepen our understanding concerning health in the gender segregated labor market. This is important, given the escalating ill-health and sick leave numbers in women-dominated workplaces. Three important lesson can be learned; 1) what organisational factors explain ill-health amongst women; 2) how gender, work environment and health are linked to power relations; 3) how practitioners can organise work environment to counteract ill-health within these professions and workplace. Altogether, the knowledge from this symposium may be used to create better and more equal working conditions in women-dominated workplaces in the future.

S20: Care Work in Different Arenas: Working Conditions in Swedish Eldercare and Disability Services
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Background: One out of seven employed women in Sweden work in eldercare or disability services. These women-dominated occupations have poorer working conditions than the labour market in general. While there is relatively extensive research on the working conditions for staff in eldercare, there is a significant lack of knowledge about work in the disability sector. Although the main responsibility for eldercare and disability services lies with the local governments, there are differences between these areas, both in terms of legislation and economic development.
The main legislation regulating the local governments’ responsibilities for people in need of care or service is the Social Services Act (SSA) which covers all persons in need of help. Persons with certain extensive disabilities are also covered by the Act concerning Support and Service for Persons with Certain Functional Impairments (the Disability Act). The Disability Act has a higher level of ambition – “good living conditions”, than the SSA, which is aiming for a “reasonable standard of living”. Since the 1990’s, the generosity in public funding of these services has gone in different directions, with retrenchment in eldercare resulting in declining coverage, and expansion in disability services. In the light of these differences, this study aims to compare working conditions in disability services with eldercare.

**Methods:** The study is based on a national survey to Swedish eldercare workers in 2015 (n=770), and a national survey to care workers in the disability sector; the majority working in group homes and daily activities for people with intellectual disabilities, autism or brain injury; and personal assistance for people with various extensive disabilities, in 2017 (n=707). The data was analysed by bi- and multivariate methods.

**Results:** In comparison with eldercare workers, the care workers in the disability sector report significantly lower workload and more autonomy at work, and they feel more supported by their supervisors and much less often inadequate towards client needs. These different working conditions seem to have different impact on the two groups’ wellbeing: disability care workers are significantly less likely than eldercare workers to report pain and physical exhaustion.

**Conclusion:** Overall, eldercare workers seem to have worse working conditions with a higher workload and lower control over their work. Accordingly, they also experience more physical problems and fewer opportunities to meet their clients’ needs. The findings are discussed against the different policy ambitions in the two sectors, and the results suggest that more resources to, and higher levels of ambition for, disability services also lead to better working conditions for care workers in disability sector.

S21: The Prevalence and Consequences of Intragroup Conflicts in Women-Dominated Work
Susanne Tafvelin, Elin Kvist, Britt-Inger Keisu
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**Introduction:** Stress and ill health is a growing problem in working life in general, and in women-dominated work in particular. Understanding factors that contributes to stress and ill-health in women-dominated sectors is therefore imperative, and previous studies suggest that factors in the work environment may be of importance. One potential explanation that has been less studied is the role of conflicts in women-dominated work. The aim of the present study was to examine the prevalence and consequences of intragroup conflicts in women-dominated work from a gender perspective.

**Method:** We used a random sample of 1806 employees from health care, education, and social work. We measured intragroup conflict with a nine item scale developed by Jehn and Mannix (2001) that includes three subscales differentiating between task, relationship and process conflict. In addition, we measured a number of health outcomes such as vigour, stress, depression, and burnout using previous validated scales from COPSOQ (Pejtersen et al., 2010). We then used structural equation modeling in M-plus to analyse our data.

**Results:** Our analyses showed that 95 % of our sample had experiences of relationship conflict, 97 % of task conflict, and 89 % of process conflict. Also, 3 % experienced relationship conflicts on a more frequent basis (often, or all the time), while the corresponding numbers for task conflict
was 5% and for process conflict 3%. Comparing the ratings of men and women, we found that men experienced significantly more relationship conflict than their female colleagues. Our analyses also revealed that all three types of conflicts were related to stress and wellbeing, but differently so for men and women. For women, all three types of conflicts were related to increased stress and reduced wellbeing. For men, relationship and task conflict predicted stress and wellbeing, but less so process conflicts.

Discussion: Our study contributes with knowledge on the prevalence and consequences of intragroup conflicts in women-dominated work. The findings suggest that conflicts are a source to stress and ill-health in these kind of workplaces. In addition, our findings suggest that there are differences between how men and women perceive conflicts at work and what kind of consequences conflicts have. Our study point towards the importance of conflicts at work for explaining stress and wellbeing, and suggest that organisations in women-dominated workplaces should take conflicts into consideration when forming strategies to reduce stress and ill-health at work.

S22: Fit for Fight - A Study of Conflicts and Emotions in Welfare Occupations

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In the early 2010s, work-related ill-health started increasing in Sweden, mostly among women, and particularly in women-dominated sectors, and especially among highly educated women. The gender difference in sickness absenteeism is understood as mainly due to work environment and work conditions. Working life in Sweden has undergone major changes during the last 30 years. Since the 1990s both private and public sector have been restructured, organisations have been slimmed down, the number of public sector employees have been reduced, increase in temporary employment, reduces job security, increased workload and work strain and also reduces influence over everyday work. In these later years reorganisation of the public sector, the nature of welfare work; emotional commitment and the embodied characteristics has been largely neglected. The increased demands for results, efficiency and competitiveness in combination with scarce personnel and material resources challenges welfare workers ethos of helping. Working in contact professions, caring for others is highly demanding but valued less in terms of pay and other work benefits. Working with emotions, is hard, exhausting work, that requires presence and an appropriate response.

To be effective the emotional labourer must be able to understand and interpret the needs of others, be able to provide a personal response to these needs, juggling the delicate balance of each individual and of that individual within a group, further the labourer needs to be able to pace the work, and taking into account other responsibilities. Poor psychosocial work environment enhances the risk of developing workplace conflicts, resulting in personal conflicts, harassment, bullying, and sickness absenteeism. Workplace conflict is a mental stressor connected to emotions and work environment and has received little research interest.

This study aims to critically explore how conflicts and emotions are represented by employees and managers in women-dominated welfare workplaces. Further, how emotions function to bind subjects together or push them apart in these workplaces. Emotions are understood as a private matter, something that belongs to individuals, moving from within outward toward others. Inspired by Sara Ahmeds "affective economies" we will challenge the presumption, and illustrate how emotions and conflicts make “the collective” appear and how they function to align individual with collectives in welfare occupations. Further, we will show how highly strained work environments can unite the collective against individuals resulting in destructive workplace conflicts.
The data consists of 26 semi-structured interviews with four first-level managers, and 22 employees in four occupations; registered nurses, assistant nurses, teachers and social workers. We are inspired by post-deconstruction and the new materialist point of view, suggesting social change cannot solely be achieved by deconstructing identities, subjectivities and discourses. Instead, there is a need for renewed attention towards socio-economic conditions, economic and political processes and their materiality is crucial. To understand workplace conflicts in welfare professions, there is a need to situate them in its organisational, political and economical context.

Symposium: Occupational Health: Absenteeism and Presenteeism
Chair: Aristides Ferreira
ISCTE-IUL, Lisboa, Portugal

This symposium addresses the current challenges and trends on occupational health regarding the topics of absenteeism and presenteeism. It aims to present an evaluation, promote discussion and stimulate research interests on attendance behaviour to increase our understanding of presenteeism and absenteeism. This will be an opportunity to share experiences with different methodologies to measure presenteeism and to reflect on new contracts that should be considered to enrich the existing conceptual frameworks on the presenteeism and absenteeism literature. We aim to provide opportunities to contribute to the literature on important emerging sectors such as tourism and hospitality. In study one, research conducted with multilevel structural equation modeling will emphasise the important role of negative appraisals of economic crises and the positive indirect relationship with work-unit absenteeism through psychological distress. Findings show that negative appraisals of economic crises explain psychological distress which in turns, explains absenteeism. Study two presents a contribution to the presenteeism literature by showing that supervisor support and materialistic inducements have an indirect effect on productivity despite presenteeism through the role of affective commitment. Another study highlights the importance of studying presenteeism leadership. Findings show that psychological and contagious diseases have an impact on leadership presenteeism and presenteeism perceptions. Study four will present an interesting experimental scenario design that manipulates attendance behaviour, type of illness and contextual variables. Results show that the absence history influences the perceptions of employees’ favorability. Finally, study five will provide some insights on how different causes of presenteeism influence customers, in the hospitality sector. This study aims to understand if the perception of employees’ sickness has an impact on customers’ behaviour, affecting their recommendation scores and the intention to rebook a new stay in a specific hotel.

S23: Appraisals of the Economic Crisis and Its Impact on Work-unit Absenteeism: The Moderating Role of Psychological Distress
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The recent global economic crisis has generated renewed interest in questions regarding the potential impact of such macro-level events on employee wellbeing and organisational productivity. Thus, we build upon a perspective on workplace stress that is increasingly multilevel (Bliese & Jex, 2002; Probst, 2010) by examining a cross-level model (1-1-2) in which employees’ negative appraisals of the economic crisis affects work-unit absenteeism (according to the human resources (HR) department’s record) through their perceived level of psychological distress.
According to Lazarus and Folkman’s (1984) widely-cited transaction model of stress, the stressful event (i.e., economic crisis) is considered as a threat (i.e., primary appraisal) because may lead to job loss, and therefore workers may feel fear regarding how the organisation might fare in and respond to a financial downturn. Moreover, workers may believe that they do not have the necessary resources to cope with the stressor (i.e., secondary appraisal), as it would be quite difficult to find a new job with another employer, which, in turn, has general negative effects on workers’ health and wellbeing (e.g., Wittekind et al., 2010). In addition, as individuals often put in place coping mechanisms directed towards avoiding the stressor and reducing the negative emotion they experience under stressors that are difficult to modify or uncontrollable (Lazarus & Folkman, 1984), workers try to minimise exposure to stressors by being absent and having time to recover (see Biron & Bamberger, 2012). Furthermore, it is increasingly recognized that absence decisions are linked with social and relational influence mechanisms (Salancik & Pfeffer, 1978). In this case, stress contagion may encourage employees to seek cues in their social context about how to confront or avoid the stressor and its associated negative emotions, resulting in the formation of shared ‘absenteeism norms’ (i.e., stressor-strain-absenteeism relationship: Darr & Johns, 2008; Podsakoff et al., 2007). Thus, workers from the same unit may share both perceptions about the consequences of economic crisis and absenteeism norms, leading to behave in a congruent way with the information received from their social environment (Salancik & Pfeffer, 1978). In turn, workers in the same unit may use absenteeism as a collective coping mechanism to alleviate the negative feelings that the economic stressor produces.

We conducted multilevel structural equation modeling (MSEM) with data collected in a large Italian company in the field of home furniture that comprises 1,160 employees nested in 49 units. Results confirmed the hypothesised model ($\chi^2 (66) = 298.24, \text{CFI} = .92, \text{RMSEA} = .05, \text{SRMR} = .06$) against other plausible models: negative appraisals of economic crisis were positively associated with psychological distress ($\beta =.30, p < .01$), which in turn was positively linked to work-unit absenteeism ($\beta =.60, p < .01$). Additionally, negative appraisals of economic crisis had a positive and significant indirect relationship with work-unit absenteeism through psychological distress (product of coefficients = .18, $p < .05$, 95% CI = .10, 1.98). These results have implications for managers and other workers with responsibilities for improving productivity and maintaining employees’ wellbeing in turbulent times.

S24: The Mediator Role of Normative and Affective Commitment in the Relationship Between Organisational Resources and Presenteeism
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Presenteeism is a frequent phenomenon in periods of economic crisis. The main consequence of presenteeism is the decrease of productivity. Portugal is crossing a critical period, and having affective and normative commitment has a positive impact on the productivity of individuals. The more employees are committed to their company the higher productivity will be, even in fragile situations such as presenteeism. For employees’ commitment, the contribution of organisational resources must be considered. Thus, the present study aims to understand the relationships that between organisational resources, specifically supervision support and inducements (materialistic and developmental); affective and normative commitment; and productivity associated to presenteeism. For this purpose, a sample of 297 participants was analysed through linear regression and mediation analyses. Findings showed a positive and significant impact of developmental inducements either on affective and normative commitment or on productivity associated to presenteeism. Supervision support and materialistic inducements had an indirect effect on only productivity associated to presenteeism, through affective commitment. Lastly, affective commitment revealed a mediation role between developmental inducements and productivity associated to presenteeism.
The phenomenon of presenteeism has been emerging as a research area in the last years and some features of the organisational climate may explain the presenteeism phenomenon (Hemp, 2004; Schultz & Edington, 2007). When employees and leaders choose to be present at work while ill, they put their colleagues at health risk (Bokhari et al., 2017). Supervisor behaviours play a key role on employee productivity (Bokhari et al., 2017), and considering the increasing prevalence of presenteeism, this possibility is important to explore (Luksyte et al., 2015). Presenteeism strategies can be adopted in the same way by employees and leaders, to the point that presenteeism can be contagious in the work environment (Ferreira et al., 2017). New research are now focusing on the contextual nature of leadership and worker’s perceptions of their leaders (George et al., 2017). Since there is much evidence that leaders have an impact on employee’s health (Dietz & Scheel, 2017) we intend to go further and study how the fact of leaders go to work despite feeling sick can also indirectly affect their followers presenteeism.

We aim to contribute to the literature by developing a new instrument to measure leadership presenteeism. In this investigation we intend to test if there are differences between the means of leadership presenteeism and individual’s perception of presenteeism in four different groups: psychological diseases, physical diseases, contagious diseases and control condition (no disease). Particularly, we intend to study if psychological diseases may affect leadership presenteeism and presenteeism perception in a distinct way than the other diseases.

We conducted a pilot study with a university sample (326 students from a public Portuguese university, aged between 17 and 43). It was presented an image of a sick leader, according to each health condition. It was asked to students evaluate a set of statements about their performance, if they had to work with a leader with that specific health problem. To test validity of leadership presenteeism scale we performed a confirmatory factor analysis, through AMOS software.

Results showed an adjustment in the independence of the two factors of the scale. Results of the one-way ANOVA revealed that there was a significant effect of the four different health conditions in the level of leadership presenteeism and individual’s presenteeism perception. Post hoc analyses using the Bonferroni correction confirm that psychological diseases and contagious disease had more impact on leadership presenteeism and presenteeism perception. To our knowledge, this is one of the first investigations to study the impact of leader’s in spreading a presenteeism climate in the organisation. Our findings suggest that individuals feel more uncomfortable to work with people with psychological diseases than with people with other health problems, and this can generate negative emotions and unfavorable behavioural reactions at work.

This paper provides the preliminary findings regarding a new instrument to assess leadership presenteeism, and results indicate that the instrument have good psychometric properties. Our findings enhance the importance of organisations to focus on decrease negative attitudes that surround mental illness, to help to build healthy work environments.
S26: A Scenario Study about the Observer Reactions to Absenteeism Versus Presenteeism
Merce Mach\textsuperscript{1}, Eric Patton\textsuperscript{2}, Gary Johns\textsuperscript{3,4} \\
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Attending work while ill, commonly called presenteeism, has important repercussions for employee wellbeing and organisational effectiveness. This study examines contextual conditions and individual differences that influence people’s attributions and judgments about employees’ decisions to attend work or to be absent when ill. We employed a $2\times2\times2\times2$ between-respondents experimental design using scenarios describing the absence/presence of an employee in order to assess such judgments. Manipulated variables include attendance behaviour (presence versus absence), type of illness (lower back pain or depression), and two contextual variables; the impact of absence on clients and the individual’s absenteeism history. Compared with absentees, presentees garnered more sympathy and more organizational citizenship attributions. They were also seen as more productive and less obligated to attend. The criticality of attendance for clients did not moderate these relationships, but absence history did, such that absentees with a record of poor attendance were viewed least favourably. Compared to those with back pain, the depressed were seen as less obligated to attend, less productive, and less inclined toward citizenship behavior. Also, there was significantly less sympathy and a higher obligation to attend when the depressed worker was absent.

S27: The Nightmare of Getting Sick on Vacation: The Effects of Sickness Presenteeism in the Hospitality Sector Net Promoter Score
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ISCTE-IUL, Lisbon, Portugal

Although presenteeism has a high prevalence across job sectors, few studies focused on how presenteeism affects the hospitality sector (e.g., Arslaner, & Boylu, 2017; Chia & Chu, 2017; Chia & Chu, 2016; Cullen & McLaughlin, 2006). Still, it is known that hospitality and tourism cultures promote sickness presenteeism behaviours (Deery & Jago, 2009). Indeed, hospitality employees’ sickness may affect not only their performance, but also coworkers (e.g., damaging team’s dynamics) (Luksyte, Avery & Yeo, 2015) and customers (e.g., causing dissatisfaction) (Boylu & Arslaner, 2015).

Hence, focusing on employees’ sickness negative consequences, our study follows an experimental approach to investigate how the presence of sick hospitality employee (vs. control) impacts on customers’ fear of contagion and intentions to recommend (i.e., net promoter score) and/or rebook stays in hotels. To achieve our goal, we have already collected data from 570 participants of different nationalities and with tourist accommodation experiences around the world. Data will be analysed using SPSS package programme. Regarding the data collection procedure, we started by asking participants about their last touristic accommodation experience (e.g., name, location, type of travel and satisfaction regarding employees, cost/quality relation, etc.). Then, we asked to which extent the participants would: (1) recommend that tourist accommodation to their families/friends/colleagues, and (2) rebook a stay in that tourist accommodation. Then, we controlled the effects of three different job roles (maid, cafe/bar/restaurant attendant and receptionist) and three different races/nationalities. To control these characteristics, we presented pictures of the employees to the participants. Also, we manipulated the employees’ sickness-health impact. In the experimental group we informed the participants that the employee was presenting symptoms of severe cold, for example “imagine that you find, in the touristic accommodation where you have stayed, Miguel, a cafe/bar/cafeteria employee who appears to be tired, with signs of fever and who often coughs and sneezes”. To test the possible effect of hospitality employees’ sickness presenteeism behaviors, we asked again to which extent the participants would recommend and rebook that tourist accommodation.
Summing up, our study comprises nine different groups (each one with one control and one experimental condition). We also asked participants about employees' attractiveness in both experimental and control conditions, and participants fear of contagion only in the experimental condition. Regarding results, we expect to find that participants will tend to recommend less the tourist accommodation where they have stayed, and will less likely rebook a new stay if the employee presented to them displays sickness symptoms. We also expect that higher levels of fear of contagion will be related to lower levels of recommendation and less intent to rebook a new stay, and that a higher perception of employee’s attractiveness will be related to higher levels of recommendation and more intent to rebook a new stay.

Symposium: From Job Crafting to Life Crafting: Proactively Shaping Work, Studying, Leisure and the Boundaries between Life Domains
Chair: Jessica de Bloom & Philipp Kerksieck
1University of Tampere, Tampere, Finland; 2University of Zurich, Switzerland

A globalised economy, an aging labor force and technological advancements such as smart mobile ICT devices have led to structural changes in the way work is organised, carried out and experienced. The very concept of work becomes more and more flexible, accompanied by a changing nature of employment relationships such as temporary and project-based work, and high levels of job insecurity. Spatial and temporal boundaries between work and non-work vanish while workload increases with far-reaching consequences for occupational health and wellbeing.

Organisations increasingly strive for an “agile workforce” to support dynamic responses to a rapidly changing environment. This provides workers with numerous possibilities to coordinate different roles in life and to carry out their work and non-work duties. Accordingly, workers are more and more depicted as active agents in (re-) designing their job and off-job time as reflected in the prosperous field of job crafting research. This symposium will focus on crafting across various life domains.

The first contribution applies crafting to the domain of studying. It will provide insights into student wellbeing by investigating how students may proactively make their studying more meaningful and engaging. The second contribution will deal with the question whether effects of job crafting can spill-over to the off-job domain and affect amateur runner’s performance. The third contribution will deal with the measurement of boundary crafting and the fourth contribution will present a psychological needs framework to investigate the interplay between job- and off-job crafting. The last presentation of this symposium will discuss challenges in the implementation of crafting interventions. It will provide tips and guidelines for practitioners who would like to apply crafting interventions on the workfloor. Using a wide range of research methods and presenting several new measures for crafting developed in four different countries, the symposium provides new perspectives on crafting and hopes to inspire future lines of research.

S28: Validation of the Study-Related Crafting Questionnaire (SRCQ)
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Higher education is a demanding context in which students work with the aim of achieving a degree: they attend courses, do assignments in order to pass courses and strive to meet deadlines. Hence, students’ activities can be seen as “work”. The available research indicates that the prevalence of stress and burnout is high and increasing among students studying in higher education. Consequently, this study aims to provide insight into student wellbeing research by investigating how students can self-initially make their studying more meaningful and engaging.
The present study investigated the psychometric adequacy of Job Crafting Questionnaire (developed to measure job crafting in a work setting), adapted for measuring the crafting behavior in an educational setting, i.e., study-related crafting (SRCQ). In Spring 2017, a sample of 357 Finnish university students completed a SRCQ survey together with a school engagement measure. Confirmatory factor analysis showed that the hypothesised three-factor model best described the structure of the SRCQ; that is; the scale included three interrelated factors that reflected the task, relational, and cognitive forms of study crafting. Reliability analyses indicated the measure has adequate internal consistency. From the crafting behaviors, students utilized task crafting the most. Convergent analyses showed the SRCQ correlated positively with school engagement. Especially cognitive crafting showed to be the most beneficial strategy that fostered school engagement.

Together, the analyses supported the hypothesized three-factor structure, adequate internal consistency reliability, along with congruent validity of the SRCQ. Consequently, the questionnaire is a useful tool for the assessment of crafting behavior among students.

S29: Work-Sports Enrichment in Amateur Runners: A Diary Study
Anniek Postema, Arnold B. Bakker, Heleen van Mierlo
Erasmus University, Rotterdam, Netherlands

Purpose: The meaning and energy people find in work may spill over from the work domain to other life domains (Edwards & Rothbard, 2000). The work-home resources model (Ten Brummelhuis & Bakker, 2012) acknowledges this work-life interface and explains the antecedents, mechanisms, and outcomes of work-home conflict or enrichment. In this study, which is – to the best of our knowledge – the first to examine work-to-sports spillover, we test whether and how work can enrich the sports domain. Drawing on the work-home resources model, we explore work-sports enrichment and propose that work-related proactive behavior (i.e., job crafting) will affect people’s volatile personal resources (i.e., work engagement and meaningfulness), which, in turn, influences running performance. In addition, we hypothesise that positive cognitions about work during running (i.e., problem-solving pondering), play a moderating role: positive thinking about work will enhance the relationship between work engagement or meaningfulness and running performance.

Design/Methodology: In this diary study, conducted among amateur runners, participants completed three types of questionnaires: (a) a general questionnaire completed once, (b) a work-related questionnaire completed multiple times after work, and (c) a run-related questionnaire completed multiple times after training. We performed multilevel regression analyses in MLwiN version 3.01 (Charlton, Rasbash, Browne, Healy, & Cameron, 2017). The two-level model consisted of (a) the repeated occasions (N = 667) on the first level, and (b) the individuals on the second level (n = 239, Mage = 41.24, SDage = 10.60). Indirect effects were measured with the Monte Carlo Method for Assessing Mediation (Selig & Preacher, 2008).

Results: Results of the multilevel analyses showed indirect effects for task crafting and crafting of social job resources on running performance via work engagement, but not via meaningfulness. More specifically, job crafting was positively related to work engagement, which, in turn, was positively related to speed stability. Furthermore, results suggested a moderating effect of problem-solving pondering on the relationship between volatile personal resources (i.e., work engagement and meaningfulness) and running performance.

Limitations: We assume a causal relationship of job crafting with work engagement and meaningfulness, but we had no control over the causal ordering of these variables. Furthermore, drop-out after the initial phase of the study may have resulted in some sort of self-selection bias.
Research Implications: The present findings support the work-home resources model (Ten Brummelhuis & Bakker, 2012) and spillover theory (Edwards & Rothbard, 2000), and bridge the gap between the domains of organisational and sport psychology. This research has important implications in the sports domain; individuals can take control over their work day, which may facilitate sports performance via volatile personal resources.

S30: Boundary Crafting: Development of an Instrument to Capture Behaviours that Promote a Balance Between Work and Private Life
Philipp Kerksieck, Rebecca Brauchli, Georg F. Bauer
University of Zurich, Zurich, Switzerland

Background and aim: The modern working life has become more and more flexible, individualised, complex, and demanding. The challenge and the possibility for shaping, integrating or balancing the own work and private life has massively changed. Thus, we need to understand how employees actively craft the boundaries between their working life and private life. The present study aims at developing a new instrument to for capturing boundary crafting behaviours.

Procedure: We build on a well-known concept to derive the content of the respective scale: The superordinate framework of boundary crafting refers to the qualitative work of Sturges (2012). Applying a qualitative interview technique, Sturges identified the following sub-factors of work-life balance crafting. Physical Crafting: The amount of time spent at work; where work time was spent; what job was done; and how much time was spent on travelling to work each day. Cognitive Crafting: Cognitive techniques such as framing and defining the subjective meaning of work-life balance or compromising an ideal work-life balance in return for long- and short-term benefits. Relational Crafting: Usage of out-of-work relationships to reinforce the approach to work-life balance crafting and work identity. Management of relationships at work in order to limit workload or manage work time effectively.

For all three sub-dimensions, it is of interest to which degree employees establish the boundary between working life and private life and are undertaking this proactively, goal oriented and initialised by themselves.

In a first step, on the basis of this qualitative work questionnaire items for this scale are formulated, selected and reviewed by internal and external experts in the field of occupational health psychology. The second step contains data collection with a cross-sectional online survey (N = 500) for instrument validation: Exploratory and confirmatory factor analysis, reliability and validity tests and assessment of the internal consistency of the scales.

Results: At the conference, quantitative results of the reliability and validity tests will be presented and conclusions for further adaptations of the scales will be drawn.

Outlook: Building on this new scale, we will look at patterns of boundary crafting in relation to other crafting styles (namely job crafting and leisure crafting) as well as their relationships to both negative and positive health outcomes. This will allow for drawing conclusions for particularly beneficial, salutogenic strategies for crafting an increasingly flexible working life.
S31: Crafting Work and Leisure: The “Why” and “How” of Crafting Within and Across Life Domains

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Within recent years, there has been a heightened interest in working people’s active role in shaping their activities and experiences during work and leisure to benefit their own goals, referred to as job-, leisure- or work balance crafting. In this review, we integrate past models on crafting with the help of Sheldon´s Two-Process Model of Needs. The application of this model enables us to connect the crafting conceptualisation by Wrezniewski and Dutton, which focuses on crafting motives (“why”), to the Job Demands Resources framework for job crafting proposed by Tims and Bakker, which centers on actual crafting behaviors (“how”).

More specifically, we propose that psychological needs energise particular types of crafting efforts. If these crafting efforts match a person’s actual needs and satisfy these unfulfilled needs, need satisfaction serves as experiential reward for crafting efforts which ultimately leads to optimal functioning. By distinguishing crafting motives and efforts and implying a potential (mis)match between individual crafting behaviors and psychological needs, our Need Model of Crafting can explain 1) why and how people craft, 2) why crafting may not lead to optimal functioning, 3) how crafting sequences develop dynamically over time, and 4) how crafting processes interplay across life domains.

S32: The Job Crafting Intervention in Practice: Tips, Tricks and Food for Thought

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Given the rapid and ongoing changes in society and the way we work, employee resilience and adaptivity has been put to the test. New ways of working include different types of ‘boundaryless’ work, i.e. traditional structures of fixed hours in a fixed place, are replaced by high levels of employee flexibility, autonomy and use of technology. For these changes to have positive effects, employees require new skills and a proactive mindset regarding the way they shape their work and lives outside of work. For most, these self-management skills are the direct opposite of what was once taught in school. Supporting employees in dealing with change and being proactive in shaping their work and ways of working is therefore paramount.

Job crafting has been put forward as a phenomena that describes proactive changes to work and working conditions that employees themselves instigate and apply. The aim of job crafting behaviour is to build healthy, meaningful and engaging work based on the specific needs of the individual employee. In the past decade, the concept of job crafting has been used to inform the design of bottom-up interventions to support employees in shaping their tasks, demands and resources at work. This is of particular importance during times of change, when employees need to be able to manage their own wellbeing and motivation. Evidence so far indicates that job crafting interventions are a promising, bottom-up way to boost employee wellbeing and motivation at work.

The aim of this presentation is threefold. First, to elaborate on the design and effectiveness of the job crafting intervention that we developed and tested in 2010. Secondly, to discuss challenges with regards to implementing job crafting interventions in organizations. Thirdly, I will reflect on the implications of job crafting on the way employees may craft their life outside of work. From a practitioner perspective, I will discuss a number of tips and tricks when using job crafting with organizations and employees. Following from this, I will take a scientist perspective to propose a number of theoretical themes for future research.
Why is atypical and insecure work as well as job loss so bad for individuals? This symposium argues that an answer for that can be found in the reason as to why work is important for people: Work comes with important latent functions (beyond providing an income); it is an important part of how people define themselves: and it is embedded in a wider social environment. Atypical and insecure job situations are likely to undermine a person's sense of who they are and affect a person’s wider social environment. Even worse, job loss is likely to deprive people of the functions of work in general, thereby affecting wellbeing.

The first two papers focus on the identity related aspects of work. Starting from the notion that work is an important part of who we are, Stiglbauer and Batinic argue that job insecurity can undermine a person’s self-perception as a professional person, and threaten associated beliefs regarding how to carry out ones job. In a large scale online survey they show that this then eventually leads to role strain and exhaustion. Selenko and De Witte propose a similar mechanism to explain the effect of atypical work. Atypical work (i.e. working involuntarily part time or under skilled) is likely to affect a person's sense occupational identity and understanding of their professional self. The resulting identity confusion leads to lowered wellbeing, as they can show in their four wave study.

The second two papers look at the role of the wider context in the experience of job insecurity. Tomas, Seršić and De Witte point out the role of the social environment in explaining the negative effect of job insecurity on wellbeing. In a three wave study they found that job insecurity has a profound effect on organisational climate, significantly reducing people’s willingness to cooperate over time. This highlights that job insecurity is not just limited to an individual’s own situation, it affects the wider organisational environment around a person as well. Interestingly, Roll, Rothmann and De Witte found similar results in a different study. In qualitative interviews with academics they showed that the experience of job insecurity was very much embedded in a wider socio-political context: Job insecurity was perceived as being related to the economic and political situation of the country and as having an effect not only on the individual but also on their private life outside organisations.

Eventually, Zhou, Woods, Zou and Wu analyse the detrimental effects of job loss and the restorative effect of reemployment from a latent functions perspective: while reemployment managed to restore people’s life satisfaction to pre-unemployment levels, a move into economic inactivity did not do that, presumably because those situations do not allow for a sufficiently good access to the latent functions of work. All in all this symposium shows the value of taking into account more fundamental aspects of a person’s employment situation (i.e. the latent functions, identity related aspects and the wider environment) when analysing the effect of work on wellbeing.

S33: The Role of Role Stress in the Job Insecurity – Strain Relationship
Barbara Stiglbauer, Bernad Batinic
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Purpose: Job insecurity is an identity-relevant experience because it threatens a person’s identity of being an employed person. Thus, identity-threat offers another explanation for the detrimental effects of job insecurity. In the present study, we extend this theorizing and findings and argue that job insecurity also “confuses” aspects of individuals’ job-related identity.
Theoretical background: Previous research has shown that professional identity may prevent role stress, and, consequently, strain. Thus, individuals with a strong work-related identity are more certain of what their job is and how to perform their role at work. As job insecurity threatens individuals’ work-related identity, job insecure individuals may also experience higher job role stress. Role stress may be particularly high if job insecure individuals feel that they have high job expertise. Job expertise, in general, constitutes a resource, as it contributes to employability. However, having high expertise and still having an insecure job is likely to present a conflict with regard to the concept of “being a person who is employed in this job”.

Hypotheses: Job insecurity is positively related to role stress, which in turn is positively related to strain. Thus, role stress is a mediator in the job insecurity – strain relationship. Subjective job expertise moderates the relation between job insecurity and role stress, in that effects on role stress are more pronounced among individuals with high job expertise as compared with individuals with low job expertise.

Method: A sample of n = 716 employees (54.10% female, mean age 44.40 years) from various occupational fields completed an online survey on job stress and wellbeing. They reported their subjective job insecurity, job expertise, role conflict and ambiguity, and cognitive and emotional job strain.

Results: In line with previous studies, job insecurity was associated with higher levels of cognitive and emotional strain. Job insecurity also related to higher role conflict and ambiguity, and this relation was augmented by high job expertise. Furthermore, cross-sectional moderated mediation analyses revealed that role conflict and ambiguity partially mediated the effects of job insecurity on strain, particularly among employees who felt to have high job expertise.

Discussion: The cross-sectional results support our hypothesis that employees who experience job insecurity will also experience more ambiguity and conflict in terms of their job role. Thus, role stress can partially explain why job insecurity is associated with cognitive and emotional strain. The job insecurity – role stress relation, which was even more pronounced among employees who felt they had high job expertise, may reflect the general threat to employee’s job-related identity.

Limitations: We assumed that job insecurity would increase role stress, but reversed causation is equally plausible. The cross-sectional data does not allow examining the temporal precedence of the constructs. Therefore, a second wave of data collection will be conducted in June, and the longitudinal results will be presented at the conference.

S34: Atypical Jobs Undermine Professional Identity and thereby Affect Wellbeing
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Theoretical background: Increasingly many people find themselves in atypical jobs, i.e. involuntary part-time work, agency work or digital platform work, outside organisational structures. These atypical jobs bring various challenges for individuals. Drawing from recent theory-making on atypical work and identity we propose that work is an important part of who we are. People who work in atypical job situations are exposed to more volatile job environments, which makes it difficult to attain a stable sense of ‘who they are’ and what they can do professionally. Also, they will feel less typical for the majority of the working population. In other words, working in atypical jobs is likely to undermine a person’s sense of occupational identity and their identification with the working population. This, in turn, will affect wellbeing: without a good understanding of who one is, people would experience identity confusion and disorientation, leading to unhappiness and anxiety.
Method: A sample of 1,000 British workers in various professions were surveyed with the help of a panel-survey company in June 2016 and re-contacted for four times. The majority of the respondents (59.5%) were male, on average 44.98 years old (SD = 11.13). Atypical employment was operationalized through contract type (whether someone was working on a zero-hour contract, or worked as an agency worker or not, and this concerned 34 people) as well as whether the person reported that they were working involuntarily part-time or below their skills and expertise. Occupational Identity, the Identification with the Working Population and Mental Health were measured with standard instruments.

Findings: Results of structural equation modelling showed that atypical employment, especially working involuntarily part-time and below ones’ skills was related to a lowered sense of occupational identity and identification with the working population over time, even when controlling for previous identity and identification. This effect was stable between all time points. Identification with the working population was also related to health over time, but the effect varied between time points.

Discussion and Conclusion: This study is the first to provide empirical quantitative evidence for the assumption that atypical employment undermines a person’s understanding of themselves. A weaker identity was related to lowered mental health, outlining the practical relevance of this construct. Knowing less well who one is and where one belongs professionally seems to affect people’s health. The theoretical contribution of the study is that it provides a new way of thinking about atypical job situations – by demonstrating their effect on identity. This study hence contributes to the very scarce knowledge that we have on the psychological effects of atypical work.

S35: Dealing with Job Insecurity: Does a Resourceful Work Environment Make a Difference?
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Job insecurity – a perceived threat of involuntary job loss – has been affiliated to the list of the most severe work stressors. Despite its well-established severity, disproportionately less is known about how we can reduce this problematic phenomenon and alleviate its negative consequences. In response, this study probes: (1) work environmental antecedents of job insecurity; (2) work environmental moderators of the effects of job insecurity on employees’ wellbeing and (3) mediators of main and moderating effects of work environmental variables. Uniting the Conservation of Resources Theory and psychological climate model, we propose that a resourceful work environment (i.e., high levels of job challenge, role harmony, leader support and co-workers’ cooperation) will reduce job insecurity due to its positive effects on occupational self-efficacy and/or alleviate negative outcomes of job insecurity on employees’ wellbeing due to its positive effects on perceived control. Data were collected among a large sample of Croatian white-collar employees working in the private sector. Participants completed on-line questionnaire three times spaced approximately six months apart (N1=1867; N2=1977; N3=1852). The hypothesised mediation and mediated moderation models were tested longitudinally via structural equation modelling. The results of the cross-lagged panel analyses did not provide support for the main and moderating effects of psychological climate dimensions. In contrast, we found reversed negative cross-lagged effect of job insecurity on employees’ perceptions of the work environment. In particular, job insecurity predicted decrease in cooperation among co-workers after one year. Accordingly, the results of the present study do not shed a light on the means to encounter job insecurity. However, they do reveal another relevant, yet understudied outcome of this work stressor.
S36: Job Insecurity in South Africa’s Higher Education Sector: Towards a Deeper Understanding
Lara C. Roll¹, Sebastiaan Rothmann¹, Hans De Witte²,¹
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Job insecurity was identified as one of the major reasons for South Africans to emigrate, causing a severe brain drain from the country. South Africa (SA) is currently facing subdued economic growth combined with high unemployment rates. The higher education sector (HES) is particularly affected, both in terms of research funding cuts and significant changes to the university budget following the so-called “Fees Must Fall” student protests in 2015/2016. The government has granted students’ demand for free education for lower-income students, which until today creates a lot of uncertainty regarding how universities will be compensated for the significant income loss. Therefore, we focused our research on SA and in particular on university staff. The goal of our study was to a) examine the prevalence and the severity of job insecurity in the HES, b) get a deeper understanding of the perceived causes for job insecurity, c) identify how job insecurity affects university staff, d) obtain first-hand insights on how staff members cope with job insecurity and e) gather recommendations on what university management can do to support their staff members.

We interviewed a total of 39 academic and support staff members from a traditional university and a university of technology, both government-funded. The study was advertised via email until data saturation was achieved. Regarding academic staff, we ensured to interview employees from various job levels, ranging from junior lecturer to full professor. For support staff, we included at least one member from each of 14 previously identified job families, e.g. administration, finance, technical services and marketing. The average duration per interview was 45 minutes. All interviews were conducted in English, as it is the language of instruction at both participating institutions. Each interview was audiotaped and subsequently transcribed. We conducted a content analysis using Atlas.ti software to identify broad themes in the data and develop a coding structure using an iterative process.

Results showed that most participants perceived job insecurity as a serious issue facing the HES. Causes included insecurity regarding the political developments following the “Fees Must Fall” movement, Black Economic Empowerment efforts, lack of organizational justice, and the overall economic situation of the country. Staff members linked job insecurity to their individual health issues and spillover into the family, as well as reduced work engagement and performance. An insightful array of suggestions for how employees could potentially cope with job insecurity in addition to ways for university management to support their employees was collected. Coping recommendations included enhancement of employability, ensuring a financial buffer and finding meaning in life outside of the university position, among others. Management support would be highly appreciated in terms of, for example, authentic appreciation of ones’ work, fairness in restructuring procedures and enhanced communication. Hence, findings from this study are highly relevant and beneficial for both employees and management.

S37: The Restorative Effect of Work after Unemployment: Examining Subjective Wellbeing Recovery through Re-employment
Ying Zhou¹, Steve A. Woods¹, Min Zou², Chia-Huei Wu³
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Does re-employment after a period of unemployment restore psychological wellbeing and repair the deleterious wellbeing effects of being unemployed? Research shows that unemployment leads to a significant decline in subjective wellbeing due to the loss of both pecuniary and non-pecuniary benefits associated with paid work (e.g. Clark, Diener, Georgellis, & Lucas, 2008).
Longitudinal studies that show that, unlike many other major life events such as marriage and divorce, individuals fail to adapt to unemployment even after remaining unemployed for many years. Moreover, data also suggest that the deleterious impact of unemployment cannot be reversed through re-employment (Clark, Georgellis, & Sanfey. 2001. Taken together, these studies suggest that a spell of unemployment can cause permanent damage to subjective wellbeing.

However, previous research has looked only at parts of the unemployment cycle (e.g., unemployment entry or exit process) and a variety of theories have been used to explain the evolution of subjective wellbeing at each stage. We argue that the theory of latent functions of employment provides a more parsimonious perspective for understanding the impact of employment status changes on subjective wellbeing, and examine data that focus on the full unemployment-reemployment cycle.

Data, Participants, and Life Satisfaction Measure: The analysis is based on the British Household Panel Survey (BHPS). We analysed data that enabled us to measure life satisfaction trajectory before, during and after unemployment. The final analytical sample consists of 4221 observed unemployment spells (which include multiple spells of unemployment experienced by the same individual), of which 2241 (53%) were followed by transitions into employment and 1980 (47%) were followed by transitions into economic inactivity. The dependent variable is life satisfaction, measured using single question in each year: ‘How dissatisfied or satisfied are you with your life overall?’ Responses were made against a seven-point scale ranging from ‘completely satisfied’ to ‘completely dissatisfied’.

Analyses: Fixed effects models were used to estimate the impact of employment status changes on subjective wellbeing, enabling control of time-invariant individual characteristics which may affect both dependent and independent variables.

Results and Discussion: Our results showed that life satisfaction declines significantly in the year before job loss, followed by a further sharp decline in life satisfaction when unemployment hits, which is consistent with previous research that shows a large negative psychological impact of unemployment. During the post-unemployment stages, life satisfaction trajectories start to diverge between those who re-enter the labour force and those who transition into economic inactivity. Among the former, there is a sharp increase in life satisfaction when individuals exit unemployment, which then consistently stays at baseline level for those who remain employed for the following five years. Our analyses indicate a clear restorative impact of re-employment on wellbeing. The pattern of development of life satisfaction among those move into economic inactivity, however, is very different. These results suggest that unemployment does leave lasting scars on individuals’ subjective wellbeing if they eventually transition into economic inactivity, which is consistent with the prediction of latent functions theory.

Symposium: Complex Designs in Occupational Health: Challenges and Opportunities
Chair: Alfredo Rodríguez-Muñoz & Ana Sanz-Vergel
Universidad Complutense de Madrid, Madrid, Spain

Discussant: Arnold Bakker
Erasmus University Rotterdam, Rotterdam, Netherlands

In 2016, Spector and Pindek reflected on the future of research methods in Occupational Health Psychology and highlighted the need to make more frequent use of complex research designs in this area. During the last decade there has been a tendency to go beyond cross-sectional studies, and most journals in the area do not even accept this type of design. Thus, it seems researchers have to move forward and use other methodologies to answer more specific research questions. These methodologies range from longitudinal studies with different time lags
to diary studies analysing weekly, daily, or hourly fluctuations of different phenomena. Intervention studies are also increasing over the last years. We agree with Spector and Pindek that these new methods are opening a door, but at the same we recognise that these complex designs bring several associated “challenges”.

In this symposium, we present the latest research using a variety of complex designs and reflect with the presenters on the main difficulties they went through while conducting the study. In the first study, Hetland and colleagues, in a diary study of 30 days, found evidence for the moderating effect of daily recovery experiences in the link between job demands, exhaustion and work engagement. The second contribution by Rodríguez-Muñoz and Fuencasta, using an experimental design, shows that abusive supervision behaviors were related to both objective performance and hear rate. In the third contribution, Hakanen explores the longitudinal relations between job crafting, job demands, and wellbeing. Finally, the diary study by Antino and Bliese shows that an expressive writing intervention (expressing one’s work experience through writing) during the weekend reduced the next week levels of stress and incivility behaviors. This set of presentations is a clear example of how we are advancing and leaving cross-sectional designs behind.

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Purpose: Drawing on Conservation of Resources (COR) theory and the effort-recovery model, the aim of the present quantitative diary study is to investigate the possible moderating role of daily recovery experiences (relaxation and psychological detachment) in the relationships between daily work pressure and (a) exhaustion, and (b) work engagement, in an operational work-setting. The present study is to our knowledge the first study to examine the possible moderating effects of daily recovery experiences in the link between job demands, exhaustion and work engagement applying a quantitative diary study in a high demanding operational context.

Design/Methodology: The present study applies data from a quantitative diary study among naval cadets (N = 78) during a 30-day long voyage on a sailing-ship from Northern Europe to North America. We requested the cadets to fill out the questionnaire at 5 PM on each day. The sample consisted of 70 male participants (89.7%) and 8 female participants (10.3%). The mean age of the participants was 22.9 years (SD = 2.2). We used daily diaries to measure our study variables. In order to capture the multilevel structure of the data we applied multilevel analyses by the use of MLwiN 2.20. In all models the outcome variables were controlled for their previous day level.

Results: The results from the multilevel analysis revealed positive relationships between daily work pressure and both day-to-day levels of exhaustion (B = .180, p < .001), and work engagement (B = .146, p < .001). Moreover, in support of the hypothesised moderating effects of recovery in these relationships, the results showed significant interactions between daily work pressure and relaxation both in the prediction of day-to-day persisting levels of exhaustion and work engagement. Moreover, visual examination of these effects showed that work pressure had a stronger positive relationship with day-to-day persisting levels of exhaustion among cadets reporting low (vs. high) relaxation between shifts. In contrast, work pressure had a stronger positive relationship with day-to-day persistent levels of work engagement for cadets reporting high (vs. low) relaxation between shifts. The results did not support the existence of similar moderating effects of psychological detachment.
Conclusions: The finding of a positive relationship between daily work pressure and both levels of exhaustion and work engagement clearly indicates that work pressure cannot exclusively be classified either as a hindrance or as a challenge job demand, and that the perception and outcome of work pressure may be dependent on situational characteristics (Lepine, Podsakoff, Lepine, 2005). Moreover, the findings demonstrate that intra-individual variation in relaxation indeed is such a situational factor influencing the perceptions and outcomes of work pressure, on a day-to-day basis. We conducted our study among a rather specific sample, which may limit the external validity of the findings.

S39: Abusive Supervision and Heart Rate: An Experimental Design
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Introduction: Tepper (2000, p. 178) refers to abusive supervision as “subordinates' perceptions of the extent to which their supervisors engage in the sustained display of hostile verbal and nonverbal behaviors, excluding physical contact”. It has been found that supervisory negative social interactions are related to strain indicators, such as depression or anxiety. However, there are very few studies that have examine the influence of supervisors on their subordinates' physiological outcomes. Similarly, few studies have been conducted with an experimental design in the field of abusive supervision. In the current study we examined the multilevel effect of negative supervisory behaviors on both heart rate variability and (team) objective performance.

Design/Methodology: The sample of the study was composed by 193 volunteer students (n=193). The 94.8% were Psychology students, 75.2% were female, 55.7% were employed, 72.9% reported they had previous working experience in teams and 15.7% were not team coordinators. They worked in 56 teams that included 3 or 4 members. We collected data in an experimental research design, where participants were randomly assigned to one of the four conditions in each team of a 2 (Difficulty of the task) x 2 (Abusive supervision behaviors) factorial design.

Results: Results showed that abusive supervision behaviors were negatively related to group performance. We also found that these undermining behaviors were positively associated to (individual) heart rate variability.

Conclusions: We found that abusive supervision had a negative effect on both team level outcomes and individual level health indicators. Our results are in line to previous data where face-to-face communications with supervisors were associated with higher systolic and diastolic blood pressure compared with resting baselines (Brondolo et al., 1999). As Ganster and Rosen's (2013) allostatic model of the stress process reminds us, stressors such as abusive supervision can impact individuals' immune, cardiovascular, and metabolic systems.

S40: Longitudinal Relationships Between Job Crafting Behaviours, Job Demands and Four Types of Employee Wellbeing – Causal, Reversed or Reciprocal Effects?
Jari Hakanen
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Introduction: Job crafting has become a widely studied phenomenon during this decade. Research has identified the possible antecedents of job crafting as well as its consequences. Job crafting is believed to occur particularly in resourceful working conditions (e.g. autonomy, skill variety, positive leadership) and among employees with personal resources (e.g. self-
efficacy, proactive personality). However, less is known about the role of various job demands in driving or hindering job crafting. In addition, some previous studies suggest that employee wellbeing, for example, work engagement may not only be an outcome of job crafting: it may also impact it. Thus far, job crafting research has rarely used rigorous longitudinal full panel designs. Therefore, the antecedents of job crafting could also be consequences, and vice versa. Investigating such reversed or reciprocal relationships could be important for further developing job crafting theory as well as for informing interventions and practical measures to encourage proactive behaviours in organisations.

**Aims:** The first aim of this study was to examine how job crafting behaviours are related to four types of job demands: challenge demands, hindrance demands, workload, and underload over time. Its second aim was to investigate the longitudinal associations between job crafting behaviours and four types of employee wellbeing: work engagement, burnout, job boredom, and job satisfaction.

**Method:** The two-wave 18-month follow-up study was conducted among municipal sector workers (e.g. employees from health and social care, education, youth work, technical services; N = 2453; response rate 57.4%) in 34 municipalities across Finland.

**Results:** The best fitting model for testing the longitudinal relationships between four types of job demands and four types of job crafting was reciprocal, indicating that 1) challenging demands at work predicted more job crafting by increasing structural resources and by increasing challenging demands, and tentatively also by increasing social resources; 2) Hindering demands at work positively predicted job crafting by increasing structural demands and by decreasing hindering demands; 3) Workload negatively predicted job crafting by increasing challenging demands; and 4) Work underload positively predicted job crafting by increasing structural resources. In addition, increasing structural resources positively influenced challenging demands and tentatively also hindering demands.

The second set of models tested the longitudinal relationships between four types of job demands and four types of employee wellbeing. The best fitting model showed that wellbeing had reversed effects on job crafting: 1) Work engagement negatively predicted job crafting by reducing hindering demands and positively predicted all other types of job crafting; job satisfaction negatively predicted increasing structural resources and positively predicted decreasing hindering demands; and 3) burnout tentatively predicted less job crafting by increasing both structural and challenging demands.

**Conclusions:** This study suggests that the different types of job demands impact (either boost or reduce) job crafting behaviours differently, and that to a certain degree, job crafting may also influence job demands over time. In addition, although job crafting is supposed to increase wellbeing, employee wellbeing – particularly work engagement – should also be considered an important antecedent of proactive behaviours.

**S41: Expressive Writing Intervention: A Longitudinal Study**

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**Purpose:** In this study we examine the effect expressive writing interventions (expressing one’s experience through writing) on workplace related outcomes (like stress, emotional exhaustion, incivility, counterproductive behavior) as well as family related outcomes (work family balance, work family conflict).
**Design/Methodology:** We collected (data collection is not completed yet) data on diary base for two working weeks. Specifically, data were collected during 5 working days at the end of the working day; during the in-between weekend participants were randomly assigned to two conditions in which they wrote about a) their emotions or b) their next week schedule, and in the following week we repeated the measurement of the former one.

**Results:** We will present results employing multilevel analysis, more specifically applying discontinuous growth models. Preliminary results on a partial sample show a general recovery tendency during the weekend, but no significant impact of the intervention.

**Conclusion:** Our findings pretend to extend previous literature on the effects of expressive writing intervention in both the workplace as well as the family domain. One of the limitations is that data collection is not completed. The second limitation is that this study does only include self-report information for all the dependent variables.

**Symposium: Social Interactions at the Workplace**  
Chair: Petra L. Klumb & Regina Jensen  
*University of Fribourg, Fribourg, Switzerland*

Social interactions are an integral part of work life that shapes employees’ experiences. Therefore, it is of interest to occupational health psychologists to attain knowledge on positive and negative aspects of interactions as well as their antecedents and consequences. This symposium assembles four contributions with a range of different conceptual and methodological approaches to the phenomenon. The meta-analysis of Christin Gerhardt and colleagues is an attempt systematise the vast range of constructs that exists in the field of social stress by defining communalities and differences of these constructs. Laurenz Meier's longitudinal study with four measurement occasions models the reciprocal association between social conflicts and depressed mood. The well-established construct of social support is investigated from the neglected provider perspective in Anita Keller’s diary study. Based on self-determination theory, she examined the relationship between the additional social burden emerging through support provision and autonomy, competence as well as relatedness. Regina Jensen’s diary study also looked at positive workplace interactions and their relationship to positive mood and parenting behavior, in the evening.

**S42: A Bottom-up Perspective on Social Stress at Work - A Meta-analytic Approach.**  
Christin Gerhardt¹², Maria U. Kottwitz¹, Sabine Sauter¹, Alexandra Walker¹, Nathal de Wijn³, Bernd Kersten¹, Simone Grebner¹, Norbert K. Semmer¹, Achim Elfering¹²  
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**Objectives:** Within the last decades a large body of theoretical as well as empirical research on social stressors at work arose. While comparing those different constructs and focusing on the differentiation some issues emerged. Besides conceptual (Raver, 2013) as well as empirical overlap (Herschcovis, 2011) the validity of measurements was questioned respective failing to include the construct’s distinctive factors, which lead to similar findings for most of those concepts (Tepper & Henle, 2011). Although some researchers are already targeting the differences in the constructs (i.e., Baillien, Escartin, Gross, & Zapf; 2017) we are still lacking a sufficient taxonomy of social stressors ranking them in terms of their psychologically relevant features. Derived from the literature (Baillien, Escartin, Gross, & Zapf, 2017; Friborg, Hansen, Aldrich, Folk, Kjær, Nielsen, Rugulies, & Madsen, 2017; Herschcovis, 2011; Raver, 2013) we identified the following
dimensions as important to discriminate the different constructs: importance for wellbeing, perceived intent, frequency, manifestation, offense of the self, and perpetrator power/position. Our aim was to create a taxonomy of social stressors at work based on subjective ratings of the measurement instruments items used to measure those constructs.

Methods: We used a large set of research published in peer-reviewed journals. Effect sizes were coded for all relationships between social stressors at work and work-related behavior. Ratings of measurements were taken for each item and averaged for the whole measurement instrument. Ratings were conducted by master students in psychology as well as experts in the field. We applied a meta-analytic procedure using CMA (Borenstein, Hedges, Higgins, & Rothstein, 2014) and taking distinctive features into account as moderators.

Results: Preliminary analysis showed proposed moderators to be statistically relevant and meaningful. Importance of wellbeing and perceived intent seem to show the strongest moderation effects.

Conclusion: A bottom-up taxonomy of social stressors that does not rely on the definitions but the assessment adds knowledge to the taxonomy debate. Since most of the data about social stress and its outcomes are measured by self-reports subjective ratings on item features of those instruments include taxonomic information beyond construct definitions.

S43: Examining the Effect of Poor Psychological Wellbeing on Interpersonal Conflict at Work: A Multi-Source Longitudinal Study
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An impressive amount of research shows that work stressors are associated with poor psychological wellbeing. Previous research hypothesised causal paths from work stressors to wellbeing, with exposure to stressors having debilitating effects on wellbeing. However, a growing literature hints to a reversed chain of effects, with wellbeing predicting the amount and severity of stressors that individuals are facing. To explain the reversed effect, two broad mechanisms have been postulated: a) Wellbeing changes how individuals perceive their working conditions, or b) poor wellbeing actually leads to an increase in stressors that can be observed by third parties (e.g., coworkers). Empirical tests that disentangle these mechanisms, however, are lacking. We, therefore, conducted a four-wave longitudinal study of 542 triads (focal employee, coworker, supervisor) to examine reciprocal relationships between self- and other-reported interpersonal conflict with supervisor and wellbeing (depressive symptoms and emotional exhaustion).

As predicted, self-reported conflict predicted an increase in emotional exhaustion (but not depressive symptoms); vice versa, both emotional exhaustion and depressive symptoms predicted an increase in self-reported conflict. In contrast, coworker- and supervisor-reported conflict was unrelated to emotional exhaustion and depressive symptoms of employees over time (i.e., neither an effect of stressor on wellbeing, nor a reversed effect of wellbeing on conflict).

In sum, our findings indicate that there exists a reciprocal relationship between self-reported conflict and poor psychological wellbeing, pointing to a vicious circle. Clarifying this process, our findings suggest that poor wellbeing lowers people’s thresholds to perceive conflict; which, however, does not become noticeable to third parties.
S44: When Helping Others Hurts: Differential Effects on Need Fulfillment and Meaningfulness
Anita Keller\textsuperscript{1}, Sinhui Chong\textsuperscript{2}, Courtney Bryant\textsuperscript{2}, Chu-Hsiang Chang\textsuperscript{2}
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Positive social relationships at work have been shown to play a crucial role for employees’ positive development and wellbeing. While the effects of availability and use of social support for recipients of support have received considerable attention in empirical research, the perspective of the social support provider has been overlooked. The literature suggests that providing support to coworkers gives employees meaning by increasing their sense of importance and worth. However, employees may also be confronted with inappropriate or illegitimate support requests from coworkers. These requests may be perceived as social burden, a recently established concept that captures the additional work or emotional load associated with providing support. Social burden includes requests for instrumental and emotional support, for example, to help the support seekers with work tasks or to be present for their emotional catharsis. Based on self-determination theory, we hypothesise social burden to be differentially associated with satisfaction of needs. Social support requests interrupt the provider’s plans and interfere with their schedule for the day, which in turn may lower satisfaction of the need for autonomy. However, social support requests signal that the support provider is recognised as capable to offer valuable support, thus we expect it to positively relate to the need for competence. Lastly, we expect a positive relationship with need for relatedness because, despite being imposing, the request also involves interaction and cooperation. Satisfaction of these needs would in turn positively predict perceived work meaningfulness. Seventy-six employees completed two surveys a day for ten working days. Daily social burden and work-related needs were measured after lunch and daily work meaningfulness in the evening. Multilevel modeling revealed significant associations between social burden and satisfaction of the needs for autonomy and competence in the expected direction. In contrast to our prediction, we observed a negative relation between social burden and need for relatedness. Meaningfulness was positively predicted by all three needs. Autonomy and competence were significantly indirectly related to meaningfulness while relatedness was not. We did not observe a significant direct effect between social burden and meaningfulness. In sum, this study revealed concurrent positive and negative relationships between providing social support and daily wellbeing in the form of meaningfulness. This study is one of the very few that focuses on the provision of social support, and therefore advances the line of research on social support in general.

S45: Do Positive Interactions at Work Help to be a Better Parent? Results from a Diary Study.
Regina Jensen, Dominik Schoebi, Petra L. Klumb
University of Fribourg, Fribourg, Switzerland

Nearly every job requires interacting with co-workers, supervisors or clients. While researchers mainly focus on stressing aspects of social interactions at work, positive interactions can also have beneficial effects: they can evoke positive emotions and restore depleted resources. However, little is known how positive workplace interactions influence the home life. Based on the work-home resources model, we tested whether positive workplace interactions are related to increased positive mood after returning home and thereby influence the parenting behaviour in the evening.

To address this question, we analyzed data from a daily diary study with 198 participants. Over 10 consecutive work days, the participants completed four questionnaires per day. Our findings show an enriching effect of positive workplace interactions on the home domain: They predicted
positive mood after returning home, which, in turn, was related to more positive and less negative parenting behaviour. Positive mood mediated the effect of positive workplace interactions on parenting behaviour.

This study bridges the research lines on positive workplace interactions and work-home interface. Furthermore, it illustrates the importance of positive mood as transferring mechanism between the work and the home domain and it points out the beneficial effect of positive workplace interactions for individuals' wellbeing as well as family members. The results stress (a) that work and home life can enrich each other in everyday life and (b) the need to create climates at work that foster positive workplace interactions.

**Symposium: Looking for a Job despite Feeling Blue – Job Search and Mental Health among Unemployed People**

Chair: Karsten Paul & Andrea Zechmann  
*Friedrich-Alexander University Erlangen-Nürnberg, Nuremberg, Germany*

Although unemployment rates differ between countries and fluctuate within countries over time, unemployment itself is a remarkably persistent phenomenon that appears to be an integral characteristic of the modern capitalist economic system. Outside of times of war, full employment with unemployment rates below 3% has rarely been achieved in western countries for more than a few years. Thus, a large percentage of citizens will experience joblessness at some point during their career. Psychological research on unemployment has focused on two topics that are particularly relevant for jobless people: (1) job search and successful reemployment; (2) mental health among unemployed people. The Symposium contributes to these two topics in equal manner.

The first presentation pertains to the question of which aspects of an unemployed individual’s social network are helpful or not helpful when looking for a new job. The study uses a longitudinal sample with more than 300 participants from Bosnia and Herzegovina in order to answer this question. The second presentation is also concerned with questions of job search. It analyses whether perceived age discrimination has a detrimental effect on job search among older unemployed people and whether this effect is mediated by job search self-efficacy, reemployment expectations and perceived control over reemployment. The study uses a sample of 176 Portuguese unemployed people who are over 40 years old in order to answer these questions.

The third presentation shifts the focus to questions of mental health and wellbeing among unemployed people and sheds light on an important, yet neglected, aspect of the most frequently cited theory on this issue, i.e., Jahoda’s latent deprivation theory. Specifically, the study tests whether the latent functions of employment (time structure, social contact, collective purpose, status, and activity) as well as the recently proposed latent function of competence mediate the negative effects of unemployment on mental health even when these latent functions are perceived as not personally important by the respective unemployed individuals. A German longitudinal sample with > 1000 participants and six waves is used to scrutinize this question. Finally, the fourth contribution presents findings from a meta-analysis that integrates the available empirical evidence on the latent deprivation model, providing robust and generalisable estimates of the different paths in the model for the first time.

In summary, the Symposium offers valuable insights pertaining to the most important topics of psychological unemployment research, i.e., unemployed people’s job search behaviour and mental health. With a mix of up-to-date methods, from meta-analysis to multilevel analysis of longitudinal data, and with samples from three different European countries, the symposium will provide diverse yet highly interesting research of very high
The Role of Personal Social Network Composition and Structure in Predicting Job Search Outcomes
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Aim: Unemployment rates among young people tend to be higher than for other segments of the population. This is due to a lack of experience which makes it more difficult for them to find jobs, and they can't gain the practical experience they need unless they can find someone willing to hire them. For these reasons, successful transition from college to work depends on individual factors that define someone’s employability beyond the necessary training or skills to do the jobs. Recent studies of human social networks have revealed individual differences in their composition and structure. Considerable research demonstrated that structural aspects of social relationships, as reflected in the size of ego-centric social networks, are influenced by demographic variables and life experiences. However, our knowledge on the role of various personal social network variables in predicting career success is still fairly scarce. So, the current study investigates a role of personal social network composition and structure in job search success during a one-year period of transition from college to work. Personal social network was conceptualised as an indicator of individual social capital, i.e., available resource that the person can realise through social relations, which potentially play a significant role in predicting individual differences in job search efficacy.

Methodology: Graduates (N=303) from different public universities in Bosnia and Herzegovina were surveyed immediately after receiving diploma and followed up six months and one year after graduating when 138 (45%) of them were employed and 165 (65%) still unemployed. Various socio-demographic characteristics of the graduates as well as self-reported personal network characteristics – composition and structure, were in focus of the first wave of data collection. Job search intensity and employment status were measured in the follow up.

Results: Logistic regressions revealed that socio-demographic characteristics of the graduates as well as their job search intensity were no significant predictors of employment status six months or one year after entering the labor market. However, personal social network variables were significant predictors: Personal network composition, i.e., social status of acquaintances and strength of ties were significant predictors of job search success. Contrary to our expectations, size of personal network, as an indicator of network structure, was no significant predictor of employment status in the period of one year after graduation.

Limitations: The study used self-report measures of personal social network composition and structure and was conducted on a convenience sample, limiting the generalisability of findings. Furthermore, job search success was measured as a binary variable.

Implications: As personal social network composition predicts successful transition from college to work, the process of gaining and losing social capital may be crucial for the explanation of differences in career success among people of comparable human capital characteristics. Findings of this study are potentially relevant for our understanding of the phenomena appearing on a societal level, such as the chronically high unemployment rate in Bosnia and Herzegovina.

Originality/Value: The study integrates findings on various dimensions of personal social network and tests their incremental validity in predicting job search success.
While in several countries the need of longer working lives has been acknowledged, due to accelerated demographic ageing, many older workers face particular challenges both in keeping their employment and becoming reemployed after redundancy. Due to the high prevalence of negative age-related stereotypes, a central factor that may hinder the employment prospects of older adults is the discrimination on the grounds of age, which may occur as early as age 40. In the absence of job opportunities, a considerable number of older unemployed people eventually withdraw from the labour market earlier than they would like. Job search is currently an integral part of working life, including in mid- and late-career, and there is extensive research evidence for the positive impact job search has on the likelihood of reemployment. While it is plausible that perceived age discrimination plays a significant role in older unemployed people’s job search behaviour, to date this has rarely been investigated.

In this line, building partially on propositions from the social cognitive model of career self-management (applied to job search behaviour) proposed by Lent and Brown, as well as prior research, the present study aims to contribute to a better comprehension of factors and processes that are associated with job search among older unemployed people. The study investigates a parallel mediational model which proposes a negative relationship between perceived age discrimination and three job search indicators (job search intensity, job search effort and job search intentions) that is mediated by job search self-efficacy, reemployment expectations and perceived control over reemployment.

The study has a cross-sectional design and the sample comprises 176 Portuguese unemployed people (aged 40-64 years). A MANOVA examined differences in the model’s predictors and outcomes in terms of age (40-54; 55+), gender, educational level (4-10; 11+ years) and length of unemployment (0-11; 12+ months). To investigate the proposed model, ordinary least squares path analyses were calculated using the SPSS macro PROCESS.

Results suggest that women, those with lower education levels and those aged 55+ are at higher risk of becoming discouraged in their job search. In times when demographic ageing has led to tightened conditions qualifying for early retirement and increased statutory retirement ages, special attention should be paid to these groups to prevent social exclusion. Job search self-efficacy and reemployment expectations were positively related to the three job search indicators and perceived age discrimination was negatively related to reemployment expectations and perceived control over reemployment. The study also found an indirect negative relationship between perceived age discrimination and job search via lower reemployment expectations.

Whilst the cross-sectional design of the study restricts firm conclusions regarding causality, the mediational model is theoretically well sustained. The findings expose the pervasive effects of age discrimination, which besides limiting the employment opportunities for older workers, has also indirect implications by decreasing job search activity through lowered levels of reemployment expectations, what may lead to premature and involuntary labour market exits. These findings may be useful for policy-makers and practitioners working with unemployed people.
Psychological research on unemployment has consistently shown that unemployment leads to psychological distress (e.g., Paul & Moser, 2009). Still, the reasons why unemployment undermines mental health have received far less attention. The most renowned model in psychological unemployment research, the deprivation model (Jahoda, 1981), has suggested that with employment, people not only lose the possibility of earning a living, but also the possibility of satiating important psychological needs which are necessary for maintaining good mental health. Only recently, an extended version of the model (Zechmann & Paul, 2018), including competence as a new latent function, has been presented. The current study aims at scrutinising the preference irrelevance assumption in the context of Jahoda’s latent deprivation model. Specifically, it tested whether access to the latent functions of time structure, social contact, status, activity, and collective purpose, as well as the newly proposed latent function of competence, pertain to mental health irrespective of whether people value the experience of the respective latent function or not.

Analyses were based on a six-wave longitudinal study with 1021 unemployed respondents of whom many found reemployment throughout the course of the study (at T6, 231 of the 468 remaining respondents were reemployed). On average people were 38 years old and 51% were female. Distress was measured with the GHQ-12 (α =0.91-0.92) and latent functions were assessed with items mainly from established scales (α = 0.76-0.90). Respondents also rated how important they personally considered fulfillment of each latent function in their lives. Multilevel models showed that people profited from access to each of the latent functions even when they explicitly considered the respective function as unimportant for themselves. For three latent functions, a significant moderator effect was identified: People who considered social contact, activity, or competence unimportant profited to a lesser extent than did people who considered them to be important. Nevertheless, even when perceived as subjectively unimportant, the experience of these latent functions still had positive effects on mental health. Finally, increased access to each latent function mediated the positive effect of reemployment on mental health irrespective of an individual’s preferences for a certain latent function. Thus, evidence for the robustness of the whole model, even under conditions of unimportance, was found.

While this study used single-item measures to assess importance, it is the first to scrutinise the psychological needs nature of the latent functions. So far, this study substantiates the importance of satisfaction of the latent functions of employment for mental health. Therefore, the assumption that the latent functions represent fundamental psychological needs, as conceptualised in Jahoda’s deprivation model and in accordance with recently proposed criteria for psychological needs (Sheldon, 2011), is endorsed. Interventions for unemployed people should thus ensure access to latent functions in order to stabilise mental health and might be well advised to take into account individual preferences for some of the latent functions.
S49: Marie Jahoda’s Latent Deprivation Model – Meta-Analytic Findings
Karsten Paul¹, Andrea Zechmann¹, Bernad Batinic², Klaus Moser¹
¹Friedrich-Alexander University Erlangen-Nürnberg, Germany. ²University of Linz, Linz, Austria

According to Marie Jahoda’s (1981) latent deprivation model, unemployed people suffer because they experience a lack of five so-called latent functions of employment (time structure, social contact, collective purpose, status, and activity). These latent functions are unintended side-effects of employment and employment is the only source that provides them in sufficient frequency and intensity in modern societies. Since the latent functions correspond with deep-seated human needs, they are important determinants of mental health. The manifest function of employment, i.e., earning a living, is expected to be of lesser importance for mental health in Jahoda’s model, because modern welfare states should prevent severe degrees of poverty among people who do not have jobs.

The latent deprivation model has instigated intensive research with findings that, however, are not always in full agreement with each other. In order to allow for robust and generalisable estimates for the different paths in the model, a meta-analysis is necessary. The present meta-analysis was done using random-effects-models. The data base varies between \( k = 12 \) independent samples with \( n = 745 \) participants and \( k = 65 \) with \( n = 20.712 \) for the individual meta-analytic effect sizes.

Results show that – as predicted by Jahoda – employed people report a considerably better access to the latent functions than unemployed people do. The largest difference was found for status (\( d = 0.73 \)), followed by time structure (\( d = 0.68 \)), activity (\( d = 0.57 \)), collective purpose (\( d = 0.54 \)), and social contact (\( d = 0.39 \)). Unexpectedly, however, the effect size for participants’ current financial situation – assessing the manifest function of employment – was the largest for all comparisons between unemployed and employed people (\( d = 0.95 \)). Furthermore, the association between the latent functions and mental health was of medium size for financial situation (\( r = 0.32 \)), collective purpose (\( r = 0.32 \)), and status (\( r = 0.30 \)). For time structure (\( r = 0.27 \)), social contact (\( r = 0.22 \)), and activity (\( r = 0.22 \)), weak effect sizes were identified.

With one exception, these results are in good agreement with Jahoda’s theoretical assumptions and clearly support her model. Unexpected results emerged for the manifest function (i.e., current financial situation), which appears to be more strongly affected by job loss and more closely related to distress than the latent deprivation model would predict. Thus, the role that money plays for the mental health of unemployed people should not be underestimated, even in modern welfare states. The findings are limited by an almost complete lack of longitudinal data. Therefore, the causal mechanisms implied in the latent deprivation model could not be tested within this meta-analysis. Nevertheless, it contributes to the research field by providing robust and generalisable estimates of effect sizes for different paths in the model for the first time.

Symposium: The Whole is Greater than the Sum of its Parts: Developing a Framework for Psychologically Healthy Workers
Chair: Arla Day
Saint Mary’s University, Halifax, Canada

Discussant: Kevin Kelloway
Saint Mary’s University, Halifax, Canada

One of key issues facing organisations is the health and performance of their workers. Although we know about the negative consequences of work, and it has long been argued that we must address the stress epidemic at work (e.g., Sauter et al., 1990), there is still a lack of validated workplace interventions addressing workplace health. Moreover, despite the fact that the concept
that the "people make the place" is not new (see Schneider, 1987), we frequently fail to take a global perspective, or to leverage the positive aspects of workplaces, to improve people's functioning at work.

Therefore, in this symposium, we take a holistic perspective of workplace health. In line with our previous work (e.g., Day & Nielson, 2017), we argue for a paradigm shift to promote a holistic perspective of worker health that focuses on supporting individuals, strengthening groups, and developing leaders, as the foundational aspects of a healthy organisational culture. This symposium brings together experts in occupational health interventions to examine research in all components of this framework.

(1) In the first presentation, Day and colleagues examine the effectiveness of an individual-focused coaching program, ACTion, aimed at improving individual functioning, even when employees are faced with physical or psychological demands. ACTion is based on Acceptance and Commitment Therapy (a third wave" cognitive behavioral intervention that focuses on acknowledging thoughts and feelings and engaging in committed action consistent with values). ACT has been empirically supported for a number of different health and mental health conditions, and this study represents an extension of ACT into a phone-based coaching practice for employees. (2) In the second presentation, Leiter presents work on a group-based intervention designed to increase civility and improve social relationships at work. The analysis considers both its direct impact on social behaviour as well as its downstream implications for burnout.

(3) In the third presentation, Nielsen and colleagues compare individual and collective participation in organisational interventions and examine how participatory process may enhance the effects of collective participation on the intervention’s outcomes. (4) Finally, Hartling and colleagues study the ability of two coaching programs targeting leaders to help them develop their own skills and psychologically healthy workplaces in order to improve worker outcomes. This novel program incorporates the work on transformational leadership, psychologically healthy workplaces, and behaviour change to engage leaders to improve the health and functioning of their direct reports.

As discussant, Kelloway will draw upon these four papers to talk about the implications for occupational health interventions, the importance of leveraging the positive aspects of the workplace to foster health and functioning, and impact on future research directions.

S50: Supporting Individuals at Work: Putting training into ACTion
Arla Day¹, Meredith Ivany¹, Dayna Lee-Baggley²
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Background: Workers may struggle to remain engaged in the workplace in the face of chronic challenges that stem from health concerns (physical or psychological) and life demands (e.g., caregiver roles). Awareness and Commitment Training in Organisational Networks (ACTion) is a 10-week phone-based coaching program designed to improve individual wellbeing and functioning. It is based on Acceptance & Commitment Therapy, which is a technique designed to improve psychological flexibility and behavioural effectiveness by focusing on one’s personal values, committed action to these values, acceptance of emotions and thoughts, cognitive defusion, mindfulness, and developing the self as one’s context (Hayes et al., 2006).

In one of the few studies to examine the applications of ACT in an occupational context, Bond and Bunce (2000) compared workers in three conditions: ACT, workplace stressor reduction training, and control. Both intervention groups were better at reducing workplace stressors than the control group, but the ACT group had significantly higher general health scores than did either
the stressor reduction or control group. Flaxman and Bond (2010) utilised a similar methodology, comparing the effectiveness of ACT, stress inoculation training, and a control group. Both interventions were equally effective at reducing psychological distress. Additionally, a randomised, controlled trial found that ACT was effective at reducing stress and burnout in Swedish social workers with high stress levels at baseline (Brinkborg, Michanek, Hesser, & Berglund, 2011). Finally, a recent study of an ACT programme in Canadian healthcare workers found an increase in self-reported performance after the intervention when compared to baseline levels (Lee-Baggley, Day, & Helson, 2017). Given the promising initial research into ACT-based workplace interventions, the current project aims to explore the effectiveness of a phone-based ACT program in workers who face chronic challenges.

Methods: Using a wait-list control design, two groups of workers from various Canadian organisations participated in the 10-week ACTion program, and completed surveys at three times. Participants included 65 workers (98% women) who self-reported having a chronic physical or psychological condition or life demand. The mean age was 45.43 years (SD = 9.72 years), and 19% were shift workers.

Results: Of the sample, 29% had been on short-term disability, 8% had been on long-term disability, and 51% were currently seeking assistance for a physical health concern. Most participants (75.8%) had either dealt with a MH issue in the past or were currently dealing with one (or both), and 81.5% had either dealt with a PH issue in the past or were currently dealing with one (or both). Workers currently experiencing a mental health issue had higher levels of burnout, strain, and anxiety, whereas having a physical health issue did not impact on their levels of burnout, strain, or anxiety.

Discussion: Workers facing chronic health and life demands may face extra burdens at work. We examined how a phone-based coaching program helped these workers at work and at home. We report on the longitudinal influence of the ACTion training on worker wellbeing and discuss implications for individual workers and organisations wanting to support worker wellbeing.

S51: Actively Promoting Civility: Piloting a Group Level Intervention Study
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The quality of working relationships has become an issue of increasing importance in contemporary worksettings. Despite extensive research demonstrating the dire consequences of uncivil and abusive social encounters coupled with calls for action, descriptions of controlled research evaluating workgroup-based interventions are rare.

SCORE (Strengthening a Culture of Respect and Engagement) addresses workplace civility through five facilitated sessions. The process begins with increasing participants’ awareness of both the blatant and the subtle forms of social encounters. It proceeds to coaching participants in actions that increase the frequency of explicitly civil encounters. The next step in the process develops participants’ options for responding to incivility or disrespect directed at themselves or towards others. The fourth sessions concerns ways of working with others despite problems with trust and respect. The process concludes with reflections on the issues and establishing policies and procedures to assure sustaining gains made in the SCORE process.

This presentation reviews a pilot of SCORE with an Australian health district comprising hospitals and outpatient facilities in 2018. Data is not available at the time of this writing. The project schedule calls for an initial survey in February 2018 with sessions commencing in March. A brief pulse survey is scheduled for April and the concluding Time 2 survey will occur in May 2018. During this time, SCORE will occur in 2 organizational units with 3 other units serving as waiting list, no-treatment comparison groups.
The presentation will review the results of the surveys as well as interviews with SCORE facilitators and participants. These interviews will focus on interviewees' perceptions of the program with the aim of identifying their exposure to the distinct elements of the SCORE program. The intent of the interviews is to identify mechanisms within SCORE that facilitate change within the specific context of the participating units with reference to realist perspective on intervention research (Pawson & Manzano-Santaella, 2012).

The surveys include measures of workplace civility and incivility, job burnout, work engagement, trust and areas of worklife. Following on Leiter et al (2011). The presentation will contrast responses on these measures in an Australian healthcare setting with those from similar settings in Canadian healthcare facilities. The primary focus will be on changes in measures of civility and incivility. With only 2 intervention units, the data will provide only limited opportunities for quantitative analysis. The focus will instead emphasize ways in which this pilot informs further examination of change in workgroup cultures. The session will review plans for further research on SCORE, including the challenges and opportunities of intervention research on the quality of working relationships.

SS52: Is it me or us? The Effects of Individual and Collective Participation in a Cluster-Randomised Organisational Intervention

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Organisational interventions aim to improve employee health and wellbeing through changing the way work is organised, designed and managed (Nielsen, 2013). The participatory process is a key element of such interventions (Nielsen & Randall, 2012) whereby managers and employees jointly determine the process of implementation and the content of interventions (Abildgaard et al., in press), however, the form of such participation has been debated (Nielsen & Noblet, 2018). In the present study, we explored both individual and collective participation and tested whether collective participation has a stronger effect on the intervention's outcomes (burnout and work engagement) than individual's participation. We also tested the importance of being supported by an occupational health consultant. Understanding these factors has important implications for how we design and implement the intervention process.

Methods: The study was conducted in a national postal service. A cluster-randomised, control design was employed with a baseline and a follow-up 12 months later. The randomisation took place at the largest geographical area level. Intervention group 1 would go through the process themselves as they had previous experience with the process whereas intervention group 2 was supported by an internal occupational health consultant.

At Time 1, the questionnaire was completed by 135 out of 148 participants (90% response) in intervention group 1 (without the consultant supporting the intervention) and by 196 out of 215 participants (response rate 91%) in intervention group 2 (which had the support of the consultant). At Time 2 all participants were invited to complete the questionnaire regardless of whether they had completed the baseline questionnaire, 117 out of 140 (response rate 84%) participants responded to the questionnaire in intervention group 1 and 112 out of 137 (response rate 89%) completed the questionnaire in intervention group 2.

We included tailored measures of individual and collective participation and standardised measures of burnout (Kristensen et al., 2005) and work engagement (Schaufeli et al., 2006).
**Results:** We found that individual participation in the intervention process was positively related to increased work engagement, but not burnout. We also found that collective participation was positively related to increased work engagement. After the introduction of collective participation, the effect of individual-level participation was no longer significantly related to work engagement. Collective participation was positively related to reduced burnout. Finally, we found an interactive effect of the collective and the facilitation of the occupational health consultant, meaning that the facilitation of the consultant enhanced the impact of collective participation on increases in work engagement.

**Discussion:** Our main contributions are threefold. First, we offer a methodological development to capture how participants collectively participate in organisational interventions. Second, we found that this collective participation is even more powerful than individual participation in bringing about intended outcomes. Third, we found that having consultants facilitating the participatory process may enhance the effects of collective participation on the intervention’s outcomes.

**S53: Investing in Leaders to Foster Psychologically Healthy Workplaces**

Nikola Hartling, Arla Day, Samantha Penney
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Drawing on Conservation of Resources Theory (Hobfoll, 1998; 2001) and Job Demands Resource Model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001), leaders and healthy workplaces are important resources in promoting employee wellbeing. Transformational leadership has been found to increase experiences of optimism, happiness, and enthusiasm in followers (Bono, Foldes, Vinson, & Muros, 2007), and evidence for the positive associations between transformational leadership and wellbeing continues to accumulate (see Kuoppala, Lamminpää, Liira, & Vainio, 2008, and Kelloway, Turner, Barling, & Laughlin, 2012; Tepper, 2000).

However, we don’t fully understand the extent to which training may help to develop specific leader behaviours in supporting psychologically healthy workplaces, while acting as a resource for both leader and subordinate health. Moreover, less is known about the mechanisms within this training that may impact both leader and worker wellbeing. Therefore, we examine two leadership development programme studies – LEAD & Leading Healthy Workplaces (LHW) – to examine how leadership training may influence leaders’ behaviours and wellbeing, as well as the workplace and subordinate wellbeing.

**Methods:** Fifty-nine leaders (n=35 women; n=24 men) completed the 10-week phone and web-based LEAD coaching program. Subordinate data was collected for all leaders. One hundred and twelve leaders (n=78 women; n=32 men; n=2 prefer to self describe) completed the Leading Healthy Workplaces workshop, and 8 week phone and web-based coaching. To date, subordinate data was collected for 35 of these leaders.

**Results:** In general, subordinate health was associated with positive transformational leadership behaviours in the LEAD sample, but had less consistent effects when looking at leading healthy behaviour data. Overall, there were some positive changes in leadership in LEAD in leadership efficacy and transformational behaviours. However, these improvements also were associated with decreased leader wellbeing indices.
Transformational leadership was associated with leading healthy workplace behaviours (r’s ranged from .44 to .56, p<.05). Interestingly, engaging in positive behaviours that supported employees and a healthy workplace were associated with high efficacy in the leader, and lower levels of strain. Implications for leader health, and measurement issues regarding self and other ratings of leadership are discussed.

Discussion: It is important for organisations to focus on the wellbeing of their employees, but it is equally important to ensure the leaders are not paying for healthier subordinates with their own health. That is, leadership development must take the interests of both the leaders and the employees into consideration. In focusing on developing psychologically healthy workplaces, we need to support the development of leaders in a healthy manner, and we need to understand the mechanisms that can promote leader and subordinate health.

Symposium: Effects of a Mindfulness-based Intervention for Teachers: A Study on Teacher and Classroom Interactions Outcomes
Chair: Alexandra Marques-Pinto & Joana Sampaio de Carvaho
Universidade de Lisboa, Lisbon, Portugal

Recent studies have shown that an increasing number of young people at school experience emotional and mental health problems, which affect a wide range of outcomes, including risk behaviors and academic performance. In this scenario teachers are expected, in addition to their academic teaching role, to actively participate in the promotion of students’ mental health. Due to such difficult work demands there is a high-risk level of teachers’ stress and burnout which, in turn, can negatively interfere with the quality of classroom interaction and, consequently, with students’ engagement and learning.

According to literature, teachers with better social and emotional competencies (SEC) are more effective in stress management, have higher levels of wellbeing, and are more capable of managing the classroom, responding to the emotional needs of their students and engage them in the learning process. Within this scope, mindfulness-based interventions can be beneficial in promoting teachers’ SEC, and the existing studies on mindfulness-based programs for teachers have revealed promising results such as significant improvements in teachers’ self-efficacy and wellbeing and also in skills to manage the classroom effectively and to establish supportive relationships with students. Additionally, some studies of the neuronal circuits that accompany mindfulness practices point to changes in how the body and brain respond to stress. Despite these encouraging results, research in this domain is very recent and there are few methodologically robust studies on the efficacy of mindfulness-based interventions for teachers.

This symposium presents some preliminary results of a research project entitled Effects of a mindfulness-based intervention for teachers: A study on teacher and student outcomes (Bial Foundation Grant 114/16). This project was designed to evaluate the proximal and distal effects of a mindfulness-based SEC program specifically developed for elementary school teachers, across a variety of teachers, classroom climate and students outcomes. The program, Programa Atentamente, was primarily experiential in nature and included mindfulness practices, group reflection, role-playing and homework assignments (formal and informal mindfulness practices). From a methodological stance the project followed a randomised trial design, used a mixed data collection strategy, and included four data collection points: pretest, posttest, and two follow-ups. Participants were recruited through the school training centers and randomly assigned to an intervention group and a control group.
In this symposium, three presentations are carried out on the preliminary results of this project, collected at pre-test and post-test. First, Sofia Oliveira and colleagues present teachers’ self-report data on social and emotional competencies, burnout symptoms and wellbeing levels. Next, Maria Amorim and Ana Patrícia Pinheiro report on neurophysiological data regarding teachers’ attentional control. Finally, Carolina Gonçalves and colleagues present the observational ratings of teachers’ behavioral classroom interactions with students.

S54: Effects of a Mindfulness-based Intervention for Teachers on Teachers’ Social and Emotional Competencies, Burnout and Wellbeing
Sofia Oliveira, Joana Sampaio de Carvalho, Alexandra Marques-Pinto
Universidade de Lisboa, Lisbon, Portugal

Given their heavy work demands, teachers feel increasingly stressed and professional stress can affect their health and wellbeing. Indeed, over the last two decades, different studies in Portugal have shown a high-risk level of teachers’ stress and burnout. The literature in this domain has revealed that teachers with better social and emotional competencies (SEC) are more effective in stress management and have higher levels of wellbeing, but little effort has been made to develop specific interventions to boost teachers’ SEC. A promising approach for enhancing teachers’ SEC and wellbeing is through mindfulness-based contemplative practices. Nevertheless, studies on the efficacy of mindfulness-based interventions for teachers are scarce and lack methodological rigor.

This study aimed to evaluate the proximal and distal effects of Programa Atentamente, a mindfulness-based SEC promotion program developed for elementary school teachers, across a variety of teachers’ outcomes. It followed a randomised trial design and used self-report measures to collect data, before and after the intervention, on teachers from the intervention group (n=60) and the control group (n=60), namely regarding their social and emotional competencies, burnout symptoms and wellbeing levels.

Results revealed direct, positive, and significant effects of the intervention in the development of mindfulness competences, self-compassion and wellbeing. Results also showed that mindfulness mediated the relationship between the intervention and teachers wellbeing, whereas self-compassion mediated the relationship between the intervention and teachers burnout.

These findings contribute to further the knowledge on the role played by mindfulness-based interventions in cultivating teachers’ SEC and reducing their burnout symptoms. The demonstrated improvements at teachers’ variables provide preliminary support for key components of Programa Atentamente and are consistent with existing theoretical models. Mindfulness training promotes mindfulness and self-compassion, which then leads to reductions in teachers’ burnout symptoms and to an increase in their wellbeing. This knowledge, in turn, may inform future teacher training policies and intervention practices and thus contribute to teachers’ wellbeing.

S55: Effects of a Mindfulness-based Intervention for Teachers on Teachers’ Attentional Processing: An Event-related Potential Study
Maria Amorim, Ana Patrícia Pinheiro
Universidade de Lisboa, Lisbon, Portugal

Following the increasing interest in the behavioural benefits resulting from mindfulness practices, studies have started to focus on the neuronal changes that may accompany the behavioural results reported in the literature. Specifically, mindfulness has been associated with changes in attention allocation, reflected in decreased alpha activity and increased theta phase consistency to attended and task-relevant stimuli, increased P3b event-related potential (ERP) amplitude and decreased P3b latency to task-relevant stimuli, as well as reduced P3a amplitude to distracting
stimuli after training. Of note, the P300 component is a neurophysiological measure of attention allocation, and it consists of two dissociable responses: the P3a is an index of attention orienting to task-irrelevant and infrequent stimuli, whereas the P3b reflects the top-down allocation of attentional resources to task-relevant stimuli. These results suggest that mindfulness practices are associated with enhanced selective attentional control, which may underlie long-term effects of decreased emotional reactivity and more successful management of stressful life situations. This study probed whether these changes are also observed in teachers that underwent a mindfulness-based training program aiming to promote social and emotional competences (Programa Atentamente).

A randomised trial design was used and two groups of teachers, intervention (n=9) and control (n=7), participated in an EEG session before and after the intervention programme. In both EEG sessions, participants performed an auditory oddball task with simple sounds and an auditory oddball task with emotional stimuli. In the first, 400 tones were presented over headphones, in a pseudorandomised order: 360 standard (P=0.90) and 40 deviants (P=0.2). In the second, 400 nonverbal vocalizations were presented over headphones together with distractor (P= 0.1) environmental sounds. In both tasks, participants were asked to silently count the number of targets. P300 results will be discussed in light of existing literature indicating that mindfulness practices result in changes in attentional sound processing and, more importantly, that these practices may be a tool to capacitate teachers with a greater control over their attentional resources, which a powerful impact in the classroom.

S56: Effects of a Mindfulness-based Intervention for Teachers, on Teachers’ Behavioural Classroom Interactions with Students
Carolina Gonçalves1, Rita Pereira1, Joana Cadima2, Teresa Leal2, Joana Sampaio de Carvalho1, Alexandra Marques-Pinto1
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Some studies indicate that a growing number of teachers report high levels of professional stress which in turn affect the quality of classroom interaction. These negative impacts of teachers' stress include using more rigid methods to teach and manage student misbehaviour and responding with less sensitivity to students' emotional needs. During the last decade mindfulness-based interventions have been used to promote teachers' social and emotional competencies (SEC) but little rigorous research has evaluated its efficacy to reduce teacher stress and to improve the quality of interactions between teachers and students in classrooms. The main goal of this study was to evaluate the impacts of a mindfulness-based SEC promotion programme (Programa Atentamente) developed for teachers, on teacher-students classroom interactions.

The study adopted a randomised trial design and used a systematic observation approach to data collection. Teachers in the intervention group (n=22) and in the control group (n=12) were compared for their behavioural classroom interactions with students, before and after the intervention.

The mean comparison tests used revealed that the teachers from the intervention group demonstrated significantly higher levels of respect for students and lower levels of negativity responses to conflict situations, than teachers form the control group. These findings are promising in that they show improvements in classroom interactions as a result of intervention efforts that did not explicitly focused teachers’ classroom management and instruction skills. Therefore, results highlight the importance to implement and evaluate mindfulness-based SEC promotion programs within teachers’ initial and continuous training in order to contribute to a safe, supportive and effective classroom climate.
Symposium: In Agreement? Impact of Leader-Team Agreement in Organisational Interventions
Chair: 1Henna Hasson & 2Ulrica von Thiele Schwarz
1Karolinska Institutet, Stockholm, Sweden; 2Malardalen University, Västerås, Sweden

Organisational health interventions aiming to change how work is organised and managed are generally recommended to improve employee health. However, these interventions often do not reach their potential to improve employee wellbeing (Egan et al., 2009; Richardson & Rothstein, 2008). To understand how and why such interventions may fail, process evaluation can offer important information (Nielsen et al., 2010). From congruence literature, it is well established that work teams and their leaders often differ in their perceptions of work and working conditions (e.g. Atkins & Wood, 2002; Gibson et al., 2009; Hasson et al., 2013). Such disagreement is related to worse health, job satisfaction and performance among the members of team. Despite this, differences in leader and team perceptions are seldom considered in process evaluations of organisational health interventions.

The planned symposium presents empirical, conceptual and methodological work on leader and team perceptions in relation organisational health interventions. More specifically, we compare how team members’ and their leaders’ perceive intervention implementation and organisational context and how the possible disagreement relates to the outcomes of the interventions, e.g. employee health and wellbeing.

This symposium brings together a number of experts in this area to highlight issues around perceptual distance (i.e. agreement, congruence) and process evaluation. A number of solutions for advancing knowledge and practice on evaluation of organisational health interventions are suggested. The symposium starts with a presentation of current concepts and frameworks in the area. Thereafter, the three presentations give examples of empirical studies focusing on comparing team members’ and their leaders’ perceptions of interventions and connecting the agreement levels to the intervention outcomes.

The first presentation examines how leader-team perceptual distance in safety leadership affects the outcomes of a leadership training intervention. The symposium continues with a presentation that concerns how self – other – agreement (SOA) on leaders behaviours among followers and leaders pre-training influence changes in leadership styles after the training. The last presentation gives an example of how employees’ and leaders’ perceptions of organisational context at pre-intervention impacts the outcomes at follow up measurement. All three studies uses longitudinal intervention data and applies polynomial regression and response surface methodology (Edwards, 2002). The session concludes with comments from our discussant as well as questions and discussion with the audience. The symposium contributes with knowledge on how organisational interventions can be evaluated taking into consideration different stakeholder perceptions. It gives methodological examples e.g. polynomial regression and response surface methodology that can advance the evaluation of organisational interventions.

S57: Does Seeing Eye to Eye with your Leader Influence Training Outcomes? A Multi-source, Multi-level Quasi-Experiment
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A meta-analysis has revealed modest results in terms of return on investment on leadership training and conclude that 34% of leadership training programs do not achieve their intended outcomes (Avolio et al., 2009). Effective leadership training requires actual changes in leaders’
behaviors once leaders return to the workplace (Kirkpatrick, 1994; Nielsen, Randall, & Christensen, 2017). Meta-analytic evidence confirms that leaders and followers often differ in their perceptions of the leaders’ behaviors (Lee & Carpenter, 2017). Leaders may rate themselves positively and consider themselves good leaders but this perception may not be shared by their followers. In the present study, we explore the extent to which leaders’ and followers’ agreement or disagreement (perceptual distance) on leadership styles prior to training influence the extent to which leaders and followers report improvements in leadership style. We used trait activation theory (Teet & Burnett, 2003) to develop our hypotheses. In line with recent research on perceptual distance, we include both constructive and passive leadership behaviours (Lee et al., 2017).

**Methods:** The leadership training was initiated by the organisation, delivered by organisational psychologists and evaluated by a team of researchers. The extensive leadership training program consisted of a total of 20 days of didactic and experiential learning activities with the goal of increasing theoretical knowledge as well as practical skills (Kolb, 1984). In total, 68 leaders had a sufficient number of 180-degree ratings to be included in the study. These 68 leaders had 237 followers who responded to the questionnaire and were thus included in the analyses.

Constructive leadership behaviors included transformational leadership and contingent reward while passive leadership was measured using management by exception passive and laissez faire leadership. All were measured using the Multifactor Leadership Questionnaire (MLQ - Form 5X) (Avolio & Bass, 2004). We tested our hypotheses using polynomial regression with response surface analysis (Edwards, 1994).

**Results:** We found that agreements and disagreements indeed influenced changes in leadership outcomes. Followers who had a leader they rated positively and their leaders also rated themselves positively reported the greatest increases in their leaders’ constructive leadership behaviours and the largest reductions in passive leadership behaviours. Leaders whose followers agreed with them that they exhibited positive leadership behaviours also reported the largest increases in transformational leadership and contingent reward. Our results have important implications for developing training programmes.

**Discussion:** Overall, the results of our study show that it is important to carefully consider the context of training and how feedback from leaders and followers may be used during training. Our results suggest that not all leaders are equally able to act on such feedback. Future research needs to apply these findings and develop feedback tools and mechanisms that may help leaders accept and act upon feedback from followers.

**S58: Leader-Team Perceptual Distance Affects Outcomes of Leadership Training: Examining Safety Leadership and Follower Safety Self-Efficacy**

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**Introduction:** Whether leaders and their teams agree or not on perceptions of leadership has been found to impact follower wellbeing and performance. Less is known about how agreements or disagreements play a role in relation to safety and leadership training. The present study examined the effects of leaders’ and followers’ perceptual distance on safety leadership prior to a leadership safety training. The aim was to understand the impact of agreement and
disagreement on leaders' safety behaviors among leaders and followers pre-training and how these impact leaders' changes in safety behaviors and the changes in followers' safety self-efficacy post-training.

Method: The present paper is based on data from a natural experiment; a leadership training program in the Swedish forest industry. Forty-eight leaders and a total of 211 followers from the paper industry completed surveys before and after training. Safety leadership behavior was measured with the supervisory action to ensure safety at work from the Group Safety Climate Scale (Zohar, 2000). Safety self-efficacy was measured with two three-item scales, one for feedback and one for safety intervention (Pettinger, 2000). We used polynomial regression with response surface analysis (Edwards, 1994) to test the impact of agreement and disagreement among leaders and their followers on leaders' safety behaviors and followers’ safety-specific self-efficacy.

Results: Polynomial regression with response surface analyses revealed that the agreement between leaders and their followers regarding safety leadership before training was positively related to training outcomes including safety leadership and followers' safety self-efficacy. Line managers who overrated themselves on safety leadership before training had less favorable training outcomes.

Discussion: Leadership training is a top priority in many companies and may be a way of ensuring that leaders are equipped to understand and enforce safety priorities. Using feedback from 360-degree surveys is common in leadership training, building on the assumption that having a shared understanding of how the leader behaves is important both in itself and as a motivator for change. This study showed that the perceptual distance between leaders and followers before training has a significant impact on the outcomes of the training in that agreement is generally beneficial and particularly when both leaders and followers rate the leadership favorably. The present study also showed that when leaders over-rate themselves, feedback on discrepancy does not change the fact that they see little improvement in outcomes over time. This raises the question of whether 360-degree feedback is helpful for the group that would need it the most.

S59: Understanding How Agreement on Organisational Implementation Climate Affects Leaders’ Ability to Develop Their Implementation Leadership
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Managers and their teams have often different perceptions of shared organisational factors; in previous research the disagreement of perceptions has been linked to a lower employee wellbeing as well as lower performance. Hence understanding the agreement of managers and their teams is an important factor that helps understand and predict important employee as well as organisational outcomes. Moreover, investigating agreement might also help understand the effects of organisational health interventions. In this study we investigate how the managers’ and their teams’ agreement on implementation climate, e.g. the perception of how easy it is to introduce innovations and changes in the organisation, affects the managers’ use of implementation leadership, e.g., behaviours that help introduce and maintain a specific innovation or change in the organisation as a consequence of an implementation leadership training. In addition to the agreement on implementation climate, training components such as the relevance of the training context or contextual factors such as support by senior leadership are assessed as moderator variables to understand the effects of the implementation leadership training on managers’ implementation leadership behaviour. This study is based on the iLead project, where 54 managers participated in the iLead intervention, an implementation leadership training. Measurements were conducted pre training and immediately after the training. During
the training, four process measurements were conducted. Both the participating managers (n=54) and their work teams (n=1048) filled out the pre and post questionnaires, whereas only the participating managers provided data on the process measures. Preliminary analyses with polynomial regressions with response surface analyses have been conducted and results are promising. This study can help us understand the training effects and how to plan future trainings.

**Symposium: Employees’ Worries and Feelings of Guilt in the Work-family Interplay: Strenuous Experiences from an Everyday and a Career-related Perspective**

Chair: Bettina S. Wiese & Anna M. Stertz
*RWTH Aachen University, Aachen, Germany*

Over the last decades, the work-family interface has received increased attention in occupational health psychology as well as in other fields of psychology (e.g., family psychology, developmental psychology). This symposium puts focus on what keeps the coordination of work and family a challenging and strenuous endeavor in terms of both everyday experiences and career development. While most research on work-family topics is still based on cross-sectional data, the three studies in this symposium have implemented longitudinal and diary designs (i.e., repeated measurements).

Using cross-lagged modeling, Messerli, Meier, Cho and Bechtoldt present longitudinal data from working parents on the vicious cycle between feelings of work-family guilt and work-family conflicts. Most importantly, they show that the effects of work-family conflict on guilt are equally strong among women and men. This underlines that men’s experiences deserve more research attention than they did in the past. Stertz, Horvath and Wiese build on this research desideratum and contribute a talk on career-related daily worries of fathers who are on parental leave. They show these worries to be more pronounced among fathers employed in a company with a family-unsupportive organisational culture. Taking a biographical perspective, Noppeney, Stertz and Wiese complement the present set of presentations by demonstrating that in a sample of highly qualified university graduates, a lifestyle preference of setting clear boundaries between work and family roles fuels concerns about the long-term compatibility of career strivings and family-related goals.

**S60: Work-Family Conflict and Guilt – Only a Women’s Issue?**

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Feelings of guilt arising from an unsuccessful attempt to balance work and family demands (i.e., work-family related guilt) is a frequently discussed topic in numerous books and blog posts, indicating that work-family related guilt is a central issue for many working parents. Interestingly, the non-academic articles focus on working mothers only, implicitly suggesting that women experience more work-family related guilt than men do. However, research on work-family related guilt is in its infancy with a small number of empirical studies, and findings of the few studies on gender differences in work-family related guilt are inconclusive. Moreover, little is known about the causality of the relationship between work-family conflict (WFC) and work-family related guilt due to limited evidence from longitudinal studies. Lastly, although a reciprocal relationship between WFC and work-family related guilt seems theoretically plausible, it has never been examined.

With those limitations of the current literature in mind, we conducted a four-wave longitudinal study with three-month intervals. Our sample consisted of 344 employed parents (58% female). The findings of the cross-lagged panel model indicated an effect of WFC on work-family related
guilt. Of importance, this effect was of equal size for women and men. In contrast, we found
gender differences regarding the reversed effect of work-family related guilt on WFC; guilt
predicted an increase in WFC for women but not for men.

Contrary to what the popular press suggested, our findings indicate that both women and men
experience work-family related guilt when facing WFC. However, our findings further revealed
that for women, not only unsuccessful management of work-family demands results in feelings
of guilt, but feeling guilty about work-family issues makes it even more difficult to handle demands
from work and family. This points to a vicious cycle between WFC and guilt for women. Thus,
the “work-family business” is an issue for both men and women, but arguably women may suffer
more in the long run.

S61: Perceived Organizational Work-family Culture and Fathers’ Worries during Parental
Leave: A Diary Study
Anna M. Stertz¹, Lisa K. Horvath², Bettina S. Wiese¹
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Germany

Building on a stress-theoretical perspective, this research examined the impact of perceived
organizational work-family culture on fathers’ daily work-related worries during parental leave.
To get a more complete picture of work domain influences on fathers’ stress experiences during
parental leave, we additionally investigated the role of daily contact with interaction partners from
the work domain.

Data were gathered in a standardized online diary-study consisting of a registration, a pre-diary
questionnaire and a diary survey (completed on five consecutive evenings within one week, i.e.,
from Monday to Friday). The analyses are based on data of N = 109 fathers currently on leave.
Fathers’ perceived organizational work-family culture was assessed in the pre-diary
questionnaire. On every diary survey, fathers provided information on their daily work-related
worries and the extent of daily contact with someone from the work domain.

Multilevel analyses confirmed that perceived family-supportive organizational culture was
associated with fewer work-related worries during fathers’ leave. With respect to within-person
effects, we found that, on days when fathers had more contact with their organization, they
worried more about the impact of their leave on their working life. Most importantly, this research
highlights the critical role of an organizations’ work-family culture on fathers’ wellbeing during
parental leave. From a practical point of view, our research indicates that a family-supportive
environment increases the chance that parental leave is a positive experience for fathers.

S62: Setting Inter-domain Boundaries: Does It Affect the Compatibility of Career Strivings
and Family-related Goals?
Ruth Noppeney, Anna M. Stertz, Bettina S. Wiese
RWTH Aachen University, Aachen, Germany

Most individuals strive for successfully dealing with both work and family demands. For some of
them, creating clear borders around different roles appears a promising regulatory strategy.
People, however, differ regarding how flexible and permeable they prefer these boundaries to be
(Ashforth & Fugate, 2000). Regardless of such boundary-setting preferences, there are career
paths that require, for instance, high flexibility in terms of working hours and mobility. This might
be particularly true for careers with project and leadership responsibility. Here, individuals with
high preference for setting strict boundaries might wonder whether their lifestyle actually fits the
demands they face within their chosen career paths.
In this study, we investigated if differences in segmentation preferences, that is, the enduring preference of separating the work domain from the private domain, are associated with conflicts regarding the compatibility of career and family-related goals. Analyses were based on a sample of \( N > 3000 \) doctoral and postdoctoral scientists working within the STEM-fields (37% women). The online-survey consisted of five measurement waves spanning a period of two and a half years. Analyses revealed that concerns about the compatibility of career strivings and family-related goals were higher among those with stronger segmentation preferences compared to those who did not necessarily want to keep life spheres separated. Suggestions for future research are discussed (e.g., lifestyle preferences and goal conflicts in different subgroups of employees).

**Symposium: Workplace Interventions: Implications for Worker Health and Wellbeing**

Chair: Leslie Hammer

*Portland State University and Oregon Health & Science University, Portland, USA*

Hammer will introduce the symposium topic of workplace interventions, providing rationale for the importance of the topic and important implications for worker health and wellbeing. Using a variety of research designs, three workplace intervention studies will be introduced in this symposium. In addition, theoretical frameworks related to the development of workplace interventions will be discussed in a fourth presentation.

Kossek, Giddings, Lee and Bodner will present a cell phone policy intervention study among retail workers that shows that cell phone uses on and off the job relate to boundary control at work and home and has implications for the design of cell phone policy use. Demerouti will present an intervention study on job crafting, which refers to proactive and voluntary adjustments that individuals make in their work characteristics in order to make it more meaningful and satisfying. Results indicated an increase in seeking resources was positively related to T2 social support, workload, team climate, whereas an increase in reducing demand was negatively related to T2 work-family conflict. Kooij, van Woerkom, and Kuijpers will present on an investigation of two new types of job crafting interventions. Specifically, they examined strengths crafting, referring to self-initiated changes that individuals make in their work to make better use of their strengths and interests crafting, referring to self-initiated changes that individuals make in their work to make it more enjoyable. Finally, Truxillo has found that although there has been substantial development in the science and practice of workplace interventions, relatively little published psychology-based intervention research has specifically focused on age-related interventions. The goal of his presentation is to stimulate additional research on age-focused workplace interventions. Based on the current state of the aging workforce literature, a number of possible lines of research on age-related workplace interventions will be proposed. Hammer will facilitate a discussion about workplace interventions, highlighting design issues, as well as issues related to the level of analysis for such interventions, drawing connections back to her keynote address on work-family and job stress workplace interventions.

**S63: Retail Employees’ Personal Technology Use On and Off the Job: Validating Cell Phone Behaviours for Interventions**

Ellen Ernst Kossek\(^1\), Kyunghee Lee\(^1\), Douglas Giddings\(^2\), Todd Bodner\(^3\)

*Purpose:* Brick-and-mortar retail industries such as grocery stores are undergoing transformation regarding how front-line retail employees are managed. In response to growing competition, the rise of Internet-based grocery retailers, declining staffing levels, and increased automation (self-check-out stations), retail organisations face challenges regarding boundary control over cell-phone use by employees and electronic communication on and off the job. Many employers have developed policies limiting or even banning personal cell phone use when employees are on “the front end”—in front of customers. Yet employees may increasingly want to receive texts or be
contacted for family and personal matters, while on the job or by the company (for last-minute staffing changes or to solve a work problem) during their days off. The purpose of our research is 1) to use qualitative and quantitative methods to examine how cell phones are being used by retail employees at work; 2) to design new cell phone boundary control scales and validate them; and 3) to discuss how these constructs are used to design a randomised field experiment comparing boundary control cell phone policies and family supportive supervision (FSSB).

**Method:** Using funding from the Russell Sage Foundation, we collected nested data from 740 employees and managers across several states in 69 stores to achieve several objectives. In study 1, we use qualitative data from 25 employee interviews to develop items for three constructs: 1) personal technology job crafting; 2) respecting time-off e-communication behaviours, and 3) supervisor cell phone socialisation behaviours. In study 2, we validate quantitative scales of these concepts and link these measures to outcomes (wellbeing, work-life conflict, safety, turnover) and discuss their relevance for interventions.

**Results:** Study 1 results showed that supervisors play a key role in training and modeling boundary management behaviours to employees that influence employee outcomes (burnout, work-family conflict, and turnover). Employees reported using their personal cell phones at work as tools to help themselves, customers, and their employer. Based on the qualitative findings, in study two, we developed three constructs and corresponding scales to define and measure how employees at work are using cell phones, and how cell-phone policies and boundary control management are being modeled, trained, and enforced by supervisors. Supervisor Cell-Phone Policy Communication emphasises how supervisors communicate appropriate cell-phone use at work by front-end retail employees. Supervisor Respecting Time-Off Behaviours measures the extent to which supervisors teach, train, and model appropriate behaviours regarding the contacting of employees who are not at work. Personal Cell Phone At-Work Behaviours measures ways in which employees use their personal cell phones at work to assist with work tasks. Results show that the relationship between Personal cell phone use for work tasks and outcomes showed different patterns between associates and supervisors.

**Conclusions:** This study shows that cell phone uses on and off the job relates to boundary control at work and home. These findings are useful for designing randomised field experiments comparing boundary control and family supportive supervision (FSSB) interventions that lie at the intersection of job crafting, technology work-life, and organisational-support research.

**S64: How to Improve Job Demands and Resources: The Effects of a Crafting Intervention among Healthcare Professionals**

Evangelia Demerouti  
Eindhoven University of Technology, Eindhoven, Netherlands

**Purpose:** The healthcare market in Europe is changing, causing organisations to search for cost-efficient ways to optimise organisational processes while providing quality care in a competitive market. Job crafting refers to proactive and voluntary adjustments that individuals make in their work characteristics in order to make their work more meaningful and satisfying. According to the Job Demands-Resources (JD-R) model they can seek resources, seek challenges, and decrease demands. No research so far has explored whether stimulating job crafting behaviour of employees influence their perceptions of job demands (i.e. workload, work-family conflict, cognitive demands) and job resources (i.e. social support and team climate). The job crafting intervention was applied among Dutch specialists physicians in order to increase their crafting behaviour and improve their demands and resources.

**Design/Methodology:** A nonrandomised control group pretest-posttest (experimental n = 48, control n = 71) design was utilised. Participants in the experimental group followed a training in which they specified a personal crafting plan (self-set crafting goals that concerned changing the
demands and resources in one’s work) that they would achieve the weeks following the training. Specifically, they were told to seek resources (week1), to seek challenges (week2), and to decrease demands (week3). Data were analysed with repeated measures General Linear Model.

**Results:** Results of repeated measures analyses reveal that, compared to the control group, the experimental group reported more crafting, i.e. seek challenges ($F = 5.31, p < .05$) decreasing demands ($F = 4.66, p < .05$), but also more workload ($F = 5.05, p < .05$), cognitive demands ($F = 4.25, p < .05$), social support ($F = 6.14, p < .05$), and team climate ($F = 4.34, p < .05$) after the job crafting intervention. Univariate tests indicated that although work-family conflict remained stable in the experimental group it increased in the control group at T2. Moreover, it was found that an increase in seeking resources was positively related to T2 social support, workload, team climate, whereas an increase in reducing demand was negatively related to T2 work-family conflict.

**Discussion/Limitations:** Results suggest that the intervention is effective in positively influencing job crafting behaviours and job resources. Additionally, implementing the intervention stimulated employees to increase their job demands (workload and cognitive demands) and to keep a steady level of work-family conflict although for the control group work-family conflict increased. This means that organisations can implement job crafting interventions to stimulate employees to create a resourceful and challenging work environment, and to keep work-family conflict at low levels. The small sample sizes and the reliance on self-report measures may be a limitation.

**Conclusion:** The job crafting intervention is a successful way to stimulate job crafting behaviour and to influence the work environment (job demands and resources). Future studies should replicate the effectiveness of such interventions in other domains and professionals.

**S65: Two Job Crafting Intervention Studies: Increasing Person-job Fit and Work Engagement of Aging and Busy Employees**

Dorien Kooij, Marianne Van Woerkom, Evy Kuijpers

*Tilburg University, Tilburg, Netherlands*

Job crafting refers to self-initiated changes that individuals make in their work to improve person-job fit. We investigated two new types of job crafting; i) strengths crafting, referring to self-initiated changes that individuals make in their work to make better use of their strengths and ii) interests crafting, referring to self-initiated changes that individuals make in their work to make it more enjoyable (Kooij, Van Woerkom, Wilkenloh, Dorenbosch, & Denissen, 2017). We hypothesised that participating in a job crafting intervention aimed at adjusting the job to personal strengths and interests leads to higher levels of strengths and interests crafting, which in turn will promote person-job fit. Moreover, based on the literature on personality development over the life span, we expected that older employees will benefit more from a job crafting intervention than younger employees.

To test our hypotheses, we conducted an intervention study among ($N=86$) employees of a Dutch health insurance organisation. Both the experimental and a waitlist-control group filled out a survey prior to and after the intervention. The experimental group participated in the workshop led by trained research assistants using an online tool comprised of seven steps to standardise the process of visualising concrete person–job (mis)fits and of formulating a personal action plan for improving person-job fit. Multiple regression and moderation analyses indicated that participating in the job crafting intervention leads to strengths crafting, but only among older employees. Strengths crafting was, in turn, positively associated with person-job fit. Unexpectedly, participating in the job crafting intervention did not influence job crafting toward interests and had a negative effect on crafting toward strengths among younger employees.
To address the unexpected outcomes of the intervention we conducted a follow-up study. For this study we adjusted the intervention to incorporate a homework assignment (e.g., reflected best self-exercise) to better identify strengths and interests. In addition, we did not use the online tool but an experienced trainer. Given the context of the organisation where we conducted this intervention study, we focused on employee wellbeing outcomes and the role of workload. More particularly, we hypothesised that participating in the job crafting intervention leads to higher levels of strengths and interests crafting, which in turn will promote work engagement. Moreover, building on Social Cognitive Theory (Bandura, 1982) that proposes that activating work contexts facilitate active behaviours of employees, we expected that employees experiencing higher workload will benefit more from a job crafting intervention than employees experiencing lower workload.

To test our hypotheses, we conducted an intervention study among (N=99) employees of a Dutch healthcare organisation. We used the same design as the previous study. Multiple regression and moderation analyses indicated that participating in the job crafting intervention leads to interests crafting, but only among employees experiencing high workload. Interests crafting was, in turn, positively associated with work engagement. Unexpectedly, participating in the job crafting intervention did not influence strengths crafting. We discuss these findings based on earlier discussions of this type of research (e.g., Nielsen, Taris, & Cox, 2010).

S66: Future Paths for Workplace Age Intervention Research
Donald Truxillo
Portland State University, Portland, USA. University of Limerick, Limerick, Ireland

The workforce in most industrialised countries is becoming older and more age-diverse, and this trend is expected continue over the coming decades. Many countries are raising the retirement age, and many people will need to continue to work later in life (Eurostat, 2013; Toossi, 2012). As the workforce ages, both employers and societies must sustain employee wellbeing, productivity, and health throughout their careers.

In response, there has been a surge in psychological research around employee age, focusing on issues such as motivational differences between younger and older workers (e.g., Kooij et al., 2011), age stereotyping (e.g., Ng & Feldman, 2012), age diversity climate (e.g., Kunze et al., 2011), retirement (e.g., Wang, 2007), and successful aging at work (Zacher, 2015). In short, organisational psychology as a field has begun to accumulate a solid literature that should enable us to make recommendations for workplace policies and interventions to address age issues. Although there has been substantial development in the science and practice of workplace interventions (e.g., Nielsen et al., 2010), relatively little published psychology-based intervention research has specifically focused on age-related interventions. While there are some age-focused interventions in the medical literature (Hughes et al., 2011; Strijk et al., 2013), these studies tend to be atheoretical with little examination of the underlying processes involved in their success.

My goal in this presentation is to stimulate additional research on age-focused workplace interventions. I examine the few published intervention studies that explicitly focus on employee age, such as those related to helping workers craft their jobs (e.g., Kooij et al., 2017; Mueller et al., 2014) and to increase workplace flexibility (Cahill et al., 2015). Based on the current state of the aging workforce literature, I then propose a number of possible lines of research on age-related workplace interventions, identifying needed research paths. These include work redesign interventions (e.g., Hertel et al., 2013; Zaniboni et al., 2014); interventions focusing on age diversity climate and relations between age groups (e.g., Boehm et al., 2014; Iweins et al., 2013); age-supportive HR practices (Boehm et al., 2013; Kooij et al., 2014); and work-life interventions.
I also emphasise the need for research to better understand the aging process and its implications for developing effective age interventions at different career stages as a way to sustain workers throughout their careers (Truxillo et al., 2015; Zaniboni et al., 2015). Specifically, I discuss three categories of possible workplace age interventions - primary interventions (for workers of all ages to sustain them throughout their work lifespan), secondary interventions (for mid- and late-career workers to control current challenges), and tertiary interventions (for older workers to accommodate or rehabilitate). I conclude by describing the importance of scalable interventions to encourage dissemination and the use of technology and redesign to assist older workers.

Symposium: Work-life Balance – New Perspectives on an Enduring Problem
Chair: ¹Gail Kinman & ²Almuth McDowall
¹University of Bedfordshire, ²Birkbeck University of London

Work-life balance has become the primary concern for many organisations as knowledge of its negative effects on health and job performance is growing. This symposium comprises four papers from different perspectives that use a range of quantitative and qualitative research methods to consider key issues in the study of work-life balance. Each of these innovative papers provides new insights into aspects of work-life balance, highlighting potentially effective interventions as well as fruitful areas for future research.

The first two papers report the findings of studies conducted with people working in emotionally demanding jobs, which can be a risk factor for work-life balance. The first paper presents the findings of a two-wave study of social workers. The study considers the implications of recovery behaviour and compassion orientations on work-life outcomes over time. More specifically, it examines detachment from work concerns and affective rumination as factors that might attenuate or intensify work-life conflict and enhancement over time. Also considered are the implications of compassion towards clients and self-compassion for work-life outcomes. The second paper draws on interview data with women police officers working on sexual violence cases to examine how they experience and make sense of their work personally as well as professionally. Interpretative phenomenological analysis is used to examine their responses and the implications of such potentially traumatic work for wellbeing and the work-home interface. Multi-tasking (both within and between roles) is commonplace and, while people may feel more efficient, it can impair personal effectiveness, wellbeing and the quality of personal life. The third paper in this symposium reports the findings of a quasi-experimental study that examines the effects of multi-tasking using technology. The implications of this behaviour for job performance and work-life balance are considered. Modern information and communication technologies (ICTs) allow employees to access work-related information and communications from virtually anywhere and at any time. Although such technology can improve flexibility and enhance work-life balance, using ICTs for work-related purposes outside of regular work time can blur the boundaries between work and other life domains and cause conflict between work and personal life. The fourth and final paper reports the findings of an intervention study that draws on boundary management techniques to examine the effects of self-management training on satisfaction with balance between work and non-work.

S67: Compassion, Recovery and Work-life Outcomes in Child Protection Social Workers
Gail Kinman
University of Bedfordshire, Luton, United Kingdom

Social care work is emotionally demanding with strong potential to threaten work-life balance (Kinman & McDowall, 2014). This paper presents findings from a two-wave study of UK social workers that draws on the work-home resources model (Ten Brummelhuis & Bakker, 2012) to investigate relationships between emotional demands and work-life outcomes (both positive and
negative). Two recovery behaviours, detachment and affective rumination, were examined as factors that might moderate the association between emotional demands and work-life outcomes over time. It is predicted that the ability to detach from work worries and concerns will enhance recovery and improve work-life balance by mitigating the negative impact of emotional demands, whereas affective rumination will intensify this relationship.

The protective role played by two more individually-oriented resources, compassion satisfaction and self-compassion, was also considered in this study. Although helping professionals are at risk of compassion fatigue and this is a risk factor for burnout (Adams et al. 2006; Craig & Sprang, 2008), they also experience satisfaction from engaging in compassionate relationships with service users. Feelings of compassion directed towards the self as well as others may also improve wellbeing (Zessin et al. 2015). In this study, it was anticipated that self-compassion would protect social workers from the negative effects of the emotional demands on work-life outcomes by increasing their ability to detach from work concerns thus promoting recovery.

One hundred and eighty-six social workers (81% female) working in child protection participated in both waves of the study. Data were obtained by on-line questionnaires approximately 14 months apart. Most participants (75%) had been qualified at least 10 years and nearly half (48%) worked exclusively with children and families, a particularly emotionally demanding branch of social work. Study variables were measured with a series of validated scales. Hierarchical multiple regression equations were computed, controlling for length of time in the job role. The findings provided some support for the predictions, in that affective rumination moderated the relationship between emotional demands and work-life outcomes. Some evidence was found that self-compassion (but not compassion satisfaction) had protective effects for work-life balance. Work-life conflict was higher and enhancement lower in social workers with shorter tenure, highlighting the role of experience in managing the interface between work and personal life or, alternatively, suggesting survivor effects.

The implications of the findings for the development of interventions to help social workers promote recovery and enhance work-life balance will be considered.

Adina Bozga
Birkbeck University of London, London, United Kingdom

Sexual violence has received increased political, judicial and media scrutiny in the UK in the last 10 years. The number of sexual offences recorded in the UK was at its highest recorded level in 2017 and had increased by 14% compared with the previous year (ONS, 2018). In the same year, women were victims in 88% of rape offences recorded by the police. Several collapsed rape prosecutions came under intense media scrutiny due to allegations of evidence disclosure failings.

The literature on police work has highlighted key occupational stressors for police officers such as exposure to critical incidents, organisational culture and managerial practices. Linked to exposure to occupation stress, there is evidence of higher rates of suicide amongst police officers, and in particular amongst female officers (Violanti, 2010). In relation to investigation of sexual offences in London, a recent Independent Review (Angiolini, 2015) had already drawn attention to the high sickness rates amongst police officers investigating sexual offences when compared to their peers.
Against this background, the current research explored the impact on women police officers of working in the area of sexual violence. It also looked at how those involved in investigating sexual offences relate to this experience professionally but also personally. The research question of this study was: how do women police officers working on sexual violence experience and make sense of their work? Taking an IPA stance to collect and analyse data, the research was based on interviews with 19 female officers.

The themes that emerged were organised around the participants’ experience of relating to victims, their accounts of an ailing self and perceptions about procedural and institutional legacy. Findings converged with previous studies on burnout and vicarious traumatisation amongst clinicians working with victims of trauma. Most participants reported experiences such as depression, anxiety attacks, frequent thoughts of suicide, intrusive imagery, altered beliefs and cognitions, disrupted intimacy with partners, sensory shutdown, and a perceived loss of trust and control. They also reported avoidance, dissociation and a reduction in victim care illustrated by expression of weariness, compassion fatigue and disillusionment. They spoke of a heightened perception of threat, especially fears around making mistakes when relating to victims and indicated feelings of helplessness, recurrent disturbing dreams (e.g. of witnessing rapes or of being raped), and difficulties staying or falling asleep. Women officers with parental responsibilities described becoming overprotective as a result of their work roles, or being put off from having children. The research has implications for work-family interface and bi-directional inter-role conflict research, emphasising the importance of including police officers working on sexual abuse in conceptualisations of vicarious traumatisation, and of considering occupational interventions to address potential risk factors associated with caseload, tenure, personal exposure to emotional neglect, and the permeability of work and family boundaries for these occupational roles.

S69: Are We Less Good at Multitasking Than We Think?
Almuth McDowall, Gunadi Hanafi
Birkbeck University of London, London, United Kingdom

Recent UK data shows that all age groups, including working adults, are increasingly multi-tasking and ‘multi-gadgeting’ (OFCOM, 2016). Whilst there is research which focuses on the impact of technology use on educational performance and wellbeing, relevant research is sparse in the work domain. This is a serious gap, given organisational changes towards increasingly digital working which have an impact on work-life balance. This innovative quasi-experimental study investigated the impact of technological multitasking on work performance, which was measured using performance in an assessment centre task. We hypothesised that participants asked to multitask simultaneously would be rated lower in assessment centre performance than those who did not. In order to examine our prediction more fully, we controlled for personality traits and cognitive ability.

Data was collected from 34 university students and recent graduates who were randomly assigned into either a control or multitasking condition, where participants in the multitasking condition were required to engage in an Internet-based scavenger hunt whilst simultaneously engaging in a leaderless group discussion task. Results showed that the multitasking condition performed significantly worse than controls when rated by trained assessors. However, when self-rated, there were no differences in individual and group performances between the two conditions. The paper will propose that there may be a difference between our own perception of multi-taking ability versus potentially adverse effects on work and team performance. We will also discuss the implications for research, theory and practice with particular focus on WLB implications.
S70: Improving Work-nonwork Balance by Conveying ICT-related Boundary Management Techniques: An Intervention
Svenja Schlachter¹, Ilke Inceoglu², Almuth McDowall³, Mark Cropley⁴
¹Justus Liebig University Giessen, Giessen, Germany. ²University of Exeter, Exeter, United Kingdom. ³Birkbeck University of London, London, United Kingdom. ⁴University of Surrey, Guildford, United Kingdom

With modern information and communication technologies (ICTs), employees can access work-related contents and communications from virtually anywhere and at any time. Despite potential benefits for a more individual, flexible work-nonwork management, using ICTs for work-related purposes outside of regular work time can blur the boundaries between work and non-work life and has been associated with work-nonwork conflict (Schlachter et al., 2017). In order to support employees in actively managing their work-related ICT use rather than using them passively and frequently, we developed an intervention in the form of self-management training, drawing on boundary management techniques (Ashforth et al., 2000; Nippert-Eng, 1996). By participating in this intervention and hence using ICTs more consciously during non-work time, we hypothesised that intervention participants would show an increased level of satisfaction with their work-nonwork balance.

This study evaluates this newly developed training by applying an experimental field study design, comparing an intervention group with a waitlist control group. Groups were randomly allocated and the training was spread over three weeks, with participants completing weekly modules online and by self-study. The modules covered active reflection of one’s own work-related ICT use during non-work time, the introduction of boundary management techniques (e.g., use of mobile ICTs’ do-not-disturb function) and tips on how barriers towards behavioural change could be overcome. Participants were office-based employees in Germany who completed online questionnaires at four time points: before the intervention phase (T1), as well as directly (T2), four weeks (T3) and 12 weeks (T4) after the intervention phase. At T2, data were provided by 55 participants (intervention group: n = 19; control group: n = 36). To test the proposed associations, we applied univariate analyses of covariance, as well as paired-samples t-tests.

The analysis showed that there were no significant group differences at T2, T3 or T4 in levels of satisfaction with work-nonwork balance, after controlling for satisfaction with work-nonwork balance at T1. However, given the small sample sizes and resulting lack of power, paired-samples t-tests were used in order to explore potential changes within groups over time. It was found that there were no within-group differences in the control group. On the other hand, we found significant within-group differences across time for the intervention group: in comparison to T1, levels of satisfaction with work-nonwork balance were higher at T2 and T4, indicating medium effect sizes.

Although the benefits of the intervention for work-nonwork balance were not fully conclusive, some evidence for positive effects were found. In future studies, the intervention should be developed further and re-evaluated with larger sample sizes in order to examine benefits of intervention participation, boundary conditions and mechanisms of the intervention more comprehensively. In conclusion, providing employees with the possibility to participate in a self-management training focusing on actively managing their ICT-related boundaries could benefit their work-nonwork balance.
Symposium: Translating Research into Practice: Understanding Psychosocial Risk Management in Context
Chair: Karina Nielsen
Sheffield University Management School

There has been a long debate on how research may be translated into practice. Although, there is a dearth of research on the relationship between psychosocial factors and employee health and wellbeing outcomes, there is usually little discussion at conferences as to how this knowledge is applied in practice.

The European Framework Agreement of October 8, 2004 states that it is the responsibility of the employer to take measures to identify and prevent issues concerning the psychosocial work environment and stress. It is up to the European countries and its national social partners and organisations to decide how this responsibility is enacted.

In the present symposium, we will start with the perspective at the European level. We will present some of the initiatives that have been started at the EU level. A particular focus will on the EU survey the ESENER-2 which provides insights into what the current challenges are in relation to psychosocial risk management. One of the findings are that Northern European countries have better expertise in managing the psychosocial risks.

In the remainder of the symposium, we will present Denmark as a case for how the psychosocial work environment can be managed. In the second presentation, representatives from the employer and employee organisations in Denmark will describe the national approach to psychosocial risk management. They will provide an overview of the regulation on the psychosocial work environment in Denmark and discuss the role of the Social Partners. The Danish Model is unique in that the Social Partners, employee and employer organisations work closely together to ensure a good work environment.

In the third presentation, representatives from an employer confederation and from an employee confederation will provide concrete examples of how they in collaboration support organisations in managing the psychosocial work environment. They will present the methods and tools they use in this work. In the fourth presentation, a representative from the Danish Association of Managers and Executives will present their approach to improving the psychosocial work environment in Denmark. This approach involves supporting managers who themselves have got stress problems but also making resources available to managers on how they may support their own employees.

S71: Policy and Practice in Tackling Psychosocial Risks in the European Union - Evidence from the ESENER-2 survey
Malgorzata Milczarek
European Agency for Safety and Health at Work, Bilbao, Spain

European workplaces are characterised by the changing patterns of work including new types of job, digitalisation and more flexible employment arrangements. Many of these changes put workers in a vulnerable position, with poorer working conditions and increase of jobs with limited access to training. Work intensity and health-related absenteeism are high or on the rise in many countries. Moreover, the increase in employment in micro firms poses challenges in terms of monitoring working conditions, raising awareness and enforcement.

Policy response at the level of the European Union includes a variety of initiatives undertaken in the last several years. The EU Strategic Framework on OSH (2014-2020), the Modernization of
the EU OSH Legislation and Policy (January 2017) and the European Pillar of Social Rights (June 2017) all bring the psychosocial issues high on the agenda, acknowledging the importance of psychosocial working conditions in creating healthy, fair and sustainable workplaces.

A second European Survey of Enterprises on New and Emerging Risks (ESENER-2) was launched to provide an updated, comparative picture of how psychosocial risks are being managed across Europe. The survey was carried out in 2014 covering 49,320 establishments with five or more employees from private and public organisations across all sectors in 36 European countries. Data were collected through computer-assisted telephone interviewing.

ESENER-2 shows that nearly 80% of establishments in the EU identify at least one psychosocial risk factor as being present in their workplace. At the same time, only one-third of establishments report having an action plan to prevent work-related stress. Over 40% of establishments admit that they do not have enough information on how to include psychosocial risks in risk assessments and a significant share of establishments reports lacking adequate preventive tools. There is however a great variety across Europe, with a lower level of psychosocial risk management in some Eastern and South European countries, in small-size enterprises and in sectors such as construction, manufacturing and agriculture.

The secondary analysis of ESENER-2 data shows that management commitment and a ‘request from employees’ are important drivers for psychosocial risk management in the company. The follow-up qualitative study based on face-to-face interviews with a subset of ESENER-2 respondents in seven countries showed, however, that in many establishments psychosocial risks were regarded as something separate from more conventional OSH risks and that traditional ‘safety worker representatives’ had little chance of representing workers on these matters due to perceived lack of competencies or limitations of their mandate. Another study based on interviews with owners and workers of small firms in nine countries revealed that psychosocial risks were commonly understood as part of the job and as such were not a subject to prevention and management.

There is a need for targeted actions aiming to increase understanding of the nature and impact of psychosocial risks along with dissemination of practical tools and strengthening social dialogue, especially in small enterprises.

S72: The Danish Model in Action. Cocreations of Wellbeing and a Good Psychosocial Work Environment
Jan Lorentzen, Peter Dragsbaek
DI - The Confederation of Danish Industry, Copenhagen, Denmark

In this presentation we will give an introduction to the Cooperation Agreement between The Confederation of Danish Employers (DA) and The Danish Confederation of Trade Unions (LO) as well as the agreement on wellbeing and psychosocial work environment concluded by DI – The Confederation of Danish Industry (Employers Organization) and CO-industry - The Central Organization of Industrial Employees in Denmark.

The Cooperation Agreement is an important tool in “the Danish model” in line with the DA-LO General agreement and other collective agreements governing wages and working conditions. It defines the framework for cooperation and dialogue between the employees and management in all the companies that are members of DA (24,000 companies). The focus of the agreement is the common interest of employers and employees and the purpose is to promote cooperation on integrating productivity and wellbeing at work.

In the industrial sector The Cooperation Agreement is managed by TekSam - a cooperation body for DI and CO-industry. TekSam provides assistance to management as well as shop stewards.
in the industrial enterprises concerning all matters of cooperation, including matters dealing with
the resumption of cooperation. The Agreement on wellbeing and psychosocial work environment
also allows management and employees in Danish industrial companies to request assistance
from TekSams cooperation consultants. TekSam's primary effort related to this agreement is to
facilitate the process in which Cooperation Committees works to uncover problems related to the
psychosocial work environment, formulate and implement action plans.

The agreement is quite unique in that it has taken over the Authority's obligation in relation to the
control of companies effort to prevent bullying and sexual harassment. Therefore, management
and employees can contact TekSam anonymously regarding problems with bullying and sexual
harassment. When meeting with the cooperation committee of an enterprise TekSam will always
be represented by a consultant from both DI and CO-industry.

In the presentation we will explain how we handle our consultant tasks and what focus areas are
in our work. We will present how we work with questionnaires and dialogue methods for mapping
the psychosocial work environment as well as our methods for designing action plans and follow-
up. We will also present how we work with one of today's major challenges: Bullying and sexual
harassment, as well as our work to promote social capital by working on the value of good
cooperative relationships in teams and departments, between teams and between managers
and employees. We will focus on giving concrete examples and presenting the tools we use.

S73: Authority and the Social Partners – the Two Columns in the Danish Regulation of
Psychosocial Work Environment
Signe Bergmann, Jan Lorentzen, Peter Dragsbaek
DI - The Confederation of Danish Industry, Copenhagen, Denmark

In this presentation, we take you on a brief historic tour of the Danish regulation of psychosocial
work environment with emphasis on the two columns in the regulation: the Government/the
Authority and the Social Partners. In Denmark, we have a long tradition of integrating the Social
Partners in the effort of promoting a safe and healthy work environment. We will tell the story of
how psychosocial work environment came to be a part of the legislation in 1978 and how the
Social Partners ever since have had a dialogue internally and with the Government/the
Authorities about how to handle the emerging challenges concerning the psychosocial work
environment. We will point to the difficulties, the successes and to key-factors in cooperating on
promoting a safe and healthy psychosocial work environment.

The law of 1978 included the psychosocial work environment, but equally important, it is a
framework, that emphasized, that the conditions of the work environment at all times should be
in conformity with the technical and social development of society. This has the practical
implication, that decrees can supplement the law when needed. It also has a political implication,
because the Authority and the Social Partners when it comes to the work environment can
negotiate on what to regulate and how to regulate it.

In the presentation, we explain, how the “Methodology Committee”, consisting of Social Partners
and the Authority, in 1992 came to an agreement on splitting the psychosocial work environment
in two groups. One group where the Labor Inspectorate could inspect and give injunctions and
one group where they could not. This committee has ever since been the arena where the Social
Partners and the Authority negotiated what and how to regulate the psychosocial work
environment.

We also explain, how the Social Partners in collaboration, supplement the law, and co-define
when the work environment is safe and healthy and what is necessary for the workplaces to do,
in order to create it. The Social Partners in Denmark guide the workplaces on how to obtain a safe and healthy work environment, but they also sets the standard for when the work environment is safe and healthy.

**S74: Managers as the Key in Promoting at Better Psychosocial Work Environment**

Signe Bergmann  
*Dl - The Confederation of Danish Industry, Copenhagen, Denmark*

Research often point at the managers as the key when trying to promote a better psychosocial work environment in the workplaces. In this presentation, you will learn how we in the Danish Association of Managers and Executives have been trying to support managers in their effort to create a good psychosocial work environment for themselves as well as for their employees. The managers as key, is crucial in the effort we do in The Danish Association of Managers and Executives when working with psychosocial work environment. The organisation; which represent approximately 115,000 managers and executives in Denmark, has been working with collecting, developing and spreading knowledge about how managers promote a better psychosocial work for many years. It is equally important for us in our effort, to spread the best practices from the most outstanding companies when it comes to create a good psychosocial work environment, as it is to base our effort on national as well as international research.

We try to support managers around Denmark in their effort to create a good psychosocial work environment through promoting and contributing to research, conducting surveys and developing guides bases on best practices. Since 2016 we have had “reducing stress in Denmark” as a strategic goal, intensifying our effort in that area. I will present the initiatives we have been working on and the results. Further, I will point to key-findings when seeing the promotion of psychosocial work environment in a manager’s perspective. The initiatives that I will present is among others: developing, evaluation and introduction of sparring/guidance of members with stress or work-life challenges; video’s on how to handle stress among your employees; your own stress and how to be more resilient; and four written guides with hands-on knowledge on how to handle your own stress and stress among your employees.

**Symposium: The Crossover Effects of Work: A Focus on Physical Activity**

Chair: Sven van As  
*Radboud University, Nijmegen, Netherlands*

Characteristics of our work have an impact on our health, wellbeing and behaviours after work. Interestingly these after-effects of work seem to cross domains: Having a mentally demanding job can have an unfavourable impact on leisure time physical activity (LTPA). Further clarifying the link between work demands, LTPA and ill-health has significant value for science and society. Based on occupational health theories, it can be hypothesised that: (i) Work demands negatively influence LTPA; (ii) Fatigue is potentially a key factor mediating the pathway from demanding work to insufficient LTPA; and (iii) Insufficient LTPA may mediate the association between demanding work and ill-health. Related to this topic, it is thus relevant to examine:

1. Whether exposure to high mental work demands indeed results in a cross-over to reduced LTPA.
2. Whether LTPA is, in turn, a key-factor linking work characteristics to health.
3. Whether fatigue is a mediating variable in the pathway from work demands to LTPA.
4. Whether motivational and habitual factors moderate the association between fatigue (need for recovery) and LTPA.
5. The multi-dimensionality of fatigue in relation to mental- and physical workload.
In the current symposium, recent scientific insights on these questions will be presented and discussed, aiming for a better understanding of the role of LTPA and fatigue in the work-health associations.

Our first presenter, Professor Jan Häusser, recently proposed the physical activity-mediated Demand-Control (pamDC) model (together with Andreas Mojzisch). According to this model, job demands and -control have an impact on our health and wellbeing through LTPA. He recently tested the premises of this model in an ambulatory assessment study among 207 employees. For 14 days, participants filled in three questionnaires per day while physical activity was measured using accelerometers. Findings from this study will be shared and discussed in the light of the pamDC model. In the second presentation, Sven van As will present findings from an experimental investigation of the impact of job demands on physical activity behaviour. In this study, participants were asked to work for 1.5 hours under conditions of either high or low job demands. Afterwards, physical endurance performance and physical activity preference were measured to investigate the causal impact of work characteristics on physical activity behaviour.

Our third presenter, Madelon van Hooff, already focuses on possible moderators impacting the association between work and physical activity. In a recent 10-day diary study among 82 employees, she investigated to what extent daily need for recovery from work predicts physical activity after work. She also investigated to what extent intrinsic motivation and having a habit of exercising attenuate this relationship. Closing this symposium, Fiona Earle will shed light on the domain specificity of fatigue after-effects. She will present findings from several experimental studies in which she manipulated either mental- or physical workload. After both types of workload manipulation, multidimensional state fatigue was measured to explore to what extent the fatigue after-effects of different types of work are domain specific. After each presentation, there will be room for questions. The symposium will end with a plenary discussion session.

S75: Leisure Time Physical Activity as a Mechanism Linking Job Characteristics to Wellbeing: An Ambulatory Assessment Study
Jan Häusser¹, Sascha Abdel Hadi¹, Andreas Mojzisch²
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In a recent theoretical analysis of the pathways through which job characteristics might unfold their effects on wellbeing and health, we argued that leisure time physical activity (LTPA) is an important mediator of this relationship. Based on this theorizing, we proposed a new theoretical model, the physical activity-mediated Demand-Control (pamDC) model (Häusser & Mojzisch, 2017). The key idea of the pamDC model is that the seminal Job Demands Control (JDC) model (Karasek & Theorell, 1990) can be applied to predict LTPA. Specifically, we propose that employees working in high-strain jobs (i.e. jobs characterized by high levels of demands and low levels of control) will not only experience a higher likelihood of health problems and reduced wellbeing (as predicted by the JDC model) but will also show lower levels of LTPA. We assume two specific psychological mechanisms linking demands and control to LTPA: high demands are proposed to have negative effects on LTPA due to self-regulatory fatigue, while control should have positive effects on LTPA due to increased self-determination.

To test these proposed pathways, we conducted an ambulatory assessment study using an objective measure of LTPA. 207 participants, working in office jobs, wore an accelerometer (Actigraph) for 14 days to continuously monitor their physical activity. Additionally, participants completed questionnaires on their smartphones three times a day (in the morning, after work, and in the evening) including measures of job characteristics, self-regulatory fatigue, self-determination, and wellbeing (i.e. mood, mental fatigue, and subjective stress). Multilevel
modelling demonstrated that, on a day-level, job demands were negatively and job control was positively related to wellbeing. We also found evidence for the JDC buffer hypotheses, that is, an interaction of demands and control, showing that the negative effects of demands were attenuated when control was high. Moreover, and in line with the pamDC model, participants showed lower levels of LTPA on days with high job demands as compared to days with lower job demands. However, in stark contrast to our predictions, job control was also negatively related to LTPA. Regarding the relationship between LTPA and wellbeing, we found negative effects of LTPA on subjective stress, whereas positive mood was positively related to LTPA. Subsequent multilevel mediation analyses revealed that the day-level effect of job demands on LTPA was mediated by self-regulatory fatigue: high levels of demands increased self-regulatory fatigue which, in turn, reduced LTPA. Also, we found some evidence that the effect of job demands on wellbeing was mediated by LTPA: job demands reduced LTPA which, in turn, negatively affected wellbeing. In sum, the present study provides strong support for the key assumptions of the pamDC model regarding the interplay between job demands, LTPA and wellbeing and its underlying psychological mechanisms. By contrast, the findings regarding job control are less clear and not in line with the propositions of the pamDC model.

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Introduction: According to the Job Demand Control model (JDC-model; Karasek & Theorell, 1990), job demands play an essential role in the impact of work on health and wellbeing. Recent findings (e.g., Fransson et al., 2012) and theorizing (Hausser & Mojzisch, 2017) suggest that the influence of job demands on health is partially explained by leisure time physical activity levels. Findings from multiple studies imply that especially people working in jobs with both high demands and low control (high-strain jobs) show relatively low levels of physical activity. However, it is yet unknown to what extent there is a causal impact of job demands on subsequent physical activity behaviour. Moreover, the precise mechanisms underlying this impact have yet to be uncovered. The aim of the current experimental study is to establish the causal impact of mental job demands on subsequent physical activity and to examine fatigue as a potential mediating mechanism.

Method: At least forty healthy students, aged 18-39, will participate in the current study. After filling in an online questionnaire (e.g. on health status and exercise motivation), participants will visit the lab on two days, with a 48-hours interval in-between. On the first day, participants perform an incremental exercise task on a DAUM ergobike to establish their peak power output (i.e. maximal resistance or Wmax). Then, participants work on five simulated office tasks for 25 minutes to determine their baseline working pace. Subsequently, participants cycle for as long as possible on 70% of their peak power output to establish their baseline time-to-exhaustion. On day two, participants perform the same simulated office-tasks as on day one for 90 minutes. Based on their baseline working pace, the amount of work is manipulated as such that participants have to work at either 80% (low demands group) or 120% (high demands group) of their natural pace while control is low for both groups. Following the office work, participants perform a choice task. On 60 trials, participants choose between a physical and a non-physical activity while being informed they will actually perform one of the chosen activities at the end of the experiment. Then, participants perform the second time-to-exhaustion test (TTE2) and finally perform one of the selected choices for 10 minutes. On both days, subjective fatigue is measured directly before and after the office work.
**Expected results:** We expect TTE2 to be significantly shorter and physical activity preference to be significantly lower for participants in the high-demands group than for those in the low-demands group. Moreover, we expect that fatigue partially mediates these effects and that autonomous exercise motivation attenuates them.

**Implications:** This will be the first preregistered study in which the impact of job demands on subsequent physical activity behaviour is experimentally investigated. The study will contribute to our understanding of the way in which mentally demanding work influences participation in leisure time physical activity and, subsequently, health and wellbeing.

**S77: Daily Associations between Work-related Exhaustion and Exercise: The Moderating Role of Intrinsic Motivation and Habit**

Madelon van Hooff
Radboud University, Nijmegen, Netherlands

**Introduction:** It has been widely established that daily recovery from the load effects that develop due to effort expenditure and stress at work is of vital importance for the protection of employee health and wellbeing. Research has consistently shown that engaging in exercise during off-job time contributes to recovery. Paradoxically, however, there are also indications that employees who need recovery most (i.e., those with an unfavorable recovery state) spend least time on exercise during their off-job time. The present study aimed to further insight in the negative association between employees’ unfavorable recovery state and their engagement in exercise. To this purpose, it focused on intrinsic motivation for exercise and exercise habits as factors that may mitigate the negative relationship between daily work-related exhaustion (as indicator of employees’ recovery state) and the daily time spent on exercise during the evening. It was hypothesised that 1) there is a negative relationship between employees’ exhaustion during the workday and the time spent on exercise during the subsequent evening, 2) the negative relationship between exhaustion and time spent on exercise is weaker in case of a high intrinsic motivation for exercise, and 3) the negative relationship between exhaustion and time spent on exercise is weaker in case of strong exercise habits.

**Method:** Data were collected using a 10-day daily diary study (two measurements daily: at the end of the workday, and before going to bed in the evening) among 79 employees from various occupations (45.6% male, 72.2% holding at least a bachelor’s degree, mean age 35.5 years, mean number of weekly working hours 38.7). Exercise habits and intrinsic motivation for exercise were measured in a general questionnaire that preceded the diary study. Work-related exhaustion was reported daily at the end of the workday, and time spent on exercise (in minutes) was reported daily before going to bed in the evening. Data were analysed using multilevel analysis in SPSS.

**Results:** In support of Hypothesis 1, analyses revealed a significant negative association between work-related exhaustion and the time spent on exercise during the subsequent evening. Furthermore, although intrinsic motivation for exercise and exercise habits were positively related to the daily time spent on exercise, the interactions between intrinsic motivation and exhaustion and between habits and exhaustion were not significant. Hypothesis 2 and 3 were therefore not supported.

**Conclusions:** This study showed that higher levels of daily work-related exhaustion are associated with less time spent on exercise during after work hours. In other words, those employees who are most in need of recovery, engage least in an activity that has been shown to be beneficial in this respect. As intrinsic motivation for exercise or exercise habits did not mitigate the negative relationship between exhaustion and exercise, future research could focus on further examining factors that may offset this unfavorable effect.
S78: Multidimensional Fatigue After-Effects Following Mental and Physical Work
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Real life working contexts frequently present workers with high levels of mental and physical demands and sleep-related challenges. These conditions are known to give rise to fatigue, associated with subjective tiredness and performance after-effects, commonly characterised by a shift towards low effort processing. In safety critical work, the management of fatigue remains a major concern, and fatigue risk management plans are now embedded in risk assessment culture as standard health and safety practice. However, the focus of these plans is typically on the optimisation of shift systems and careful evaluation of excessive working hours. Currently, insufficient industrial consideration is given to assessing the impact of mental and physical demands on the development of fatigue. Of particular relevance in applied settings is the nature of fatigue after-effects following different types of stressors, i.e. is there a differential pattern of after-effects from mental work, physical work and sleep disturbances?

To allow organisations to develop detailed risk assessments, which identity the unique causes and specific consequences of mental, physical fatigue and sleep-related fatigue, we need to understand how different demands relate to specific after-effects. This would enable organisations to consider causal risk chains, which should inform fatigue risk management plans to control and/or mitigate the risks.

Two experimental studies investigated the pattern of fatigue after-effects following different types of work. Mental workload was manipulated via three levels of load within a complex process control task. Physical load was manipulated via three levels of load for a stationary cycling task. The impact of workload on state fatigue was measured using a multidimensional psychometric fatigue scale. The pattern of results for the two experiments were considered to explore whether subjective fatigue after-effects are general (relatively consistent irrespective of the source of fatigue) or domain specific (with distinct subjective experiences directly related to the source). Directions for future research will be proposed, and implications for industry fatigue risk assessments will be outlined.

Symposium: Conducting Organisational Interventions in Different Healthcare Contexts: Fitting the Intervention to the Context
Chair: Karina Nielsen
Sheffield University Management School

Organisational interventions aim to improve employee wellbeing through changing the way work is organised, designed and managed. In recent years, it has become clear that off-the-shelf intervention methods are problematic to use and that tailoring needs to happen to fit the intervention to the organisational context (Nielsen & Randall, 2015).

Employees in healthcare organisations are often the target of organisational interventions as working in healthcare is characterised by high pressure jobs and the decisions you make on the job can literally be a question of life and death. At the same time, many national healthcare organisations are under pressure as the population grows older and budget costs are introduced. A further challenge is the move from a focus on care to a focus on performance and documentation of performance. In conclusion, it is important to understand how organisational interventions work in the context of healthcare. However, context does not only mean the occupational setting. The healthcare systems in different countries can be very different with different legislation, structures, cultures and resources. In the present symposium we focus on healthcare interventions in three countries.
In the first presentation, we will present the translation of an intervention model used in Norwegian universities to the Norwegian healthcare context. The second presentation describes the first phases of an intervention in the Italian healthcare. A pilot study has been carried out to understand how the national approach to organisational interventions can be tailored to the healthcare context with tailored assessment tools and a collaborative approach.

In the third presentation, we will focus on an intervention that focuses on developing a co-created program logic (COP). Based on the Nordic collaborative model, managers and employees are seen as important active agents that all need to engage with the intervention to make it work. In the COP, employees, local change leaders (appointed among employees) and process instructors were seen as instrumental to ensuring a successful process and therefore outcomes were defined for all three levels. The presentation will discuss the experiences with using the COP process.

In the fourth and final presentation, we will present another case from the Italian healthcare. Based on the UK Health and Safety Executive's Management Standards, the intervention was tailored to the Italian context using national guidelines. Based on the evaluation of the project, the authors conclude that given the ongoing changes in the Italian healthcare, dynamic risk assessment methods are needed to capture the changing nature of stressors and allow for rapid intervention.

S79: Implementing Organizational Interventions in a Nordic Context – Experiences from the ARK Intervention Programme
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Purpose: The aim of this presentation is, by showing the results and experiences from ARK-programme, and suggest benefits and challenges of using this programme in the health care sector. Until now, the programme has only been used in the academic sector, however characteristics of being a knowledge intensive workplace within the Nordic context, the ARK-programme seem highly relevant for being implemented also in the health care sector. We would, therefore, like to present experiences and results from research on ARK, and discuss the benefits and challenges with using ARK in that sector.

Nordic countries have broad concern of work on democratisation, cooperation between the parts in work life, and alternative ways of work organisation. The Nordic model defines the elements of good work as (e.g., autonomy, variety, learning and participation in decisions). These contextual characteristics have been institutionalised as shared attitudes towards work, the responsibility of organisations towards employees and the focus on worker health, meaning and productivity (Christensen, Saksvik, & Karanika Murray, 2017).

Bridging knowledge on the link between organisational structure, employee health and wellbeing and quality of health care and patient safety is more important than ever. Conducting systematic research and practice on these three pillars of healthcare could contribute to a better understanding of the mechanisms behind best practice both for the employees within healthcare, but also the patients.

Design: Findings are based on both experiences from the ARK-programme, and results from 20 semi-structured qualitative interviews with line managers in one large Norwegian university. ARK is a comprehensive research based plan and tool for: (1) systematic mapping of the
psychosocial work environment; and (2) development and implementation of interventions for improving wellbeing, health and performance (Innstrand et al., 2015). ARK is built on the suggested five phases of Nielsen et al. (2010) as a framework for the processual work with organizational development, including: (1) initiation, (2) screening, (3) development of interventions, (4) implementation of interventions, and (5) evaluation of interventions.

Results and conclusions: One of the success factors of the ARK-programme is the health promoting bottom-up profile, which also is founded in the core of the Nordic model. The advantage of this profile contributed firstly to put the psychosocial work environment on the agenda and secondly establish a communication channel for the work environment between the leader and the employees. The line managers said that many employees found it motivating that the interventions were developed locally identifying both strengths and challenges for their department. The line managers also underlined the importance of the cooperation and trust between the safety representative and themselves in a successful process. The line managers also reported challenges working with a bottom-up profile trying to develop concrete interventions based on assessments of psychological concepts in survey measures. An ARK approach, as a comprehensive plan/instrument for investigation and implementation of interventions, would be beneficial for the health care sector contributing to a deeper knowledge of what constitutes a more healthy healthcare practice; and be a win-win situation for both the employees and the patients.

S80: Implementation and Assessment of a Surveillance System for the Prevention and Treatment of Work-related Stress in an Italian Paediatric Hospital

Maria Rosaria Vinci, Guendalina Dalmasso, Francesco Gilardi, Annapaola Santoro, Vincenzo Camisa, Natalia Bianchi, Massimiliano Raponi, Silvia Rongoni, Salvatore Zaffina

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Purpose: The EU-OSHA reports that 25% of workers suffer from work-related stress (WRS). The health care sector has a higher level of WRS, as well considerations surrounding economic constraints and the growing phenomenon of aging. Therefore, it is necessary to implement specific and dynamic approaches to WRS management in health institutions. The aim of the present study is to describe the process of implementation of a surveillance program of WRS in an Italian pediatric hospital.

Methods: As planned by Management Standard approach (British Health and Safety Executive; HSE) and INAIL’s Guidelines, the preliminary step of our approach was to establish a multidisciplinary working group in the hospital. Monitoring of objective data was started in 2011. It is based on the measurement of the assessment of indicators or “sentinel” events (accidents, sickness and non-sickness absence, call for non routinary consultations, etc.), work context and content factors. In our study three objective indicators of WRS (i.e. sickness absence, transfer requests, requests for extraordinary visit to the Occupational Physician) have been proposed as variables to be monitored on a quarterly basis (compiled for each Department), in order to allow for quick recognition of critical situations that deserve further assessment and thorough in-depth and subjective investigations. We considered these indicators as partially accurate indicators of stress. On the basis of the risk ascertained (medium), it was decided whether to proceed with the second step aimed at establishing a base-line of the “subjective” stress indicators gathered through an anonymous on-line survey, using the MS-RIT questionnaire provided and recommended by HSE. Further qualitative methods was used, in order to characterise the deep roots of WRS in the Unit with a potential higher risk were applied, including: focus groups (with homogeneous groups of workers) and semi-structured interviews (with physicians and nurse management).
**Results:** On the basis of the evaluations carried out, different improvement actions have been established depending on the criticalities detected, both organisational and management-type and support-empowerment addressed to the operating units concerned. Courses and specific trainings were conducted in all departments; support groups, with the presence of a facilitator and a psychologist were set up with the aim of showing the main risks and difficulties; a help point has been opened in order to collect and face directly individual problematic and specific situations of risk. The improvement realised is proved by a concrete change, of both objective and subjective data, with a specific measured improvement in some case study, in clinical and non-clinical units with higher tested stress problems.

**Conclusion:** In our opinion in a working context in constant change and evolution it is necessary to apply the proper dynamic risk analysis methods which could monitor the stressors over time and allow a rapid intervention before the onset of harmful events for both individual and corporate health. Therefore, we underline the need of flexible approaches to WRS management in health institutions, in view of the complexity and variability of the activities.

**S81: Getting on the Same Page – Co-creating Program Logic for Changes in a Swedish Healthcare Organization**

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In any change process in organisations, everyone involved needs to have a shared understanding of the activities, mechanisms and expected outcomes of the change, as well as the logic links between them – i.e. the program logic. This can help avoid misalignment and creates a roadmap for evaluation. Yet, there is a lack of concrete tools for how the development of a shared understanding of the program logic can be facilitated. The aim of this presentation is to describe a structured process—the co-created program logic (COP) process—for how organisational stakeholders can get on the same page by being involved in defining intervention activities, mechanisms and goals.

The COP process was carried out in a large healthcare organization in Stockholm, Sweden. The intervention was a competence development program aimed at increasing skills and knowledge in managing e-health services. The target group included all the healthcare staff in the organisation. Swedish working life is heavily influenced by the Nordic model of work organisation, which emphasis employee participation and learning (Gustavsen, 2011). Based on this, the e-health competence development program was designed according to a network model where employees are engaged as trainers. Workshops were held unit-wise, led by employees acting as local change leaders who were supported by process instructors, in turn supported by a project management group.

A COP-workshop was run with the program management team (n=3) and a group of process instructors (n = 9) before the program was launched. Since the intervention had a multilevel structure with three levels (employees, local change leaders and process instructors), separate COP process was run to define outcomes for each of the three groups. After that, the logic links between them were discussed. We ran the three processes in parallel during the same workshop. A mixture of individual and team assignments was used, as outlined in the COP process. Experience of using the COP process was collected at the end of the workshop by asking participants to provide statements about what worked well (WW) and what could be done differently (DD).

The results for WW showed that participating in the COP process helped clarify dependents between outcome at different levels, that main themes were about leadership and facilitation, not
e-health, and that this needed to be reflected in the program, and finally, that the process did seem to facilitate development of a shared understanding of the process. Results for DD showed a wish to spend more time on using active verbs to describe the outcomes, as proposed in the original COP process but omitted due to time restraints. It also included allowing more flexibility in defining the intervention activities, so that these too could be amended through the COP process. Concluding, this study shows how a brief structured process can help create a shared understanding of change content, process and outcomes, and guide evaluation. This may be particularly valuable in contexts requiring multi-layered approaches.

S82: Tailoring a Psychosocial Risk Management Approach to the Healthcare Sector: The Case of Italy

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Introduction: Managing work-related stress requires a multi-phase intervention starting from the screening of hazards and the assessment of risks to the identification of the best corrective and preventive actions and the evaluation of their effectiveness. One of the key aspects of a good psychosocial risk management is also tailoring the approach to the situation (e.g. size of the organisation, productive sector, workforce specificities) to enable practical impact and help to make effective action plans and interventions. In 2011, the Italian Workers’ Compensation Authority (INAIL) developed a methodology for the management of the work related-stress risk (INAIL, 2013), as an organizational integrated approach useful for OSH professionals and companies in compliance with the legal requirements (L.D. 81/200). Given the modular nature of this approach, in the following years, a group of researchers from INAIL started to tailor the existing methodology to specific sectors, activities or groups, particularly at risk. Several studies have shown that healthcare employees are exposed to an increased risk of work-related stress compared with others (Eu-OSHA, 2014). Findings from an Italian survey on perceptions of health and safety at work (INAIL, 2014) showed that workers perceived to be exposed to work-related stress risk as much as to biological risk.

Aims: Starting from a preliminary proposal developed in collaboration with the University of Bologna within the framework of a project funded by the Italian Ministry of Health (Balducci at al. 2016), this study aims to develop and test a methodological process contextualized to the healthcare sector, including tailored tools and practices. The purpose is to enable organizations from this sector to plan and implement tailored effective actions to prevent work-related stress and to enhance health and well-being. Moreover, the study provides an evaluation of intervention process mechanisms through individual and management perceptions and actions.

Methods: Based on findings of the pilot study (including overall 800 workers), an extensive study was planned including 3 hospitals (more than 3,000 workers each). Each hospital’s steering group, in collaboration with INAIL’s researchers, plans and implements the tailored methodology into their risk assessment and management practices. First, workers were grouped following criteria feasible for this kind of context and work activity (as a unit, task and profession). Then a two-phase assessment (objective indicators and workers’ perceptions) is conducted, including measures focussing on hazards specific to the health sector. Then, actions are identified based on the assessment’s findings and after discussing into focus groups with samples of employees, where it was needed. The effectiveness of interventions is evaluated integrating process and outcomes evaluation, using, among the others, a job satisfaction measure and the Intervention Process Measure (Randall et al., 2009).
Findings and conclusion: Preliminary findings show good quality of the tailored assessment tools. Specific cut-offs for the healthcare sectors are developed based on the sample distribution. A good satisfaction for the participative approach results. As an output of this study, a full methodological proposal to the healthcare sectors will be offered to organizations on the Inail’s web platform including tools and materials useful for organizations.

Symposium: Interactive Effects of Job Crafting, SOC Strategies, and Playful Work Design on Work Engagement, Performance and Sustainable Work Ability
Chair: Filipa Rodrigues
Universidade Nova de Lisboa, Lisbon, Portugal

The aim of the proposed symposium is to discuss the evidence from empirical studies conducted on the use of proactive behaviours - job crafting, SOC strategies, and playful work design (PWD) - and its relation to work engagement, performance and sustainable work ability. We aim to present four studies, two cross-sectional and two intraindividual, conducted in three different countries – Portugal, the Netherlands, and Norway. We believe that the amplitude of samples and contexts will add value to the discussion on the adaptation of workers to the rapid changes in the workplace, that will take place in the EAOHP 2018. Job crafting, SOC strategies and playful work design consist of self-initiated actions towards a better adaptation of workers in the workplace.

Research on job design has shown that employees proactively change the characteristics of their jobs in order to better adapt to it. Whereas job crafting refers to the process of shaping jobs so that tasks and social interactions better suit an individual’s needs, balancing current demands with current resources, playful work design (PWD) refers to the process of employees creating conditions at work that foster play and enjoyment. Evidence has shown that proactive behaviour improves the fit between the job and the individual, and increases meaning at work.

In a similar way, from the perspective of the lifespan literature, the selection, optimisation, and compensation (SOC) model states that individuals who experience a mismatch between their demands and resources may adopt self-initiated actions to maintain effective functioning. The limitation of resources inherent to human existence demands a selection of goals (over others), either to achieve a desired state (elective selection) or in response to resource loss (loss-based selection). To reach selected (goal) domains, resources need to be acquired, allocated, and refined (optimisation). When confronted with loss or decline in goal-relevant means, compensatory processes are needed (compensation). SOC strategies are positively associated with successful adaptation and wellbeing at work. The studies conducted contribute to the occupational health psychology literature by demonstrating that self-initiated strategies use result in positive outcomes at work, such as work engagement, performance and sustainable work ability. A practical implication of our studies is that job crafting, SOC strategies, and playful work design may be promoted in the workplace as a way to employees better adapt to demands in the workplace.

S83: Interactive Effects of Daily Job Crafting and SOC Strategies Use on Work Engagement, Burnout and Aging Satisfaction
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Purpose: The aim of this study is to investigate within-person relationships between daily job crafting (Tims, Bakker, & Derks, 2012; Wrzesniewski & Dutton, 2001) and selection, optimization, and compensation strategies use (SOC; Baltes & Baltes, 1990), daily work engagement, daily
burnout (Demerouti et al., 2001), and daily aging satisfaction (Lawton, 1975). Based on conservation of resources theory (COR; Hobfoll, 1988), it was hypothesized that high daily job crafting and SOC strategy use buffers the impact of ageing on daily engagement and burnout.

**Design/Methodology:** Data was collected from 50 employees from Portugal, who work in various jobs and occupations, using a general questionnaire (baseline) and one daily online questionnaire over ten workdays (total sample N= 500). To test our hypotheses, we used Hierarchical Linear Modeling (HLM 6), which allowed us to simultaneously model within- and between-person relations among the variables. Data was collected using the following scales: SOC strategy use; job crafting use; ageing satisfaction; work engagement; burnout.

**Results:** Preliminary results have shown that high job crafting and SOC strategy use result in an increase in daily ageing satisfaction and daily work engagement, and a decrease in daily burnout.

**Conclusions/ Practical implications:** Daily job crafting and SOC strategies use impact positively on the daily level of work engagement, and buffer the impact of ageing. Training workers in job crafting and SOC may be helpful, especially to older workers so that they can better adapt to age-related changes at work.

**Limitations:** As a daily diary study design, conclusions about casual processes within and across days were not allowed. Future research should use long-term longitudinal designs. Additionally, data came from a single source and thus may be susceptible to common method bias. Future research could also obtain daily assessments from peers and supervisors.

**Originality/Value:** Our study contributes to occupational health psychology literature by examining the interactive effects of job crafting and SOC use on daily outcomes.

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**S84: Job Crafting and Playful Work Design: A Daily Diary Study**
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**Purpose:** Work psychology has traditionally focused on job design, outlining how employees adjust to various job characteristics in order to perform their work. More recently, research has started to investigate how employees proactively change the characteristics of their job and situation (Parker, Bindl, & Strauss, 2010). Proactive behaviour improves the fit between the job and the individual, increases opportunities to use one’s strengths, and improves the meaning of work. In the present study, we investigate how employees proactively change the characteristics of their job and tasks through daily job crafting and playful work design. Whereas job crafting refers to the process of employees redefining their job designs in personally meaningful ways, playful work design (PWD) refers to the process of employees creating conditions at work that foster play and enjoyment (Bakker & Van Woerden, 2017). We use the proactive work behaviour and Job Demands–Resources (JD-R; Bakker & Demerouti, 2017) literatures as a theoretical basis for our central proposition that employees will perform better on the days they craft their jobs and design their work to be playful. Moreover, we hypothesize that daily work pressure will determine when these proactive work strategies are effective.

**Design/Methodology:** A total of 78 Norwegian naval cadets from a Military University College participated in our study. As part of their leadership training, the cadets travelled across the North Sea and the Atlantic from northern Europe to North America by sail ship. Participants received a booklet with diary questionnaires for the first 30 days of their 75-day stay on the sailing ship (response rate was 95%). The sample consisted of 70 male participants (89.7%) and 8 female participants (10.3%). The mean age of the participants was 22.9 years (SD = 2.20). We used daily diaries to measure our study variables.
**Results:** Results of multilevel analyses showed that job crafting in the form of increasing job challenges and increasing job resources had positive main effects on colleague-ratings of performance. In addition, PWD had a unique positive effect on job performance. However, job crafting in the form of reducing hindrance job demands had a negative relationship with job performance. Furthermore, as predicted, work pressure moderated two of these relationships. Specifically, increasing challenge job demands and PWD were most effective when work pressure was low.

**Conclusions/ Practical implications:** Our findings contribute to the literature by integrating proactive work behaviour and JD-R theories to theorize and show that on the days employees use job crafting and PWD, they engage in proactive person-environment fit behaviour, which has favourable effects on daily job performance.

**Limitations:** We conducted our study among a specific sample, which may limit the external validity of the findings.

**Originality/Value:** We introduced playful work design as a new strategy to improve job performance. In addition, we investigated the unique effects of various forms of job crafting and investigated work pressure as a boundary condition.
Our results suggest that fostering opportunities for nurses to increase their perception of the impact of their jobs on client lives, is associated with the expansive crafting of their jobs, which in turn is related to their work engagement. Overall, our study suggests that hospitals that keep their nurses close to their clients in order for them to be aware of their job’s impact on their lives, and also encourage their nurses to craft their jobs, may be contributing to their work engagement, an indicator of the wellbeing of their nursing workforce.

This study, due to its cross-sectional methodology, does not allow for causal relationships between the study variables to be established, and therefore longitudinal research is needed to further investigate the relationships between the psychological effects of relational job characteristics, job crafting, and work engagement. Further research among other populations is also suggested, as our sample included exclusively public hospital nurses. The relationships between psychological effects of relational job characteristics, job crafting, and work engagement, to our knowledge, were not previously studied among hospital nurses. Furthermore, as nurses are the largest group of healthcare workers, it is important to study the relationships between psychological effects of relational job characteristics, proactive behaviours (such as job crafting), and their work-related wellbeing (i.e., work engagement).

S86: Successful Aging and Job Crafting to Sustain at Work: Examining Relations Between Job Crafting and Work Ability of Healthcare Workers

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Purpose: Due to the ageing and dejuvenization of the western workforce, employers in these countries face a challenge to enhance a sustainable working life to maintain older workers (De Lange et al., 2015). As a result, there is an increased practical as well as scientific interest in interventions that facilitate a prolonged working life of employees (Kooij, 2015). One of these research lines focuses on the positive effects of job crafting at work to enhance work ability (e.g., Kooij, Tims, & Kanfer, 2015). However, few empirical studies have examined the relations between job crafting and indicators of sustainable work ability (Ilmarinen, Tuomi, & Klockars, 1997). This study, therefore, aims to examine the relations between ageing, job crafting and sustainable work ability.

Design: We will present results of a 2-wave complete panel study on the sustainable work ability and employability of 1632 Dutch healthcare workers (mean age= 44.91; SD= 11.62; mean job tenure= 13.2 years; 83.6% is female).

Results: Results of our first hierarchical regression analyses using data from Time 1 for the outcome work ability (controlling for job tenure and gender), revealed a negative relation with calendar age (β= -.09; p<.05), a positive relation with future time perspective (β= .14; p<.01), a negative relation with the job crafting subscale “diminishing hindrance task demands” (β= -.19; p<.01), and a positive relation with the subscale “using structural work resources” (β= .09; p<.05). Using the second wave of data, we will further examine the aforementioned relations and test also multiplicative interaction effects between ageing, job crafting and sustainable work ability.

Conclusions: Preliminary results indicate significant relations of ageing and job crafting with the work ability of healthcare workers
Limitations: Data from healthcare workers can limit the generalization of results.

Originality/Value: Few studies to date have been able to examine relations between ageing, job crafting and work ability. The results of our complete panel including 2 waves can bring important new insights to the question of how to sustain ageing workers in the labour market.

Symposium: The Challenges of Doing Burnout Interventions
Chair: Anthony Montgomery\textsuperscript{1} & Margot Van der Doef\textsuperscript{2}
\textsuperscript{1}University of Macedonia, Thessaloniki, Greece; \textsuperscript{2}University of Leiden, Leiden, Netherlands

Discussant: Michael Leiter
Deakin University, Victoria, Australia

There is a growing interest in the development of interventions to ameliorate burnout. Typically, interventions are either person-directed or organisation-directed, or a combination of both. Next to interventions to treat and reduce burnout, primary interventions that focus on preventing burnout have also been developed and tested. Unfortunately, there are relatively few success stories or exemplars in the research literature. Part of the problem may in be rooted in the fact that interventions are effective in different contexts for different people in different ways, suggesting that we need more context specific tools to collate information about burnout interventions.

There is a gap in the field with regard to the experiences of researchers who have tried and been unsuccessful either in terms of implementation and/or effectiveness in various settings. Thus, there is a rich source of untapped experience regarding the obstacles and challenges that exist concerning doing burnout interventions. In terms of understanding the processes that either enable or derail interventions, we need to know more. Therefore, the proposed symposium will seek to capture successes, failures, and untested proposals. Our approach in the symposium will be to focus more on the challenges of doing burnout interventions and lessons learned from previous endeavours, than on actual demonstrations of effectiveness per se.

The proposed symposium includes four papers. The first paper by De Wijn et al will present the results of a meta-analysis on the effectiveness of burnout interventions for health care professionals. Overall a small to medium effect was found for interventions that aim to reduce or prevent emotional exhaustion, with the caveat that a limited number of organisational-focused interventions were identified. The second paper by Wingerden and Derks presents the results of an intervention study assessing the effects of a ‘recharge your battery’ intervention on recovery, psychological detachment, stress-perception and burnout. The study, which used a quasi-experimental design among health technology workers, revealed no significant changes among the study variables, but the participants of the intervention group did report that they were successful in making changes on recovery and psychological detachment.

The third paper by Costa et al reports on how a planned burnout intervention for healthcare professions was blocked by an organisation. The paper provides an autopsy on the failed attempt to develop an intervention in a healthcare setting. The fourth paper by Montgomery et al reports on the use of action research to address burnout and change work practices in healthcare settings in four European countries (FYROM, Greece, Bulgaria, Romania). The authors reflect on the process issues involved in using action research to address the work practices that maintain burnout, and they also reflect on the contextual issues of using action research in the south Eastern European region. Following the four papers, our discussant Prof. Michael Leiter will provide an overview on the main outcomes of the symposium and reflect on the lessons learned going forward into the future.
S87: The Effectiveness of Burnout Interventions for Health Care Professionals: A Meta-Analysis  
Nathal de Wijn, Chris Verhoeven, Margot van der Doef  
University of Leiden, Leiden, Netherlands  

Burnout is a common phenomenon among healthcare professionals (HCPs). It is, therefore, important to develop effective interventions to prevent and reduce burnout in this population. The current meta-analysis focuses on the effectiveness of interventions amongst HCPs and aims to determine the components and characteristics that are associated with greater effectiveness.

The databases Web of Science and PsycInfo have been screened for articles published in the period 1983-2014, with the following inclusion criteria: a target population of HCPs, examining the effectiveness of an intervention in a (quasi-)experimental design and measuring emotional exhaustion (as indicator for burnout) as outcome. This search yielded publications on 13 studies. Studies were coded by two independent researchers and disagreements were resolved through discussion.

An overall small to medium effect (g = 0.283, 95% CI [0.089 – 0.478]) was found for interventions that aim to reduce or prevent emotional exhaustion. More effective interventions have the following characteristics: a short intervention period (≤ 4 weeks), including a cognitive behavioral therapy component, focused on reducing burnout symptoms rather than preventing burnout. Due to the limited number of organisational-focused interventions it was not feasible to determine whether these interventions differ in effectiveness from individual-focused interventions. More studies on burnout interventions for HCPs are needed to gain further understanding of their effective components.

S88: Assessing the Effects of a Burnout Intervention on Recovery, Psychological Detachment, Stress-Perception and Burnout.  
Jessica van Wingerden¹,², Daantje Derks¹  
¹Erasmus University, Rotterdam, Netherlands. ²Schouten Global, Centre of Research, Knowledge & Innovation, Zaltbommel, Netherlands

This study examined the impact of a burnout intervention among professionals working in an organisation for health technology. Employees who are working at this organisation, are passionate about their work and (overly) dedicated to their job and team. Workdays of 10 hours or more are no exception, and absence due to exhaustion, burnout and work stress is increasing. Therefore senior management facilitated an intervention study to encourage employees to recover properly (named: “recharge your battery”), both during and after their workday.

At the start of the intervention, participants filled-in a questionnaire about their current state of recovery, psychological detachment, stress perception and burnout symptoms (exhaustion and cynicism as indicators). After completing the online questionnaire, participants received a digital feedback report which gave them insights in their scores on recovery in comparison to a benchmark. Subsequently, participants were asked to bring their personal feedback report to the classroom session in which they learned more about the importance of recovery during and after work. At the end of the class room session, participants made a personal action plan (based on pro-active goal setting) containing their personal recovery and psychological detachment goals which they would bring into action in the following four weeks. After these four weeks they participated in an evaluation session, in which they shared their experiences and discussed what they needed to maintain working on their recovery.
We hypothesised that the intervention would influence participants’ levels of recovery, psychological detachment, stress perception and burnout. The study used a quasi-experimental design with an intervention group (N = 44) and a waiting-list control group (N = 49). Health technology professionals participated in the study at two time points with eight weeks between the quantitative measurements. In addition, we collected qualitative data on how successful participants were in implementing their goals aimed at enhancing recovery and psychological detachment, and on the support they experienced from their peers and managers.

To test our hypotheses, a multivariate analysis of covariance (MANCOVA) was conducted. Results of analyses of variance did not meet our predictions. In both the intervention group and the control group, there were no changes in variables over time. However, although the analysis revealed no significant changes on the study variables, the participants of the intervention group did report that they were successful in making changes on recovery and psychological detachment. We discuss the implications of these (non)findings for both theory and practice.

S89: Intervening on Burnout in Complex Organisations – the Process of an Action Research in the Hospital
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This presentation describes a specific action research case study, in an internal medicine service at a major European Hospital. The main goals are to describe a detailed intervention with a particular methodology, and also to highlight the main obstacles faced by the research team in this process. As a result, we hope to contribute to the reflection about the challenges of implementing change in the context of health services.

Health professionals are at high risk for developing burnout symptoms. Directed at reducing the organisational variables affecting professionals’ burnout, an action research was developed in a specific sector of a large hospital, with 59 doctors, 66 nurses, and 42 auxiliary professionals. Action research (AR) differs from traditional empirical research in the sense that its focus is on researching with participants and not about participants; with the acquisition of knowledge from both researchers and participants as one of its key goal. Researchers conducted 11 interviews and one focus group and 20 hours of observation. The data was analysed by two researcher, using semantic segmentation of the corpus and a thematic analysis was performed (e.g., Braun & Clarke, 2006). The professionals describe the sector as technically excellent. In general, interpersonal relationships within professional groups are good, particularly within the nurses and young professionals (mostly interns and medical students). One of the most positive aspects of the sector is its potential in terms of scientific production (patients with complex situations and multiple pathologies) and teaching. However, data analysis also allowed to identify some issues considered as obstacles to effective functioning by the professionals. Professionals report demotivation and the need to address the emotional part of their job. Following the previous data systematisation, the project team defined three critical areas of intervention, each with specific broad suggestions: work organisation, teamwork and wellbeing. Nonetheless, the hierarchy blocked the proposed intervention possibilities. Organisational factors are unequivocally relevant, particularly in complex settings with emotionally charged interactions and the direct hierarchy is pivotal for facilitating organisational change. The direct hierarchy has a critical role in facilitating (or obstructing) organisational change and the consequent positive (or negative) spirals. Therefore, attempting to intervene directly with health professionals requires extra care in engaging the leadership and in making sure their intentions are aligned with the degree of change necessary to improve not only the quality of the care but also the wellbeing of professionals.
S90: Using Action Research to Address Burnout and Change Work Practices: Reflections on Success and Failure
Anthony Montgomery¹, Spanu Florin Spanu², Adriana Baban², Irina Todorova³, Roumiana Gotseva-Yordanova³, Yulia Panayotova³, Dragan Mijakoski⁴, Karolina Doulougeri⁵
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Action research (AR) differs from more traditional empirical research paradigms in that it conducts research with participants rather than on participants. The outcomes of action research involve both addressing significant organisational issues while advancing knowledge. At the most basic level, action research is about intervening in an ongoing system of relationships, to come between or among persons and groups for the purpose of helping them. AR represents a pragmatic tool for changing attitudes, beliefs and behaviors within healthcare. It comprises a useful methodological approach, able to facilitate changes within health care settings and support health service delivery development.

The arguments in favour of utilising action research (AR) as a way to deal with burnout are as follows. Firstly, AR has the ability to tap directly into the systemic issues involved in the organisation. Secondly, we can view burnout more dynamically via AR and understand the push-pull of its antecedents and consequences. Thirdly, it calibrates success in that it is driven by the individuals in the organisation and thus more likely to be feasible. Following from this, it has an evolutionary character whereby AR teams are more likely to identify small wins at the beginning which will galvanise efforts for the bigger problems.

In the following paper, the authors will report on the four parallel action research projects in four countries: Greece, Macedonia, Bulgaria and Romania. The authors will reflect on the process issues involved in using action research to address the work practices that maintain burnout. The paper will also reflect on the contextual issues of using AR in the south Eastern European region.

Symposium: Sickness Presenteeism: Practical and Theoretical Developments
Chair: Caroline Biron¹ & Maria Karanika-Murray²
¹Laval University, Quebec, Canada; ²Nottingham Trent University, Nottingham, United Kingdom

Context: Today, the definition of presenteeism that enjoys the most widespread support among researchers refers to “the phenomenon of people who, despite complaints and ill health that should prompt rest and absence from work, are still turning up at their jobs" (Aronsson and Gustafsson and Dallner, 2000, p. 503). Most studies on presenteeism have focused on its individual and organisational attendance pressure factors, and on its costs in terms of productivity losses and consequences on workers’ health. Indeed, presenteeism is widespread and costly to the population’s health and the economy.

Gaps in knowledge: However, presenteeism is also a poorly understood phenomenon with research into the topic criticised because it lacks a comprehensive and theoretical model of the possible relationships and mechanisms explaining presenteeism. Also, current views of presenteeism present it as always negative, which overlooks the possibility that presenteeism can serve as an adaptive behaviour by helping to balance health constraints and performance demands, especially in the case of benign non-contagious health problems (e.g., common health problems). Recent research suggests that although there are negative consequences to this behaviour, there are also positive attitudinal factors that can explain why workers show up at
work while ill. Being highly satisfied and engaged with one’s work, having a positive working environment and a meaningful work are examples of such positive antecedents. This current trend implies that presenteeism is no longer viewed as a strictly negative and costly behavior but as an adaptive and sense making one. This more positive view of presenteeism has been little explored in the current literature and consequently, there is little practical knowledge on how presenteeism can be managed or how presentees (workers who attend while ill) can be helped to return to work early and performance maintained.

Objectives and research questions: This symposium aims to resolve some of these issues and help advance a more cogent understanding of the phenomenon to promote both theoretical and practical advancements in this field. Four presentations will answer to the following research questions:

- How can presenteeism be viewed as a neutral behaviour aiming at balancing health and work performance and how do flexible work resources affect this balance?
- Can a person-centered approach be used to distinguish different profiles of presenteeism instead of viewing workers who attend ill as a homogeneous group?
- How do the functional benefits of, and optimal approach to managing, presenteeism vary depending on the health condition(s) causing it?
- What is the role of meaningfulness in the formation of attendance behaviour?

S91: Meaningful Work and Presenteeism: The Role of Meaningfulness in the Formation of Attendance Behaviour
Sascha Alexander Ruhle, Stefan Süß
Heinrich-Heine-University Düsseldorf, Düsseldorf, Germany

Evidence regarding the importance and formation of presenteeism—defined as attending work while ill—is steadily increasing. Not just because of its importance to employers, its costs outweigh those associated with absenteeism, but also because of its importance for employee’s health and productivity. Despite this growing interest, research on presenteeism has often been criticised as atheoretical (Johns 2010; Lohaus & Habermann 2018). More and more antecedences of presenteeism are identified. However, those are often considered as framework, in which a decision about absence and presence is formed. So far, research lacks a comprehensive and theoretical model of the possible relationships and mechanisms that link the various antecedences with the actual decision to show up despite illness. Consequently, an understanding of what processes might link those antecedents with the actual decision to show presenteeism or absenteeism are missing.

To reduce this gap, we propose that the perception of meaning at work, understood as the subjective interpretations of an individual’s work, work-related experiences and interactions in the context of work, functions as a central mechanism for choosing presenteeism over absenteeism in case of sickness. Drawing on research on the formation of meaning as well as the wide-ranging research on absenteeism and presenteeism, we analyse how the perception of meaning influences the decision between absence and presence.

First, we investigate the immediate connection between meaningfulness and presenteeism. We propose that a high level of meaningfulness can inspire employees to show presenteeism, particularly as empirical evidence has been found that meaningfulness reduces sickness absenteeism. Further, we discuss the possible indirect connections through attitudes and health, based on the dual-path model that was meta-analytically derived by Miraglia & Johns (2016). We discuss the relationship between meaningfulness and constraints on attendance, job demands, as well as job and personal resources and how they relate to health and attitudes, proposing that meaningfulness is an important mechanism that is positively associated with attitudes and health.
Further, we examine the possible role of meaningfulness for consequences of presenteeism (e.g., downstream of health). Therefore, we develop a comprehensive conceptual model that emphasises the role of meaningfulness in the formation of absenteeism and presenteeism. Finally, we debate theoretical implications and derive avenues for further research. Overall, we contribute to the literature on presenteeism by providing a theoretical model for the formation of attendance behaviour, which helps to understand how various antecedences lead to presenteeism. Further, we add to the literature on meaningfulness, as we illustrate that a strong feeling of meaningfulness might lead to negative consequences, by influencing individuals to choose presenteeism over absenteeism.

**S92: Preliminary Validation of a Taxonomy of Presenteeism Behaviour**

Caroline Biron¹, Maria Karanika-Murray²

¹Université Laval, Québec, Canada. ²Nottingham Trent University, Nottingham, United Kingdom

In this paper, presenteeism is viewed as a behaviour that is not inherently or necessarily negative in terms of its outcomes on individual health or performance or both. We suggest that under certain circumstances, presenteeism can be functional for health and performance. **Objectives:** This paper aims to provide preliminary validation of a taxonomy showing four possible groups of “presenteeists”: (1) functional presenteeism (that is beneficial for both health and performance), (2) therapeutic presenteeism (that is beneficial for health but not for performance), (3) overachieving presenteeism (that is beneficial for performance but not for health), and (4) dysfunctional presenteeism (that is deleterious for both health and performance). In addition to verifying the existence of quantitatively distinct profiles of employees who are ill and present at work, the paper aims to determine if there are differences in patterns of presenteeism, absenteeism, and exposure to psychosocial constraints among the 4 types of sickness presenters.

**Methods:** A total of 159 employees completed the ASSET (Cartwright & Cooper, 2002) questionnaire (125 at T1 and again nine months later (T2 = n=94) (response rate of 61% at Time 1 and of 48% at Time 2). Latent profile analysis (LPA) was used to derive presenteeism profiles that describe how mental health, and work performance are associated with presenteeism among specific subgroups of a sample who declared working while ill.

**Results:** As predicted, four classes of sickness presentees were found. Class 1 comprised 44% of the sample and represented sickness presenters with and average health with average performance indicators. This class should have been labelled as "Therapeutic presenteeism", but this implies a relatively good health and poor performance indicators. However, there was no one in our sample who fitted this description. Class 2 composed 14% of the sample and was termed “Dysfunctional presenteeism”. Class 3 included 25% of the sample and comprised individuals with a significantly poorer health, but who manage to maintain somehow a relatively good (average) performance. Participants in this category were referred to as “Overachieving presenteeism” given that manage to maintain their performance level relatively high, but they do so at the expense of their own health. Class 4 composed 17% of the sample and was termed “Functional presenteeism”. Although individuals doing Dysfunctional presenteeism reported higher scores of both absenteeism (4.5 days) and presenteeism (17 days), there were no significant differences among the each of the classes in terms absenteeism and presenteeism number of days. However, marked differences between Functional and Dysfunctional profiles were found in terms of exposure to psychosocial constraints.

**Discussion:** By going beyond presenteeism as a monolithic construct and presentees as a homogeneous group, this taxonomy offers a more refined understanding and new perspectives for research and the management of presenteeism. In terms of practical implications, our taxonomy can be used to develop resources for supporting functional and for achieving a better balance between (ill-health) and performance.
S93: Sickness Presenteeism in a UK sample: An Exploration of Differences According to Health Condition and Measurement Approach
Zara Whysall
Nottingham Trent University, Nottingham, United Kingdom

The substitution hypothesis (Caverley et al., 2007) posits that employees typically use sickness presenteeism (SP) as a substitute for sickness absenteeism (SA). However, other evidence identifies the two outcomes as positively correlated, suggesting instead that when unwell employees tend to engage in both SA and SP (Leineweber et al., 2012). Leineweber et al further argue that pattern of SA/SP is likely to differ depending on the health condition. This contrasts with the substitution hypothesis, according to which the nature and severity of ailments observed under SA and SP are expected to be substantially similar (Caverley et al., 2007).

Since work can be restorative to health, attending work when unwell should not be viewed as an inherently negative phenomenon, as argued by Karanika-Murray et al (2015) and Miraglia and Johns (2016). However, the functional benefits of, and optimal approach to managing, SP will vary depending on the health condition(s) causing it. Consequently, an understanding of the patterns of SP and SA adopted by individuals according to the health condition experienced is needed, in order to advance our understanding of SP.

Measurement issues are also highlighted as a significant limitation in SP research (Johns, 2010). Studies typically assess either the act of SP (i.e., number of days attending work when unwell) or its impact on work performance. Furthermore, as emphasised by Cooper and Dewe (2008), ‘most of the presenteeism research comes from the USA, Canada and Australia with little published UK data to draw on.’ (p.523). The author will share data from a study which: (1) assessed the extent and impact of SP in a UK sample via two different methods used separately in current research (i.e. the number of days attending work despite being unwell and the extent of its impact on work performance), enabling comparison of SP and associated lost productivity cost estimates generated; (2) explore differences in the pattern of presenteeism and absenteeism by health condition, and their interaction to predict health.

The data, obtained using a workforce survey, indicate that instead of substituting absenteeism for presenteeism, the two tend to coincide, but the balance of SA/SP differs significantly by health condition, revealing some important contrasts with important implications for the management of SP. Assessment of the act of SP identified it as significantly more common than SP, equating to a lost productivity cost of £659.61 GBP per person per annum (assuming zero productivity on presenteeism days), compared to £293.63 for SA. However, when assessed in terms of its impact on productivity, SP was associated with a mean lost productivity cost of £4,058.93 GBP per person. This reinforces the importance recognising the difference between the act and impact of presenteeism, as argued by Johns (2010), and of developing new, more reliable approaches to measuring SP which take into account both duration and impact on performance.

S94: A Taxonomy of Presenteeism Behaviour: Balancing Health and Performance Demands
Maria Karanika-Murray¹, Caroline Biron²
¹Nottingham Trent University, Nottingham, United Kingdom. ²Université Laval, Québec, Canada

Research into presenteeism, or attending work whilst one is unwell has relied on viewing presenteeism as a negative and costly behaviour. Presenteeism is widespread, costly to population health and the economy, and also a poorly understood phenomenon. This view of presenteeism as always negative overlooks the possibility that presenteeism can serve as an adaptive behaviour. Specifically, it can help presentees to balance health constraints and
performance demands, especially in the case of benign non-contagious health problems (e.g., common health problems). We advance a view of presenteeism as a behaviour that is not inherently or necessarily negative in terms of its outcomes on individual health or performance or both. We suggest that under certain circumstances, presenteeism can be functional for health and performance, examine the empirical evidence, and develop a taxonomy of four types of presenteeism (i.e., functional, therapeutic, overachieving, and dysfunctional) and, correspondingly, presentees. We argue that the type of presenteeism enacted will depend on the individual’s capabilities afforded by the health condition and the available work resources. Presenteeism can thus be a sustainable choice for maintaining performance whilst supporting health under impaired capacity. Decomposing presenteeism into health and performance presents a more cogent understanding of the phenomena and can enable us to develop resources and effective attendance management practices to support functional presenteeism and to achieve a balance between (ill-)health and performance.

Symposium: Rapid Changes in Today’s Workplace: Risks and Challenges for Workers’ Health
Chair: Bettina Kubicek & Roman Prem
*University of Applied Sciences Upper Austria, Hagenberg, Austria*

Discussant: Daantje Derks
*Erasmus University Rotterdam, Rotterdam, Netherlands*

Today’s world of work is characterised by rapid changes that pose risks and challenges for workers’ physical and mental health. Increasing competitiveness on global markets oftentimes drives companies to increase pressure on their workforce in an attempt to increase productivity. Work intensification requires employees to put more effort into their work and thus might pose a risk for workers’ health. Another response of companies to stay competitive in fast changing environments is to decentralise control and organise work more flexibly. Flexible work arrangements give employees the freedom to decide how, with whom, as well as when and where they work. These freedoms may also go along with cognitive demands that require employees to structure their work tasks, coordinate with colleagues, and plan their working times and work places. Such cognitive demands could bear both risks and challenges as they may trigger both, strain and learning processes. Finally, modern information and communication technology may blur the boundaries between work and leisure time and thus require employees to cope with additional demands in order to stay healthy.

The first paper in this symposium (Kerman, Tement et al.) investigates the relationships of work intensification with depression and cardiovascular health risks and shows that rumination may act as a moderator because it prolongs stress responses. The second paper (Prem, Kubicek et al.) develops a new scale to measure the cognitive demands of flexible work, which is then used in the third paper (Uhlig et al.) to show that in flexible work arrangements structuring, coordinating, and planning triggers both strain and learning processes. The fourth paper (Gombert et al.) investigates daily consequences of work-related smartphone use for employees’ regulatory resources from a self-control perspective and shows that work-related smartphone use during non-work time intensifies the strenuous effects of job stressors on the next working day. Finally, the fifth paper (Tement & Kerman) uses a person-centred approach and finds that different work-home boundary management profiles differ in their cardiac health status.

Overall, the selected studies show that the rapid changes in today’s workplace go along with new demands that pose risks and challenges for workers physical and mental health. The results of the studies as well as implications for future research and practice will be discussed by our discussant (Daantje Derks, Erasmus University Rotterdam).
Cumulative evidence from large representative samples suggests that work has intensified over the past years in many European countries (EWCS, 2015; Kubicek et. al., 2014). Work has to be carried out at a faster pace, and employees often feel that they do not have enough time to get their work done. In general, high levels of work demands have been associated with increased stress and poor health outcomes, such as physical complaints (Franke, 2015) and heart disease (Holterman et. al., 2010). More specifically, work intensification and other acceleration-related work demands were found to be related to decreased wellbeing (Kubicek et al., 2015). A crucial question, however, remains whether work intensification is also associated with physical health outcomes.

Drawing on the allostatic load model as the primary pathogenic pathway (Brosschot et al., 2006; Ganster & Rosen, 2013) we explore perseverative cognition as a potential mechanism that links intensified job demands to negative health outcomes via prolonging activation and stress response (Brosschot et al., 2006). We assume that work intensification is associated with poor psychological and physical health and that this relationship is mediated through work-related rumination, for both physical and psychological health.

We tested our assumptions on a cross-sectional heterogeneous sample of 289 Slovenian employees, coming for a routine health checkup. Self-report data on job demands and psychological health was collected as well as objective health data. The Intensification of Job Demands Scale was used to assess work intensification (Kubicek et al., 2015), the Centre for Epidemiologic Studies Depression Revised Scale was used to assess depression (Björgvinsson et al., 2013), and The Negative and Positive Work Rumination Scale was used to assess negative work-related perseverative cognition during off-job time (Frone, 2015). Objective health and body measurements (e.g., BMI, systolic blood pressure, blood glucose) were used to calculate the Framingham Risk Score, an indicator of cardiovascular risk (D'Agostino et al., 2008).

Our analyses revealed no total effects of work intensification on depression or Framingham risk score. However, the indirect effects via work-related rumination were statistically significant for depression and the Framingham risk score. Based on our findings, we conclude that work-related rumination is an important pathway, through which intensified job demands relate to depression and cardiovascular risk. Since work-related rumination enables perseverative cognition about work in off-job time it may also activate prolonged stress response, enabling negative health outcomes, both psychological as well as physical. Strengths (inclusion of objective health data) and limitations (cross-sectional design) of the study will be discussed.
individual, who personally takes responsibility for his/her work (Allvin, Aronsson, Hagström, Johansson, & Lundberg, 2011). Although this flexible way of organising work benefits employers and workers as it increases effectiveness and quality of life (Gajendran & Harrison, 2007), it also poses demands on workers to coordinate their work (Allvin et al., 2011; Hellgren, Sverke & Näswall, 2008; Kubicek, Paškvan, & Korunka, 2015).

The goal of the present study was to develop an instrument that measures different facets of cognitive demands that arise in flexible work arrangements. We assumed that, when working more flexibly, employees will be required to put more effort in structuring their work tasks, coordinating with others, and planning both, when and where to work. For example, employees working in a highly flexible work team will oftentimes have to decide when and how to perform their tasks without consulting with their supervisor (structuring of work tasks) and they will have to agree with colleagues on procedures and responsibilities (coordinating with others). Further, they will have to plan ahead when to start and end their workdays in accordance with their business meetings (planning of working time) and plan which tasks they perform in the office, at home, or on-the-go (planning of workplace).

We developed several items for each of these four facets and tested our four subscales using an online sample of 303 German employees from various occupational backgrounds working at least 30 hours per week. We selected five items per subscale that showed excellent reliabilities (Cronbach’s Alphas > .90) as well as a good fit in confirmatory factor analysis (CFI = .95, TLI = .94, SRMR = .05). As expected, the subscales were moderately correlated with other cognitive demands like problem solving (.27 < r < .38) and information processing (.09 < r < .44). All subscales also showed positive correlations with work engagement (.13 < r < .32), but, in contrast to our expectations, there were no significant positive correlations with emotional exhaustion (-.15 < r < .03).

In summary, the results provide initial evidence for a good reliability and construct validity of our measures of cognitive demands of flexible work. They also indicate that demands requiring employees to structure, coordinate, and plan their work do not necessarily result in higher levels of emotional exhaustion but might foster employees’ work engagement.

S97: The Challenge of Flexibility – An Investigation into Learning Processes and Strain Reactions Resulting from Cognitive Demands of Flexible Work
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With the rising flexibility in work organization, employees are facing new demands to plan, structure and coordinate their work themselves (Allvin, Aronsson, Hagström, Johansson, & Lundberg, 2011). These cognitive demands of flexible work could be ambivalent in their nature: on the one hand, the psychophysiological activation due to coping with cognitive demands of flexible work might hamper the detachment of employees and in consequence increase strain (Sonnentag & Fritz, 2015). On the other hand, cognitive demands of flexible work might trigger learning processes and increase cognitive flexibility which in turn could benefit the performance of employees (Kohn & Schooler, 1983; Frese & Zapf, 1994).

To examine these effects we are currently conducting a longitudinal study over three waves in a big Austrian company (N = 550). We used a newly developed scale measuring cognitive demands of flexible work which compromises 4 facets: structuring, coordinating and planning of working time and workplace (see the contribution to this symposium by Prem et al., 2018). Results from T1 support our hypotheses for all facets except for planning of working time.
Cognitive demands of flexible work show an indirect positive association with fatigue via lower detachment. Further, cognitive demands of flexible work are indirectly related to performance via cognitive flexibility. Data collection of T2 and T3 will be finished by July 2018 and the results will be presented at the conference.

It has often been proposed (e.g., ter Hoeven & van Zoonen, 2015) that higher flexibility of work organization could be linked to both positive and negative consequences in employees. Our results confirm such ambivalent effects and uncover the underlying psychological processes that link cognitive demands of flexible work to strain and performance. Thus, our findings suggest that cognitive demands of flexible work can be seen as challenge stressors (LePine, Podsakoff, & LePine, 2005).

S98: The Daily Consequences of Work-Related Smartphone Use for Employees’ Regulatory Resources: A Self-Control Perspective
Lilian Gombert
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Previous research indicates that work-related smartphone use in the evening can impair employees’ psychological wellbeing (e.g., Derks & Bakker, 2014). In order to shed further light on potential underlying mechanisms, the current study examines the adverse consequences of daily work-related smartphone use from the perspective of self-control. Drawing on the Limited Strength Model of Self-Control (Muraven & Baumeister, 2000), which states that the exertion of self-control depletes limited regulatory resources, we first examine the daily relationship between self-control demands at work and need for recovery (as an indicator of resource depletion) after work. Arguing that work-related smartphone use may deplete the same regulatory resource and integrating initial evidence that depletion effects can spill over to the next day (Lanaj, Johnson, & Barnes, 2014), we additionally propose lagged effects of work-related smartphone use during non-work time on next-day need for recovery after work. Moreover, we suggest strengthening interaction effects between work-related smartphone use during non-work time and next-day self-control demands at work on next-day need for recovery after work. Furthermore, we consider the potential strengthening of these effects by day-to-day variations in resource depletion. Our findings thus support the idea that work-related smartphone use depletes employees’ regulatory resources similar to other demands on self-control and provide further evidence for the persistence of resource depletion across days.

S99: Don’t Leave your Heart at Work: Work-home Boundary Management and Cardiac Health
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Nowadays, workers can increasingly work anywhere anytime. Such boundaryless work entails the notion of working at various times and various settings but also one's psychological involvement in work during off-job time. Although much is known about potential consequences of poor work-home boundary management for employee’s wellbeing, it is not clear to what extent being psychologically and behaviorally involved in work during off-job time is linked to health. In fact, EU-OSHA (2015) explicitly stressed that research is needed on the impact of new work realities on health and identified the investigation of "how new working patterns and different
types of flexibility, as well as implementation of new technologies, affect work–life balance and, consequently, health” (p. 29) as a research priority. Responding to this call, the present research strives to advance the literature by examining differences in (cardiac) health between profiles of work–home boundary management.

In line with previous theories, we proposed that three potentially distinct aspects of boundary management may constitute unique profiles of boundary management. One’s cognitive and emotional involvement in work during off-job time (over-commitment to work), one’s behavioral involvement (cross-role interruption behaviors) and one’s costs associated with one’s excessive involvement in work (strain-based work-to-family conflict). Moreover, we examined differences between these profiles in (cardiac) health. Our assumptions were tested in a study based on 300 employees from a wide range of occupations. Psychological and health measurement were taken during their routine health check-up in one of Slovenia’s health care centers. Cardiovascular risk was assessed using different clinical (e.g., blood pressure), anthropometric (e.g., weight, height) and laboratory (e.g., blood and urine samples) measurements. We adopted a person-centered approach using latent profiles analysis to identify the profiles. Preliminary results have shown four distinct profiles of boundary management. Interestingly, the largest group exhibits employees who exhibited moderately high work-to-family conflict, high over-commitment and cross-role interruption behaviors. Other groups showed less involvement in work during off-job time with fewer costs. Initial results provide support for significant (cardiac) health status differences between groups in the expected direction (e.g., highest total cholesterol level in the high work involved profile). Moreover, several job characteristics (e.g., leadership position) and demographic factors (e.g., marital status) differentiated profile membership.

In sum, these findings provide some support for poorer health status among employees who exhibit greater involvement in work during off-job time. Although the study is not without limitations (e.g., cross-sectional design), it is one of the few relying on objective health data. It also extends the previous literature by focusing on actual behavioral involvement in work during off-job time (not only of mental detachment from work). As such it provides new insights on how the boundaryless work context shapes health and turns attention to what is fundamentally important for a sustainable workforce from a management and IO psychologist's perspective – i.e., healthy employees.

Symposium: ‘Deconstructing Recovery: Why, How, and When It Occurs’ (Part I)
Chair: ¹Ana Sanz-Vergel & ²Despoina Xanthopoulou
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Recovery from work-related demands refers to a restorative process through which psychological and physiological systems that have been activated during work, return to a pre-stressor level. Successful recovery is crucial to stay healthy and functional. The area of Occupational Health Psychology has paid attention to this important process over the last 20 years, but experts in the field recognise that there is still much more to learn about why, how, and when this process occurs (Sonnentag et al., 2017). For instance, there is plenty of empirical evidence on the role of job demands for external recovery, as well as on the beneficial outcomes of recovery for employee wellbeing and performance. However, the characteristics of non-standard work arrangements and work breaks for recovery remain unclear, while most studies do not capture the mechanisms that explain the full recovery process from work to home, since they either focus on the one or the other domain. Finally, empirical evidence on the outcomes of recovery relies heavily on subjective wellbeing and self-rated performance. In this first part of the symposium, we focus on the predictors and outcomes of internal and external recovery with special emphasis on unique working conditions, mediating mechanisms, and outcomes for employee cognitive functioning.
In the first study, Geurts and colleagues analyse the experiences of on-call work through two studies. They investigate the aspects of on-call work (e.g., unpredictability) that are detrimental for employee recovery, while they also compare recovery during on-call periods to recovery during off-call periods and the role of employees’ experiences in the relationship between on-call work and fatigue. In the second study, Rodríguez-Muñoz and colleagues present a diary study among employees and their colleagues in an attempt to capture the full process from work to home. They demonstrate that colleagues’ daily mindfulness at work relates to employees’ daily relaxation at home via positive affect, while relaxation also mediates the relationship between positive affect and organisational citizenship behaviour the next day. In the third study, Xanthopoulou and Perrigino investigate the role of abusive supervision for employees’ daily work-related wellbeing (i.e., exhaustion and work engagement) and consequently the recovery process (i.e., need for recovery and negative work-reflection after work), while considering the mediating mechanisms of illegitimate tasks in this process. They show that abusive supervision relates to lower need for recovery and consequently to higher negative work-reflection during leisure indirectly through eliciting illegitimate tasks. Finally, Cropley and Collis extend these latter findings by focusing on the impact of work-related rumination for employees’ executive functions. Their results suggest that ruminators demonstrate poorer levels of executive functions and especially behavioral regulation and the metacognition. These results contribute to the literature by highlighting important antecedents, mediating mechanisms and outcomes that explain internal and external recovery.

S100: Recovery and Wellbeing of On-call Workers
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Although non-standard work arrangements are becoming increasingly common, the impact on employee wellbeing received only limited research attention in recent years. We will discuss two studies on recovery and wellbeing of on-call workers. On-call work refers to work done on an ‘as needed basis’ meaning that employees must be available at certain times to be called to work if required. Typically, this form of scheduling is used to provide 24 hour service, where emergencies can occur that need to be immediately dealt with, such as medical personnel, firefighters, and information technologists.

The aim of Study 1 was to find out to what extent objective characteristics of on-call work (i.e. prevalence of on-call shifts, amount of calls per shift, and duration of calls), experiences of on-call work (i.e., satisfaction with compensation, stress due to unpredictability, restrictions due to being on-call, and high demands while being on-call), and recovery experiences during ‘leisure time’ while being on-call (i.e., psychological detachment, relaxation, and control over ‘leisure time’ while being on-call) were related to wellbeing (i.e., health, fatigue and sleep). Over two thousand Dutch on-call workers filled out an online questionnaire. Results of hierarchical regression analyses revealed that negative experiences of on-call work (particularly the experience of stress due to unpredictability) were associated with lower wellbeing and with more difficulty to relax and detach from work during ‘leisure time’ while being on-call. Objective characteristics of on-call work, though obviously related to on-call experiences, were not uniquely related to wellbeing.

The aim of Study 2 was to compare fatigue during an on-call and an off-call period and to study the role of recovery experiences (i.e. detachment, relaxation, and time control) in the relationship between on-call work and fatigue. We collected data from 105 on-call workers who filled in short diary questionnaires twice a day (mornings and evenings) during 6 consecutive days in an on-call period (participants worked during working days, and were on-call in-between these days
and during 24 hours in the weekend) and in a normal workweek (no on-call obligations and a full weekend off). Preliminary results of multilevel analyses (MPlus) showed that fatigue was significantly higher during the on-call period as compared to the off-call period. Furthermore, on-call workers reported lower psychological detachment, lower relaxation and lower control over ‘leisure time’ during on-call periods as compared to true leisure time in a normal workweek. The unfavorable relation between being on-call and fatigue appeared to be fully mediated by the experience of poor relaxation during ‘leisure time’ while being on-call. To conclude, wellbeing of on-call workers is jeopardised by stress due to unpredictability of the calls, by difficulties to relax and detach from work while being on-call, and by lack of control over how to spend ‘leisure time’ while being on-call.

S101: The Positive Spirals Between Domains and Work Colleagues: The Role of Relaxation
Alfredo Rodríguez-Muñoz, Gerardo Montes-Maroto, Mirko Antino, Paula Ruiz-Zorrilla
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Although extant research has offered valuable insights about the benefits of recovery from work (e.g., Sonnentag et al., 2017), its role on the interpersonal crossover of wellbeing is still developing (e.g., Hahn & Dormann, 2013). Similarly, very little is known about the role of recovery on the short-term cross-lagged spillover between domains of positive experiences. This multi-source daily diary study examines the association between a work colleague’s mindfulness at work and the employee’s wellbeing and performance in different contexts. Moreover, we explore the effect of relaxation on next day organisational citizenship behaviors.

A sample of 63 couples of coworkers filled in quantitative web-based reports during five consecutive working days twice a day (N = 629 occasions). The mean age of the participants was 39.7 years (SD = 10.99), and 70.5% of them were women. Almost half of participants (46.8%) had children, and 76.0% of the sample had a university degree or postgraduate studies. The average number of hours worked per week was 35.7 hours (SD = 13.1). To test the hypotheses, we conducted multilevel modeling using the MLwiN software and followed the actor–partner interdependence model (APIM).

Multilevel analysis showed that colleague’s daily mindfulness at work was positively related to employee’s daily relaxation at home, an association partially mediated by the employee’s daily positive affect at work. We also found that on days when the employee experienced higher positive affect at work, the next day he/she engaged in more organisational citizenship behaviors (colleague-reported). This relationship that was partially mediated by the previous day’s relaxation at home. Our results show the key role of relaxation, but no detachment, on the interpersonal transmission of the positive effects of mindfulness between work colleagues. Moreover, our study expands existing research on recovery, by showing how relaxation is a relevant mechanism for the transmission of positive states from home to work.

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Abusive supervision is the extent to which subordinates perceive their supervisors as engaging in verbal or non-verbal hostile behaviors (Tepper, 2000). Research shows that abusive supervision acts as a job demand, creating various forms of strain for employees. However, the way through which abusive supervision affects employees’ daily functioning at work and after
work is rather unexplored. The aim of this study was to investigate how abusive supervision relates to employee daily work-related wellbeing (exhaustion and work engagement) and consequently, the recovery process during off-job time. We position abusive supervision as a distal antecedent, which can generate daily work-related demands in the form of illegitimate tasks (i.e., unnecessary and unreasonable tasks) that relate positively to exhaustion and negatively to work engagement during the workday. In turn, we hypothesize that daily exhaustion will relate to high levels of need for recovery at the end of the day that is likely to elicit negative work-related reflection during leisure time. In contrast, we argue that daily work engagement will associate with low levels of need of recovery at the end of the day that is likely to prohibit negative work-related reflection during leisure.

A total of 35 employees completed a general survey and a daily diary at the end of the day for five consecutive working days. Data were analyzed with multi-level analysis. Preliminary analyses showed that abusive supervision related positively to daily unnecessary and unreasonable tasks. However, only unreasonable tasks related to daily exhaustion (positively) and work engagement (negatively). Furthermore, daily unreasonable tasks related indirectly to need for recovery via higher exhaustion and lower work engagement. Exhaustion related positively to negative work-reflection after work via high need for recovery, while work engagement related negatively to negative work-reflection via low need for recovery. Finally, unnecessary tasks related directly and positively to need for recovery, and consequently to negative work-reflection during leisure.

This study uncovered psychological mechanisms through which (perceptions) of abusive supervision inhibit the daily recovery process. Our study reveals the role of illegitimate tasks as a central explanatory mechanism in this relationship. Abusive supervision elicits both unnecessary and unrealistic tasks, but these types of illegitimate tasks explain recovery through different processes. Unnecessary tasks have a direct positive relationship with need for recovery, while unrealistic tasks hamper the recovery process because they exhaust and demotivate employees. The reliance on self-report data is a limitation of this study. The study highlights the importance of considering the cost of abusive supervision not only for employees functioning at work, but also after work is done.

S103: Is Work-related Rumination Associated with deficits in Executive Function Skills?
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Work-related rumination, that is, perseverative thinking about work during leisure time, has been associated with a range of negative health and wellbeing issues, but little is known about the underlying mechanisms. It has previously been reported that work-related rumination is associated with deficits in executive function skills (Cropley et al., 2007). Executive function is an umbrella term for high level cognitive processes such as planning, working memory, inhibition, mental flexibility; and it underlies how people manage and regulate their goal directed behaviours. High executive function skills are essential in the workplace and deficits in any area of executive function can make it particularly difficult for workers to perform and complete tasks that require high level mental control. Previous research examining the association between executive function and work-related rumination was limited as only proxy measures of executive function were utilized. In the present paper we advance, and build on the previous study by Cropley et al. (2016) and investigate the role of work-related rumination on executive function utilizing a more valid measure of executive function, namely the BRIEF-A. It was predicted that relative to low ruminators, high ruminators will show poor overall executive function skills but also demonstrate poorer executive function in the Behavioral Regulation and the Metacognition index subscales.
One-hundred and four participants recruited from sales and recruitment background completed a measure of Work-Related Rumination. Workers classified as low (n = 28) or high ruminators (n = 35), were interviewed using the Behavior Rating Inventory of Executive Function – Adult version (BRIEF-A, Roth, Isquith & Gioia, 2005).

The affective rumination subscale of the Work Related Rumination Questionnaire (WRRQ) (Cropley et al., 2012) was used to determine individuals' levels of affective WRR. Those who scored 12 or less were categorised as a low ruminator, and 16 or more were categorised as a high ruminator.

The Behavior Rating Inventory of Executive Function - Adult Version (BRIEF-A) was used to assess levels of EF (Roth, Isquith & Gioia, 2005). This measure produces 9 subscales and 3 hierarchical scales (Behavioural Regulation Index [BRI], Metacognition Index [MI] and Global Executive Composite [GEC]). Cronbach's alpha reliability score was .95.

High ruminators were found to demonstrate significantly poorer levels of executive function in comparison to low ruminators, for Behavioral, Metacognition and Global Composite executive function (p < 0.001), and for eight of the nine sub-scales. Self-monitoring was the only sub-scale that did not reveal a significant difference between the groups. These results were not influenced by gender or age.

To our knowledge this was the first study to examine the association between work-related rumination and executive functioning using a validated measure. Such findings are important for the design and delivery of intervention programmes aimed at helping people to switch off and unwind from work.

Symposium: Age and Work Activity: Building Health and Experience Over Time
Chair: ¹Sara Ramos & ²Serge Volkoff
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In this symposium, we aim to present the perspective and the research of a specific European tradition of work psychology, resultant from the meeting between work psychology and ergonomics. The main specificity of this tradition is the crucial role of the “activity”. Activity is a complex and multidimensional concept that refers to the human activity at work, real, concrete, singular and diverse, and permanently constructed by the worker. The activity requires from the worker, a systematic use of himself, managing knowledge, competences, working conditions, relationship with others, rules, etc... with consequences from his health and wellbeing.

The emphasis on the human activity explains the distinctive methodological trends of this tradition, namely the articulation between quantitative and qualitative data, the ergonomic analyses of activity, the importance of workers' perspective, and, of course, the importance of the “field” in the research approach. Also, this focus on activity lead us to consider the worker at the center of our perspective, not as “human factor” but as the main actor of the system, (re)defining the activity and always changing it and himself across the time.

In this sense, we propose to present different communications that can exemplify how this perspective has been developing, specifically on the study of health. The communications of this symposium will generally focus on ageing and how work can differently affect health over time, including processes of growing and weakening, recognising the importance of individual and collective contexts to health preservation, using mixed methods but always with a central role of the worker’s perspective.
In more detail, presentations will cover the following themes: health and competences across the professional path, putting some light in the relationship between working conditions and the development of competences of workers in order to maintain their health across the ageing process; the importance of the collective and of knowledge and experience transmission for health promotion at work, stressing the importance of organisational conditions; the combined effects of working conditions on health among workers that are exposed to several risk factors; a presentation of the presuppositions which underlie the methods of collective intervention on psychic suffering at work in the field of Psychodynamics of work; and an example of diagnosis in a particular company focused on health complaints, experience and working conditions.

S104: Work and Action in Psychodynamics of Work
Duarte Rolo
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Psychodynamics of work occupies a singular place within the disciplinary current of psychology of work. Resulting from a meeting between ergonomics of activity and psychoanalysis, it has gradually built a body of knowledge and methods of intervention of its own.

This conception stands out by the central role it confers to the work experience in the construction of identity and the maintaining or degradation of mental health. Indeed, in addition to physical damage due to occupational hazard (well documented by occupational medicine, industrial toxicology, etc.), work can also produce psychological damages. The increase in mental health problems and suffering in the workplace testifies to this. The emergence and multiplication of workplace harassment situations, burnout, depressions and suicides in the workplace are today at the origin of many requests for intervention.

The psychodynamics of work focuses precisely on psychic issues related to work. It shows that the dynamic relationship between the individual psychic functioning and the organization of work is never neutral: it can either lead to pleasure and self-fulfillment, or to suffering and pathology. The fate of this confrontation is determined both by the individual and collective defense arrangements put in place by the workers and by the organisation of work. Unlike other approaches in the field of work psychology, the psychodynamics of work does not consider man and work as two entities separated by an impervious frontier. To understand the appearance of psychic suffering, or even its aggravation in the form of illness, it is essential to analyse the way in which work permeates psychic functioning, going so far as to alter it profoundly. In the same way, the subject intervenes on the organisation of work to make it congruent. The latter cannot be conceived of as a set of impositions or immutable procedures, which would remain purely external to human action. These are always interpreted, modified and subverted by operators, as ergonomics has long shown.

The analysis of the relationship between psychic suffering and work organisation (which I will detail in the first part of this paper) has led to the invention of specific methods of intervention in workplaces. Inspired in part by the techniques of ergonomics, the inquiry in psychodynamics of work is nonetheless singular. The role and the action of the interveners is conceived differently because they do not formulate recommendations nor initiate technical reforms. They act mainly as guarantors of a methodological framework that allows to re-establish a collective discussion about work and its difficulties. The concrete transformation of work situations is ultimately left to the care of the workers and managers of the company.
In the rest of this paper, I will detail the different stages of an intervention in work psychodynamics, on the one hand; and explain the reasons for these methodological choices, in regards to preventing mental health at work, on the other hand.

**S105: The Circulation of Knowledge within Work Collectives: Challenges for Performance and Health in the Face of Changes in the Workplace**

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**Main objective:** This communication will focus on the “constructive” dimension of the work activity (i.e. on the development of individual and collective skills) which makes it possible to articulate occupational health issues and meet production requirements (Delgoulet & Vidal-Gomel, 2015). It echoes work carried out on a national sample showing the statistical links, most often negative, between exposure to changes in or at work and the health of French employees (Wolff et al., 2015).

**Empirical basis:** The analyses presented are based on four ergonomics research projects carried out in France in different professional sectors in evolution: nursing staff in the hospital sector (Thébault, 2018), payroll management and facility maintenance agents in a large railway company (Delgoulet et al., 2013), event assemblers, and horticulturists in plant nurseries (Zara-Meylan, 2014). We examined the constructive dimension of the activity on the one hand in situations without a formal formative aim, where the organisation only targets the immediate productive dimension (event and horticulture), and on the other hand in situations where a formative aim is recognised but not necessarily prioritised in the objectives set, such as on-the-job training and tutoring (hospital, railway enterprise).

**Main results:** Through a cross-reading of the lessons learned from these four research projects, this contribution will show the important role played by work collectives in managing phases of change through the circulation of knowledge and experience among colleagues of different ages and seniority. It will show that this process is strongly influenced by the organisational and temporal conditions in which work collectives are formed and evolve as the changes unfold. In conditions favorable to the development of this process, where the work collective has been able to build or maintain itself, and influence the evolutions of work, exchanges between “old” and “new” colleagues exist, and the collective can provide support for the renewal and circulation of knowledge operating in the situations encountered. This knowledge, which is both an object and a product of exchanges, can contribute to the construction of new skills, but also to the evolution of older skills, sometimes necessary in a context of change. However, in contexts where the work collective is scrambled, where it has not been able to build and develop, the circulation of knowledge is hampered, and the weakened collective can no longer constitute a support for the construction of individual and collective skills, leaving each individual powerless to project oneself at the changes announced or initiated.

**Discussion:** The resulting difficulties or opportunities for individuals, work collectives and the organisation are examined in terms of the possibility of developing “efficient know-how”, with reference here to know-how that makes it possible to take into account the challenges of performance (productivity, quality, reliability) and health issues (increased fatigue, wear and tear, occupational risks, etc.) in action.
S106: Working Conditions and Health Complaints in Urban Refuse Collection: The Role of Experience
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The growing attention given to Occupational Health and Safety (OHS) has contributed to the general decline of work accidents in the most part of European countries in last century (Hofmann, Burke, & Zohar, 2017). Despite that, according to Portuguese official data (MTSSS, 2016; Eurostat, 2016), accompanying the economic recovery, we witnessed a slight increase of accidents incidence rate (4.415 in 2013, 4.523 in 2014 and 4.582 in 2015). This corresponds to a total of 5.459.744 (in 2015) lost working days, not considering the lost working days due to work-related diseases. For that reason, OHS is a huge concern for organizations, with strong impacts on costs, productivity or turnover (Malek, El-Safty, El-Safety, & Sorce, 2010); and for workers, in their quality of life (Keogh, Nuwayhid, Gordon, & Gucer, 2000), in their social interaction (Strunin & Boden, 2004), and also in their financial stability (Lawrence, Paustian-Underdahl, & Halbesleben, 2013) and work ability. This proposal describes an action-research, based on a demand from a specific organization (a public company of urban refuse collection and other municipality services) with a high rate of work-related accidents and health complaints, which aims to understand the factors that can explain this situation. Following the theoretical background of work psychology and ergonomics, we designed a mixed method approach centred on workers' activity (Béguin, 2006; Schwartz, 2005), to investigate the demands, constraints and risk factors that characterize this work situation. The methodology includes documental analysis, observation, individual interviews and a questionnaire, giving special emphasis to the diversity of “ways of doing” the activity among different workers, teams and waste collection modes. Data analysis is currently being conducted, through qualitative (content analysis) and quantitative techniques. Preliminary findings indicate some interesting differences associated with the specific activity of workers – drivers and collectors – showing that it has implications on the type of risk exposure, nature of accidents, and health complaints. Also, results show that workers’ experience seems to influence the way of performing the activity, highlighting the development of health protection strategies over time.

S107: Health and Competences along Professional Career
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Our purpose here is to show how to incorporate an approach of work activity in analyses linking health and competences with a long term perspective. This implies to build bridges between: the disciplines which call on “here and now” observations of activity (work psychology, ergonomics…) ; and those which allow to study the determinants of health and the development of competences along professional careers (mainly demographics and epidemiology). We shall, therefore, present and comment, at the beginning of our paper, an analytical model which encourages unfolding the relationship between work and health along the course of life, including the role of work activity as a possible regulator of various mechanisms (Volkoff & Gaudart, 2015).

Relying on this model we shall then briefly present, as an example, a recent research about the genesis of musculoskeletal diseases in an aircraft building factory (Buchmann et al., 2009). In that research, qualitative and quantitative approaches (the latter being drawn from an observatory of health at work, built and managed by job physicians) have been carried out together, in order to examine:

- The “marks” of past working conditions on health, more or less repeated exposures to hard physical constraints; or to forms of work intensification, the influence of which
can be evaluated and interpreted taking into account work constraints at various moments in the past.

- « Selection effects » along professional careers because of health problems, depending on the cases, onset of pains may (or not) prevent from continuing in the same profession; and may (or not) be anticipated in order to prepare retraining towards less demanding workstations. Actually these cases of retraining are not numerous, qualitative analyses of these attempts show that the competences in both “initial” and “final” workstations are rather specific, which hinders the reallocation.
- The « regulations » that work activity allows (or not) to realize, at each stage of the career, in order to cope with the constraints, safeguard health and build new competences, the part of these regulations can be appreciated on the basis of statistical correlations between components of job latitude and prevalence of pains. Besides, retrospective interviews with ten workers, leaning on observations of their present activity and examination of the adjustments they have brought to their tools, year after year, enlighten the work strategies linked to their experience.

On the basis of this example we shall insist in conclusion on the fact that several dimensions appear to be entangled when one intends to understand the links between health and professional career. In particular, it implies to combine two dimensions, which often happen to be tackled separately in companies: health and competences.

S108: AGE Survey: A Tool to Support the Study and Intervention on Health and Age at Work
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The complex relationship between age and work goes beyond the association between the exposure to risk factors and early ageing. Only few studies attempt to encompass this complexity and try to put this discussion in a temporal dimension, considering the developments of health and work over lifetime. This proposal presents some results of a study conducted in Portugal about working conditions, occupational risks and health problems.

European studies, as ESTEV and VISAT, both in France, used a longitudinal design with repeated measures in order to monitor health issues taking into account job modifications and age evolution. From these experiences, other studies were performed in this field, with less extensive instruments, for example the SVP50 and EVREST. In Portugal we developed the first survey on health and age – AGE – based on the previous experiences and supported by the strong network between researchers from these groups.

The first AGE data collection was conducted in 2016, in collaboration with the National Authority for Working Conditions. The survey was administrated by labour inspectors in their regular visits to companies, with 3106 surveyed workers. AGE dimensions focus on: working conditions (working time, schedules, demands/resources, perceived risks); health complaints and the perceived (by workers) relationship between these problems and their work, in order to analyse the relationship between age, health and work; and questions about retirement expectations, in order to identify retirement predictors.

The results show interesting relations between working conditions and the health problems identified by workers and, with strong evidences that age plays a key role in the capacity to recognise the connexion between work constraints and health problems. Results also show different tendencies related to both perceived expositions and perceived health problems for different age groups, emphasising the need to consider the specificity of diverse situations in the moment of intervention.
Findings also show that these health problems are frequently reported by workers, as related to their work, mostly in work situations of co-exposition (when workers are exposed to several constrains at the same time). The association of different constraints seem to be particularly hard for workers, due to the high proportion of reported health problems.

Chair: Kevin Teoh & Georg F. Bauer
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It is well established that healthcare workers are faced with challenging working conditions. They also typically report lower levels of psychological and physical wellbeing than the general population. This situation is aggravated by increasing economic pressure and fast technological as well as organisational changes in the health care sector. Thus, this symposium aims to build and extend on the substantial body of research that has been carried out with this occupational group. This session includes a summary of this existing literature base, before highlighting current studies utilising research designs that are longitudinal, group-based and/or multilevel to expand on our current understanding of the wellbeing and performance of healthcare workers from diverse European countries. The symposium captures a range of topics, including psychosocial working conditions and antecedents to wellbeing, links to quality of patient care, and ultimately predictors of successful interventions. These lessons are important not only for those working and researching in the healthcare sector, but have implications for the wider field of occupational health psychology as well.

The first presentation by Sylvia Broetje consists of a systematic, narrative meta-review that identifies the key job resources and demands of nursing staff. These are framed within the Job Demands-Resources (JD-R) model and examined as antecedents to a plethora of nurse work-related outcomes, including: engagement, health complaints, burnout, strain and turnover. Next, Annet de Lange draws on a two-wave longitudinal data collection of 25 Dutch healthcare organisations to examine how the selection optimization and compensation strategies of healthcare workers are associated with person-environment fit and successful aging at work.

In the third study, Isabella Meneghel presents findings from a study involving teams in Spanish hospitals. It focuses on perceptions of organisational justice at the team level as a predictor of team performance, and the role of resilience and horizontal trust as mediators. The fourth study by Kevin Teoh applies the JD-R model to a multilevel analysis of doctors from all hospitals in England. Doctors’ work-related wellbeing as a mediator between psychosocial working conditions and individual and hospital level quality of care outcomes are tested. Finally, Anja Lehmann investigates the association between context, process, and outcomes of organisational health interventions from the perspective of goal pursuit theory. Using longitudinal data from a lean healthcare intervention in Switzerland, she specifically examines the relation between team climate (as a contextual factor) and goal pursuit (as a process-related factor) on the perceived impact of the intervention. The symposium will be completed by drawing conclusions for future avenues of research in this field.

S109: The Key Job Resources and Demands of Nursing Staff: A Narrative Meta Review
Sylvia Broetje, Gregor J. Jenny, Georg F. Bauer
University of Zurich, Zurich, Switzerland

Aim: To identify the key job resources and demands of nursing staff by integrating findings from previously published review studies along the lines of the Job Demands-Resources (JD-R) model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001).
Background: Nurses and their employers are faced with substantial challenges. Nurses have been found to experience considerable strain at work that is related to high workloads, emotional demands, shift work or understaffing, while healthcare organisations are struggling to attract and retain qualified staff during an increasing nurses shortage. But nursing work is not only characterised by high demands, it offers unique rewards as well.

The JD-R model has been recognised as a suitable framework for better understanding those aspects that support or hinder nurses in performing their role and that attract them to organisations. The JD-R model postulates two processes: a health-impairment process linking job demands to adverse outcomes such as exhaustion or health complaints, and a motivational process linking job resources to desirable outcomes like engagement or job satisfaction. Empirical findings have largely supported these assumptions. Several previous publications reviewing workplace aspects of nurses have utilised the JD-R model. However, these studies have been limited with regards to the range of potential outcomes they were able to include, while others have researched relevant antecedents without applying this framework. This paper seeks to integrate these previous findings along the lines of the JD-R model.

Methods: The databases MEDLINE, PsychINFO and CINAHL were searched for review papers published between 1990 and 2017 in English or German that examined the antecedents of either of the following work-related outcomes in samples of nursing staff employed in hospitals or nursing homes: engagement, job satisfaction, motivation, enjoyment, commitment, work ability, nurse retention, exhaustion, health complaints, burnout, strain, stress, turnover and attrition. Relevant antecedents identified in these reviews will be integrated into the JD-R model using inductive analysis.

Results and Discussion: The integrated key job resources and demands of nursing staff will be presented and discussed at the symposium. The discussion will mainly focus on resources and demands that are amenable to interventions on the leadership and group level.

S110: Successful Aging at Work? The Influence of Individual Difference Variables and Person-Environment Fit in Relation to Healthcare Workers’ Work Ability
Annet de Lange¹,²,³,⁴,⁵, Sarah Detaille⁶, Karen Pak¹,⁷, Filipa Rodrigues⁵, Trude Furunes⁴, Guus Heuvelink¹

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Aim: Due to the ageing and dejuvenisation of the western workforce, employers face a challenge to enhance a sustainable working life in order to maintain older workers at work (De Lange et al., 2015). As a result, it is important to know what makes workers age successfully at work. According to Zacher, Kooij and Beier (2018) employees age successfully at work if they deviate in increasingly positive ways from the average developmental trajectories in subjective and objective work outcomes across the working lifespan, and maintain a person-job fit across time. They also point to the fact that few studies have examined the influence of individual difference variables like coping behaviour (selection, optimisation and compensation or SOC strategies (Müller et al., 2018), experienced future time perspective (Baltes et al., 2014) and the role of different levels of P–E fit (i.e., demands-abilities versus needs-abilities fit at work) in relation to indicators of successful aging (such as work ability (Weigl et al., 2013). Moreover, Zacher et al. (2018) identified the need for more longitudinal research in this area. In this new 2-wave complete
panel study we aim to address these research gaps by examining the influence of SOC strategies, future time perspective as well as person-environment fit in relation to reported work-ability of healthcare workers. More specifically, we hypothesise that: SOC strategies, future time perspective as well as person-environment fit are significant positively related to work-ability of healthcare workers across time.

**Design:** We will present results of a 2-wave complete panel study (the “Dutch Healthy Healthcare” project) on the sustainable work ability of 2804 Dutch healthcare workers.

**Results:** Results of our first hierarchical regression analyses using data from Time 1 for the outcome of work ability, revealed significant positive relations with SOC strategies ($\beta = .14; p<.05$), a positive relation with future time perspective ($\beta = .17; p<.01$), and a positive relation with the subscale “needs-abilities fit” ($\beta = .28; p<.01$). No significant findings were found in relation to demands-abilities fit at work. Using the second wave of data, we will further examine the aforementioned relations and test multiplicative interaction effects between SOC strategies, future time perspective, person-job fit in relation to cross-lagged changes in work ability.

**Conclusions:** Our preliminary results indicate significant relationships involving individual difference variables and person-job fit measures as meaningful age-related processes to age successfully at work. This indicates different possible methods of intervening at work to facilitate the successful aging of workers (e.g., by stimulating effective coping strategies versus improving person-job fit through work-related interventions).

**Limitations:** We only focused on data from healthcare workers and therefore cannot generalise the results to other professions or sectors. Originality/Value: Few studies to date have been able to examine the relationships between individual difference variables and person-job fit measures in relation to successful aging at work (e.g., work ability). The results of our complete panel including 2 waves can, therefore, shed new insights to the question how to effectively sustain ageing workers in the labour market.

**S111: The Role of Organisational Justice in Healthcare Organisations: How to Enhance Team Performance through Team Resilience and Horizontal Trust**

Isabella Meneghel, Juana Olvera, Susana Llorens, Marisa Salanova
University Jaume I, Castellón de la Plana, Spain

This study explores how team perceptions of organisational justice predict team resilience and team horizontal trust, as well as the mediation role of team resilience and team horizontal trust between organisational justice and team performance. A sample of 1241 employees, clustered in 121 teams from seven Spanish hospitals, filled out the questionnaire about organisational justice (i.e., distributive, procedural, interpersonal and informational), resilience, horizontal trust and performance (in- and extra-role). All variables were measured using team as a reference, and data was then aggregated between team members. Structural Equation Modelling highlighted that team resilience and team horizontal trust fully mediates the relationship between team perceptions of organisational justice and team performance. As research implications, the results provide evidence on how the perception of justice is a tool to keep teams more resilient and boosts the emergence of interaction processes that increase that shared vision of trust among team members, leading to better performance. In addition, it focuses on team-level variables in the health context, where the team-work is relevant to achieve positive outcomes. At a practical level, results highlight the relevance of deepening the study of organisational justice as a strategic variable for the development of healthy health organisations.
S112: Work-related Wellbeing as a Mediator Between Hospital Doctors’ Psychosocial Working Conditions and Quality of Care: A Multilevel Perspective

Kevin Teoh¹, Juliet Hassard², Tom Cox¹
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Background: Substantial evidence exists to highlight the relationship between the psychosocial working conditions of healthcare workers and various measures of their wellbeing. It is then presumed that better working conditions should translate into better patient care. To increase practical relevance, it is important to determine whether such relationships exist when quality of care outcomes are not self-rated and when they exist at the organisational-level. Using The Job Demands-Resources Model to theoretically underpin the postulated pathways, this study aims to: (i) test the direct effects that hospital doctors’ psychosocial working conditions and on their own work-related wellbeing and on six quality of care outcomes; (ii) to test whether work-related wellbeing functions as a mediator within this relationship; and (iii) to examine these pathways from a multilevel perspective.

Method: Participants were hospital doctors (n=14,066) drawn from the 2014 working conditions survey of the English National Health Service involving 157 hospital trusts in England. Job demands was represented by measures on workplace demands and aggression; and job resources by manager support and job control. Work-related wellbeing was measured through perceived stress, presenteeism and work engagement. Quality of care was assessed with three self-rated measures at the individual-level (quality of own care, quality of hospital’s care, number of medical errors seen) and three organisational-level outcomes (patient satisfaction, number of patient safety incidents, and standardised mortality rates).

Findings: Multilevel analyse showed that perceived stress and presenteeism mediated the relationships that job demands had with both quality of care by the doctor and by the hospital. The relationship that job resources had with the same two outcomes were mediated by work engagement. Limited direct and indirect effects were observed in relationships where medical error was an outcome. At the organisational-level, the proposed relationships involving patient satisfaction, but not patient safety incidents or mortality-rates, were the only ones to demonstrate the anticipated effects.

Discussion: These findings demonstrate that hospital doctors’ psychosocial working conditions and their work-related wellbeing can influence the quality of patient care, although this is dependent on the type of outcome measure. Quality of care measures that were self-rated and more proximal were found to be more consistent outcomes. At the individual-level, the Job Demands-Resources Model provides a useful framework to describe the proposed relationships, although its incompatibility at the organisational-level may be a function of limitations with the research design.

S113: Goal Pursuit in Organisational Health Interventions: The Role of Team Climate, Outcome Expectancy, and Collective Implementation Intentions in Healthcare

Anja Lehmann, Rebecca Brauchli, Georg F. Bauer
University of Zurich, Zurich, Switzerland

Background: Healthcare organisations are facing increasing challenges and economic pressure. In this situation, organisational health interventions (OHIs) become ever more important as they can help to tackle these challenges on an employee level by improving the working conditions. In these interventions, it is a common approach that employees themselves formulate action plans that include collective goals regarding their work-related needs. Up to now, there has been
lack of research regarding which role these formulated goals play in explaining intervention effects. This might be due to the general gap of research on the underlying mechanisms (e.g., context and process factors) of OHIs.

**Study aim:** The present study investigates the association between context, process, and outcomes of an OHI from the perspective of goal pursuit theory. Specifically, we examined the relation between team climate (as a contextual factor) and goal pursuit (as a process-related factor) on the perceived impact of the intervention.

**Methods:** Longitudinal data from a lean healthcare intervention with an explicit focus on psychosocial working conditions and health were used. Team climate was measured at baseline. 4-6 weeks after baseline a 4-day workshop with team representatives was implemented in 29 nursing wards. During these workshop days employees formulated collective goals as action plans to be implemented in the nursing wards. Goal pursuit was differentiated into a (a) motivational “goal setting” and a (b) volitional “goal striving” phase. The scale outcome expectancy (measured after the forth workshop-day) was used as an indicator for the goal setting phase. For the operationalisation of the goal striving phase, we rated the action plans regarding to the proportion of formulated implementation intentions (“if-then-plans”). After six months, the impact of the intervention was measured with a retrospective impact scale on team and on individual level.

**Results:** The preliminary results of the multilevel analysis and of the multiple regression analysis show that team climate as well as goal pursuit (outcome expectancy and the proportion of implementation intentions) were positively related to the perceived impact of the intervention. Furthermore, the results show that the relation between team climate and the impact of the intervention was mediated by outcome expectancy, but not by the proportion of implementation intentions.

**Conclusion:** The results highlight the important contribution of goal pursuit theory within context-process-outcome research that leads to a better understanding when and why OHIs are effective. Furthermore, this research implies ways how to optimise the intervention action-planning phase in complex organisations like hospitals.

**Symposium: Why Do People Extend and Intensify Their Working Hours? Antecedents and Outcomes of Self-Endangering Work Behaviour**

Chair: Michaela Knecht¹ & Nicole Deci²

¹University of Applied Sciences and Arts Northwestern Switzerland, Olten, Switzerland; ²University of Hamburg, Hamburg, Germany

The current symposium focuses on the concept of “self-endangering work behaviours” (such as extension of working hours, intensification of work, sickness presenteeism, faking, or substance abuse) as possible maladaptive coping strategies under high workload. We conceptualise self-endangering work behaviour as a possible explanatory variable in the relationship between work-demands and negative subjective well-being outcomes. The symposium consists of one theoretical and four empirical papers.

The first theoretical presentation introduces the concept of “self-endangering work behaviours” as possible maladaptive coping strategy under indirect control. This presentation looks at performance-oriented leadership practices such as management by key performance indicators. These indirect leadership practices result in higher self-regulatory demands, such as planning and decision making. At the same time, they might increase the risk of self-endangering work behaviour, especially if there are not enough resources available.
The second presentation discusses the role of personality in the context of self-endangering work behaviour. We analysed performance-based self-esteem as well as self-efficacy as moderators of the association between high workload and different self-endangering facets. The third presentation is on a study investigating the association between workload, self-endangering work behaviour and well-being in a daily diary study. Furthermore, the presented study also analyses and discusses other strategies than self-endangering work behaviour to cope with demands, such as reducing demands and searching support. The fourth and fifth presentations inform about the role of supervisors in the context of self-endangering work behaviour, workload and subjective well-being. While the fourth presentation focuses on abusive supervisor behaviour, the fifth presentation analyses the importance of role modeling and emotional support from supervisors for the working condition and the subjective well-being of employees.

The symposium will explain under what circumstances self-endangering work behaviour occurs and it shows that self-endangering work behaviours might explain the negative effects of work demands on subjective well-being and other work-related outcomes. As a practical implication, the current symposium suggests that self-endangering work behaviour should be addressed by occupational health prevention initiatives.

S114: Facets and Correlates of Indirect Control
Maida Mustafic, Michaela Knecht, Andreas Krause
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Indirect control is a currently often-applied organisational method to lead and enhance individual performance in organisations. Indirect control is characterised by two main processes. First, the responsibility for the organisational economic success is transferred from the organisation to the individual and second, inter- but also intraindividual comparisons are used to increase organisational economic success. In the current review, we will present the method of indirect control and, in line with the Job Demands-Resources Theory (Bakker & Demerouti, 2014), the demands and resources emerging from this method. Moreover, we will delineate the effects of the factors related to indirect control — such as supervisor behavior — and moderators on the individual level — such as personality — of the effect on self-endangering work behavior and subjective wellbeing as well as recovery.

S115: Self-endangering Work Behaviours to Overcome Time Pressure - The Role of Personality Traits
Nicole Deci
University of Hamburg, Hamburg, Germany

Employees in modern work contexts show coping behaviour patterns that can negatively impact their health and recovery experiences. One example is the prolonging of working hours, meaning employees work at the weekends or during holidays in order to keep up with the high demands placed on them. Or they go into work when they are sick without taking the time to recover properly. Prolonged working hours and working when sick are just two examples of different self-endangering coping strategies. Initial studies point to the reasons behind these sorts of behaviour, such as time-and performance pressure and goal spirals. Nevertheless, the presenteeism research does provide initial indications that not everyone has the same tendency towards these sorts of coping behaviours. The article addresses the question of whether specific personality traits influence the use of self-endangering strategies. Building on the findings relating to coping and personality, self-esteem, perceived self-efficacy, performance motivation, chronic worrying, internal-external locus of control and self-awareness were examined as moderators of the relationships between state time pressure and various fluctuating self-endangering
strategies. The data was gathered in a diary study covering five working days. Personality traits were recorded beforehand as part of a basic questionnaire, and multi-level analyses were applied to see whether various different personality traits and/or a certain profile of personality traits represent a moderator. The results of the study are discussed against the background of their significance in modern work contexts.

S116: Daily Diary Study on the Association Between Workload, Active Coping Strategies (Self-Endangering Work Behaviour and Self-Empowering Work Behaviour) and Wellbeing

Michaela Knecht, Jonas Mumenthaler, Andreas Krause
University of Applied Sciences and Arts Northwestern Switzerland, Olten, Switzerland

Background: Goal-oriented leadership strategies such as key performance indices are becoming more and more prevalent. On the one hand, these more autonomous forms of work have positive effects, such as opportunities for coordinating work and private life as well as opportunities for personal growth. On the other hand, there are also negative effects such as feelings of time pressure, perceived stress or missing boundaries between the life-domains. The current study investigates self-endangering and self-empowering strategies to cope with high job demands. For the self-endangering work behaviour we focus on two facets: 1) extension of working hours and not taking time to recover and 2) work intensification. Besides self-endangering work behaviour we investigated other strategies (i.e. self-empowering work behaviour such as seeking support or reducing demands) to cope with time pressure and high workload. The self-endangering work behaviour strategies might mediate the negative effects of high workload on subjective wellbeing and health and work-related outcomes. We hypothesise that high workload is positively associated with self-endangering coping strategies and negatively with self-empowering work behaviour. Furthermore, we assume that self-endangering work behaviour might partially explain the negative association between workload and wellbeing both within- and between-person.

Method: In the current study we analysed the associations between workload, active coping strategies, namely self-endangering and self-empowering work-behaviour, and wellbeing on a daily basis. Data were assessed via smartphones in a daily diary study on workdays during two weeks. Participants had to answer a daily questionnaire at the end of their workday. Besides momentary wellbeing and workload of the day, different coping strategies to handle workload were assessed. The sample consists of $N = 87$ employed participants (48% male; age $M = 37$ years, $SD = 12$ years). Data will be analysed with a multi-level structural equation model, in order to take within- and between-subject effects as well as the hierarchical structure of the data into account.

Results: Data analyses is still ongoing. Preliminary results suggest a positive association between workload and self-endangering work behaviour as well as a positive association between self-endangering work behaviour and exhaustion both between and within subject. The association between workload, self-empowering work-behaviour, and wellbeing is less clear. Sometimes associations differ within-person and between-person.

Discussion und Implications: Self-endangering work behaviour has to be addressed by occupational health prevention initiatives and interventions should take this form of coping into account. The concept of self-endangering work behaviour as a coping mechanism for high work demands is one possible explanation of the negative association between high work demands and subjective wellbeing and health. Moreover, the role of self-empowering work behaviour should be analysed in more detail, especially the different associations with wellbeing within- and between-person.
S117: Abusive Supervision and the Extension of Working Hours: Investigating the Mediating Role of Workload
Maie Stein, Sylvie Vincent-Höper
University of Hamburg, Hamburg, Germany

Background: In recent years, there has been growing interest in destructive or harmful leader behavior (Schyns & Schilling, 2013). Abusive supervision describes nonphysical, punitive, and aggressive behaviors of leaders that are directed towards their subordinates (Tepper, 2000). Research has shown that abusive supervision has severe negative effects on numerous attitudinal and behavioural outcomes (e.g., Tepper, 2000). Studies have found associations between abusive supervision and several indicators of employee wellbeing, such as anxiety (Hobman, Restubog, Bordia, & Tang, 2009), depression (Tepper, 2000), and emotional exhaustion (Aryee, Sun, Chen, & Debrah, 2008). Moreover, ratings of abusive supervision were negatively related to job performance (Jian, Kwan, Qiu, Liu, & Yim, 2012) and organisational citizenship behavior (Xu, Huang, Lam, & Miao, 2012) and positively related to deviance (Mitchell & Ambrose, 2007). Research also suggests that abusive supervision may decrease subordinates' willingness to exert high levels of effort (Harris, Harvey, & Kacmar, 2011). However, abusive supervisors may (intentionally) expose their subordinates to workplace stressors that require additional effort expenditure of subordinates (Ashforth, 1997). Given the ability to shape their subordinates' work environment, abusive supervisors may fail to decrease or even increase workplace stressors as a form of passive aggression towards their subordinates (Kelloway, Sivanathan, Francis, & Barling, 2005). For example, they may assign their subordinates too many tasks and set tight deadlines. To accomplish their tasks, subordinates may work longer hours and thus prolong their effort expenditure. In this study, we propose an indirect effect of abusive supervision on subordinates' (coping) effort expenditure (i.e., the extension of working hours) through workload.

Method: Data were collected from 358 employees working in the health care and social service sector (76% female) using an online survey.

Results: Structural equation modeling (SEM) revealed an indirect effect of abusive supervision on the extension of working hours through workload.

Discussion: This study extends existing research by showing that abusive supervision is positively related to subordinates’ perceived workload, which in turn increases the extension of working hours used as a coping effort. Previous studies indicated that subordinates reduce their efforts in reaction to abusive supervision (Schyns & Schilling, 2013). In this study, we found that subordinates have to increase their effort expenditure to cope with high workload. Thus, we identified workload as a workplace stressor through which abusive supervision affects subordinates’ effort expenditure (i.e., the extension of working hours). We suggest that investigating the intervening role of workplace stressors (and resources) may contribute to the understanding of the effects of abusive supervision on employee outcomes.

S118: Never off Duty? – The Role of Supervisors in the Relationship between Extended Availability and Subordinate Wellbeing
Jana Biemelt¹, Nicole Deci², Christiane R. Stempel¹, Jan Dettmers¹
¹Medical School Hamburg, Hamburg, Germany, ²University of Hamburg, Hamburg, Germany

Introduction: Previous research shows that extended availability for work is a double-edged sword. From an employer’s standpoint, there are various benefits if employees are accessible to supervisors, colleagues or costumers outside their regular workplaces and working hours. However, if extended availability is not properly organised, it is associated with impaired wellbeing. Past studies show that supervisors are key figures that influence subordinates’ health
through direct interactions as well as through the management and allocation of resources. Thus, we assume that supervisors’ role modelling and their emotional support regarding life-domain-balance moderate the relationship between extended availability and wellbeing.

**Design/Methodology:** To address this research question we asked 621 participants to fill in an online-questionnaire about their availability requirements, supervisors’ role modelling and emotional support regarding life-domain balance. Additional, participants indicated their wellbeing and recovery experiences.

**Results:** Moderation analyses revealed that high work-life-friendly role modelling and support buffered the relationship between extended availability requirements and impaired wellbeing. The findings are in line with theoretical assumptions that ascribe the supervisor a central role in the relationship between extended availability requirements and subordinates’ health.

**Limitations:** We merely analysed cross sectional data from our first wave survey, whereas the data of the second wave survey are not available yet.

**Research/Practical Implications:** By focusing on the central role of the supervisor, the results offer a good starting point for interventions regarding availability requirements.

**Originality/Value:** New conditions at the interface between work and non-work domains require looking at factors that utilise its benefits and buffer its detrimental effects to establish a healthy work environment.

**Symposium: Craft Industry: Small but Healthy?!**
Chair: Christine Busch
*University of Hamburg, Hamburg, Germany*

In this symposium we present results of small business health research. We present research about networking strategies of entrepreneurs, team resources in small craft business, an online-tool and survey-feedback workshop for healthy working conditions in craft industry, resource-based strategies of entrepreneurial couples to create life domain balance and the realist evaluation of a blended-learning coaching intervention for entrepreneurial couples to foster their life domain balance. The research is done in a transdisciplinary project, financed by the German Federal Ministry of Education and Research. We focus on studies which were mainly carried out with entrepreneurs and entrepreneurial couples, but we also present results of a study with craftworkers on their working conditions.

In the first qualitative study with entrepreneurs (N = 20), networking structures and behaviours of entrepreneurs are studied. The craft is traditionally well connected, being involved in a range of different formal and informal networks nowadays. The aim of this interview study was to investigate networking structures and behaviors of craft business owners in order to understand the specific circumstances as well as success mechanisms behind it and detect possible intention needs.

In the second qualitative study with co-working entrepreneurial couples or copreneurs (N= 16 couples), resource-based strategies of copreneurs to create their life domain balance were researched. The study addressed copreneurial businesses as a unique type of family firm to shed light on the individual and shared strategies of copreneurs to gain resources in their interdependent system. Further, explicit behaviour and phenomena are illustrated to gain an idea how copreneurial couples create a balance between different life domains seeking, using, and offering resources. Lastly, the copreneurs’ strategies are compared against different conditions.
In the third qualitative study with entrepreneurs of small craft companies (N =13), team resources in small business were researched from the perspective of the entrepreneur, based on the socio-technical system approach. Entrepreneurs identified resources in the technical system such as team composition, team meetings, and cooperation with other companies. They identified social team resources such as team climate, (cognitive) empathy, and conflict resolution. The results helped us to build up a team development intervention.

In the fourth contribution, a participative work design approach through an online-tool and survey-feedback workshop to assess individual and team demands and resources of craftworkers in small business is presented as well as reliability and validity scores of the online-tool.

In the fifth study, the realist evaluation of a blended-learning coaching intervention for entrepreneurial couples (N= 16 couples) is presented. Based on realist evaluation, we present the intervention and the initial middle-range theory about why the intervention is expected to work by identifying the underlying mechanisms of change. The intervention successfully managed to activate somatic markers and resources, and to foster the interdependence of the participating couples as well as their satisfaction with life domain balance.

S119: Healthy Small Business through Networking
Yanina Mallok
Hamburg University, Hamburg, Germany

Purpose: The craft is traditionally well connected, being involved in a range of different formal and informal networks nowadays. The aim of this interview study was to investigate networking structures and behaviors of craft business owners in order to understand the specific circumstances as well as success mechanisms behind it and detect possible intention needs. Specifically it was a matter of interests how external relationships effect crafts' small business, what are the driving forces of attending and remaining in networks, who are the typical members and crucial participants and what are the determining positive and negative aspects or experiences of networking.

Design/methodology: 20 semi-structured interviews with entrepreneurs (16 males and 4 females) of small and micro-enterprise in five regions of Germany were accomplished and reveal their daily external networking preferences, experiences, behaviors and practices in self-reports.

Results: Our results reveal the spectrum of crafts' existing networks of different size, formality level, content and cross-connections. Business owners aim external cooperation in order to maintain competitiveness of their business by exchanging the experiences, information, innovation and initiating new projects or getting new assignments. Successful networking is associated with resource investment (e.g. time, active participation), reciprocity, recognition of common needs and goals as well as the presence of promoters and strong focal actors. Lack of health promotion topics, high time expenses of networking and homogeneity of the group (e.g. age, ethnic) expose interesting development points.

Limitations: The sample includes active and successful networkers, giving no insight into a perspective of entrepreneurs not involved in formal networking structures.

Research/practical Implications: Knowing more about circumstances and mechanisms of networking can help to support the crafts' small business owners in their external cooperation, activate or enlist not organized craft businesses and close existing gaps by developing regional networks and prevention alliances.
Originality/Value: Development of regional prevention alliances by using strong existing networks enables spreading health interventions and other important prevention associated contents and practices (e.g. diversity and resource management, digitization) in the craft. This, in turn, can promote availability and further development of suitable interventions.

S120: Working and Living Together – Creating Life Domain Balance by Copreneurs
Romana Dreyer
University of Hamburg, Hamburg, Germany

The purpose of this study is to gain insights in the techniques used by co-working couples with their own company (namely copreneurs) to create a work-life balance. Since co-working entrepreneurial couples evince special demands as well as facilitating factors in shaping a good functioning in all life domains, investigation in this interdependent dyadic system is necessary. Drawing on COR Theory we address the question how co-working couples in family businesses create a balance in their different life domains through offering, seeking and using resources. Semi-structured interviews were conducted with both co-working partners at the same time and place. Altogether, 16 married couples working and living together were asked about their shared working life (e.g. their collaboration and conflicts at work), their individual and shared leisure, and lastly family time (e.g. recovery experiences and routines). Every couple engaged in a range of techniques. These techniques can be classified in physical, cognitive, relational, and supportive strategies to ensure a resource gain in different life domains. Different conditions such as working hours, tradition of the family business, and distance between home and work were factors that affect the usage of certain strategies. This study offers three important contributions to research in entrepreneurs and their co-working spouses. First, it addresses copreneurial businesses as a unique type of family firm to shed light on the individual and shared strategies to gain resources in their interdependent system. Second, explicit behavior and phenomena are illustrated to gain an idea how copreneurial couples create a balance between different life domains seeking, using, and offering resources. Lastly, the copreneurs’ strategies are compared against different conditions.

S121: Team Resources in Small Craft Business
Danièlé Wittkopf
University of Hamburg, Hamburg, Germany

The aim of this qualitative study was to research team health resources of micro and small craft enterprises from the perspective of the entrepreneur. While most research on teamwork examines the relationship between teams and organizational performance outcomes, there has been limited research on the association between teams and employee health and wellbeing (e.g., Cruz & Pil, 2011). A review by Rasmussen and Jeppesen (2006) suggests that teamwork is generally associated with positive psychological outcomes. Studies investigating specific team resources have found that team meetings and collective self-efficacy show a positive relation to team members’ health (e.g., Busch, Deci & Laackmann, 2013), but research on team resources in small business is missing. Based on the socio-technical system approach we did a qualitative interview study with entrepreneurs (n = 13) to assess their perspective on team health resources in their enterprise. The entrepreneurs identified as technical team resources team composition, team meetings, workshops, and cooperation with other enterprises. Team climate, team cognition, feedback, (cognitive) empathy, cooperation, and conflict management were seen as important team resources in the social system. The results helped us to build up a team development intervention and the initial middle-range theory about why the intervention is expected to work. The middle-range theory and the intervention itself will be presented.
S122: Health Promotion for Craftworkers - The Role of Working Conditions in Small Businesses
Nicole Deci
University of Hamburg, Hamburg, Germany
This work presents an online analysis tool for recording dominant individual and collective work demands and work resources of craftworkers. A standardized, participative tool, based on the work psychological team stress model and the GDA guidelines was developed for risk assessment in small craft businesses. The focus is on different working conditions that have turned out to be relevant in the skilled trades sector. Due to frequently found team structures in the craft industry, the individual working conditions are complemented by collective work demands and resources that affect the entire team. The instrument was tested in various craft areas such as construction and mechanical, electrical and metal industries. This contribution introduces the analysis tool and discusses its reliability and validity scores. Furthermore, first findings concerning the relation between specific work conditions and impaired health as well as work engagement and job satisfaction are presented. The application of the tool in German small businesses is discussed, under consideration of the characteristics of the sample.

S123: Blended-learning Coaching for Entrepreneurial Couples: A Realist Evaluation Study
Christine Busch, Romana Dreyer
University of Hamburg, Hamburg, Germany
We present our coaching intervention study for entrepreneurial couples of small craft business. Based on realist evaluation, we present the intervention and the initial middle-range theory about why the intervention is expected to work by identifying the underlying mechanisms of change. The success of organizational health interventions depends heavily on the context and reach. The craft is traditionally well connected in Germany, being involved in a formal craft network. The main multipliers for worksite health promotion are prevention providers, such as statutory health insurance, which are traditionally part of these formal craft networks. They have access to small craft business and offer health promotion at low costs. Therefore we developed and implemented the coaching intervention in close cooperation with formal craft networks in different German regions and the main statutory health insurance for craft business in Germany. Beside of that, the context of health promotion in small craft business is characterized by the fact that entrepreneurs often work together with their spouses as co-working entrepreneurial couples or copreneurs. They employ on average less than five workers. The entrepreneur and their spouse are both very much involved in operational activities of the firm. This unique type of family firm offers high demands to copreneurs in creating their life domain balance. Health promotive interventions need to be carried through in-house and online approaches. We developed a blended-learning coaching intervention for entrepreneurial couples of small craft business to help them to create a better life domain balance. Our coaching concept is based on the result-oriented coaching intervention and the self-management intervention of the Zurich resource model. Both work with the extended Rubicon phase model. We combined these intervention concepts with Carl Rogers` person-centred approach. The coaching intervention is expected to work by activating somatic markers and resources and through self-congruent reflection supported by the spouse. Further on, we see as main mechanisms of change the empathic and appreciative relationship between coach and both coachees. Drawing on COR-theory and the concept of interdependence for entrepreneurial couples, the intervention is expected to work by fostering resources and the interdependence of the participating couples, in particular in promoting their open communication. We present first results of our coaching intervention study (N=16 couples). The statutory health insurance as part of the regional formal craft network encouraged entrepreneurial couples to participate. The coaching intervention successfully managed to activate somatic markers and resources. The intervention managed to foster the interdependence of the participating entrepreneurial couples as well as their life domain balance.
There is ample evidence that work-related smartphone use during off job hours may have negative implications. Several studies showed that it is positively related to work-family conflict and rumination and negatively to family role performance, psychological detachment and recovery state at bedtime. Additionally, in the popular press there appear many messages on how late night smartphone use might negatively impact our sleep (both quality and quantity). In this symposium we focus on the relation between smartphone use and work-related rumination, psychological detachment, sleep and wellbeing.

The goal of this symposium is two-fold. First, we aim to dig deeper into the relationships between smartphone use recovery, sleep and wellbeing, and look at possible explaining mechanisms. Second, we aim to discuss possible interventions to prevent ourselves from the potential negative implications of work-related smartphone use.

First, Svenja Schlachter presents a longitudinal diary-based study on ICT use in the evening, psychological detachment, recovery state at bedtime and wellbeing the next morning. Second, Jana Kuehnel will present a daily diary study on late night smartphone use, impaired sleep (objectively measured with actigraphs) and impaired wellbeing the next day. Third, Ruben Cambier will contribute a daily diary study on telepressure, empathy and psychological detachment. He shows that smartphone use is an important behavioural mechanism. This study is the link to two intervention studies, since behaviour—the actual smartphone use—is something that is under control of the employee, which can be influenced by an intervention.

Fourth, Michelle Van Laethem will present a multi-level intervention study where the participants wore orange glasses during two evenings to prevent blue light exposure emitted by smartphones. During the other two evenings, blue light was not blocked. Michelle looks at the implications for rumination and sleep. Finally, Daantje Derks will present an RCT intervention study in which employees were encouraged to withhold themselves from work-related smartphone use during two hours before bedtime. The control group received information about the benefits of a healthy work-life balance. Consequences for work-related smartphone use, rumination, psychological detachment and perceived stress are examined. After the presentations there will be room for an interactive discussion between speakers and audience on the presented studies but also on future directions in the research field.

S124: Work-related ICT use during Evenings, Psychological Detachment and Recovery State: A Daily Diary Study
Svenja Schlachter1, Ilke Inceoglu2, Almuth McDowall3, Mark Cropley4
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Modern information and communication technologies (ICTs) have made it possible to access work-related materials and communications from almost anywhere and at any time. Although this can grant employees more flexibility to manage their work and non-work domains more effectively, it could also impede necessary downtime for employees to recover (e.g., Schlachter et al., 2017).
This daily diary study examined the associations between work-related ICT use during workday evenings and recovery state at bedtime, as well as the following morning in order to explore how the effects of work-related ICT use during the evening might carry over to the following morning. Additionally, we investigated two explaining mechanisms between work-related ICT use and recovery state, namely lack of psychological detachment and sleep quality.

To examine these associations, we conducted a daily diary study over 5 consecutive workdays, with diaries being completed at bedtime and the following morning. The sample consisted of 197 office-based employees in Germany, providing 823 diary entries. The evening diaries included questions regarding frequency of work-related ICT use, psychological detachment during the evening (Sonnentag et al., 2008), and fatigue at bedtime as indicator of recovery state (McNair et al., 1971); in the morning, diaries covered sleep quality (Buysse et al., 1989) and recovery state (Sonnentag et al., 2012). The resulting multilevel data were analysed using multilevel regression analyses with Mplus.

The multilevel analyses showed that, at the daily level, work-related ICT use during the evening was not directly associated with fatigue at bedtime. However, it was found that there is an indirect positive effect of work-related ICT use on fatigue at bedtime via impeded psychological detachment during the evening. In relation to recovery state the following morning, at the daily level, work-related ICT use was not associated with recovery state, neither directly nor indirectly via psychological detachment. Examining the role of sleep quality, it was found that it was not affected by work-related ICT use. Sleep quality was, however, positively associated with recovery state the following morning.

Our study showed that work-related ICT use is detrimental for cognitive recovery processes during the evening, resulting in employees feeling less recovered at bedtime. However, these associations do not appear to carry over to the following morning at the daily level to the same extent, with sleep being a stronger predictor of recovery state. The association between work-related ICT use and sleep has previously been found to be inconsistent with our study not indicating a strong association, pointing towards conditional effects which should be considered in the future (e.g., emotional state as result of work-related ICT use; timing of work-related ICT use). We conclude from our study that work-related ICT use should be kept to a minimum during workday evenings in order for employees to recover during the evening. Organisations should inform employees about the implications of ICT use and should not request it implicitly or explicitly. Employees should be considerate of colleagues’ recovery when contacting them during non-work time.

S125: Does Late-Night Use of Mobile Devices Impair Sleep? – An Ambulatory Diary Study
Jana Kühnel, Klaus G. Melchers
Ulm University, Ulm, Germany

Using mobile devices such as smartphones, tablets and personal computers before going to bed is very common (Gradisar et al., 2013; Perlow, 2012). Unfortunately, this behaviour may impair employees’ sleep, because employees are potentially confronted with work-related content and they are exposed to screens’ blue light emission (Chang, Aeschbach, Duffy, & Czeisler, 2015). Good sleep, however, is crucial for wellbeing and job performance on the next day (e.g., Kühnel, Zacher, de Bloom, & Bledow, 2017). The current ambulatory diary study investigates whether late-night use of mobile devices is related to objectively assessed sleep characteristics, and whether these sleep characteristics are related to wellbeing on the next day.
Participants of this diary study were 53 employees working in companies from various industries. Thirty-four percent of the sample were female, and mean age was 33 years ($SD = 9$). Over the course of seven days, participants wore ActiGraph® activity monitors on their wrist to ambulatory assess sleep duration (total sleep time = TST) and sleep quality (sleep efficiency). Moreover, participants filled in two daily questionnaires (one in the morning, and one at the end of the work day or at the same time of day on work-free days, respectively), resulting in 346 days in total on which participants provided objective and subjective data.

Results of multilevel analyses showed that late-night use of mobile devices was negatively related to both objective sleep quality and objective sleep duration. More specifically, on days with longer late-night use of mobile devices compared to days with shorter use, participants slept shorter and their sleep quality was worse. Day-specific sleep duration and sleep quality, in turn, predicted wellbeing at the end of the (work) day. On days with better sleep quality, participants indicated more positive affect and less fatigue at the end of the day. On days with shorter sleep duration, participants indicated more fatigue at the end of the day.

Taken together, our results corroborate prevailing concerns about late-night use of mobile devices.

**S126: A Diary Study on Telepressure, Work-Related Smartphone Use and Psychological Detachment: Examining The Role of Empathy**
Ruben Cambier¹, Daantje Derks², Peter Vlerick¹
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Being constantly connected to work via technology-mediated communication (e.g., email) is typical for an abundant amount of employees. In this diary study, we examined the associations between daily work-related telepressure, daily work-related smartphone use during off-job hours and daily psychological detachment within a group of smartphone users. In addition, we investigated the moderating role of empathy. A sample of 80 employees, representing a wide range of occupations and organizations, completed a daily survey on five successive workdays ($N = 337$ day-level observations). Results of multilevel analyses supported the indirect negative relationship between daily work-related telepressure and daily psychological detachment, mediated via daily work-related smartphone use during off-job hours. No evidence was found for a moderating effect of empathy. Our study highlights the importance of a clear organisational policy regarding work-related smartphone use during off-job hours and provides valuable input to the development of intervention programs for psychological detachment.

**S127: Continuous Connectivity in Everyday Life: Exploring Underlying Mechanisms of the Relationship between Smartphone Use and Sleep**
Michelle Van Laethem¹, Anne L. de Bruijn¹, Debby Beckers²
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Sleep problems are very common in modern society and can have detrimental effects on health (Cappuccio et al., 2010; LeBlanc et al., 2009; Maglione et al., 2014). Therefore, it is crucial to examine possible causes of poor sleep. Previous research has shown that smartphone use during the evening can negatively affect sleep (Lanaj et al., 2014). The relationship between smartphone use and sleep may be explained by two possible underlying mechanisms. Smartphone use at bedtime may stimulate cognitive processes (i.e. rumination) about, for example, study- or work-related issues, which in turn may impede sleep. Previous research has shown that rumination and sleep are indeed closely related (Van Laethem et al., 2015).
Additionally, blue light emitted by smartphones may be responsible for poor sleep (Chang et al., 2015). Research demonstrated that blue light blockers, such as amber-tinted glasses, may improve sleep (van der Lely et al., 2015). The aim of this multilevel intervention study was to examine whether rumination and blue light exposure indeed are underlying mechanisms in the relationship between smartphone use and sleep. We followed a total of 95 participants over a time span of four days, whilst they completed short evening and morning questionnaires (8 measurement occasions). To examine whether blocking blue light indeed improves sleep and to disentangle the effects of blue light exposure and rumination on sleep, participants were asked to wear blue light blocking glasses during two evenings. During the other two evenings, participants did not wear the glasses. Conditions were counter-balanced. The questionnaires addressed smartphone use during the evening (i.e. active or passive use in minutes), rumination during bedtime (i.e., duration and intensity), and subjective sleep indicators. Active use described active smartphone activities such as liking Facebook content, commenting, or posting Instagram pictures. Passive use described passive smartphone activities such as reading Facebook content, reading e-mails, and news applications. Repeated measures analyses revealed that the intervention was not effective, i.e. participants did not sleep better when wearing blue light blocking glasses compared to wearing no glasses. In addition, multilevel path analyses did not support blue light exposure as a mediator in the relationship between smartphone use and sleep. However, day-level active smartphone use during the evenings (but not passive smartphone use) was positively related to duration and intensity of bedtime rumination, and daily variations in duration of bedtime rumination, in turn, were positively related to sleep onset latency and negatively to overall sleep quality. Multilevel mediation analyses suggested that duration of bedtime rumination is an important mechanism linking active smartphone use during the evening and overall sleep quality. Active smartphone use was related to increased duration of bedtime rumination, which in turn predicted lower sleep quality. Findings suggest that predominantly active smartphone use during the evening may lead to increased rumination, which in turn may adversely affect sleep. We all may benefit from managing our smartphone use in a way that preserves a good night’s sleep in order to, ultimately, function as well-rested individuals the following day.

S128: Work-related Smartphone Use During Off Job Hours, Rumination and Stress: An RCT Intervention Study
Daantje Derks¹, Michelle Van Laethem², Heleen van Mierlo¹
¹Erasmus University, Rotterdam, Netherlands. ²University of Amsterdam, Amsterdam, Netherlands

Purpose: Work-related smartphone use is ubiquitous in many contemporary jobs. However, this work-related smartphone use is neither limited to office space nor to regular office hours which results in boundary-spanning behaviours. There is ample evidence that work-related smartphone use during off-job hours may have negative implications. For example, it is associated with increased work-family conflict, lack of psychological detachment and impaired recovery, sleep and employee wellbeing. Therefore the central aim of this study was to test an intervention aimed at reducing work-related smartphone use in the evening in order to promote psychological detachment and decrease work-related rumination and stress.

Method: In this RCT intervention study we encouraged employees to withheld themselves from work-related smartphone use during two hours before bedtime (intervention group, N = 57). The control group (N= 63) only received information about the importance of a healthy work-life balance. The time span of the intervention was one workweek, T0 measurement took place on Sunday evening and the T1 measurement on Friday evening, both just before going to sleep.
Results: We hypothesized that the intervention group decreased their work-related smartphone use and as a consequence would experience less stress and work-related rumination and more psychological detachment after one week, compared to the control group. Manipulation checks showed that both groups significantly decreased their work-related smartphone use. The intervention group decreased their smartphone use more than the control group, which was marginally significant. Regarding the levels of stress, we found a significant interaction effect of time and condition. The intervention group was able to decrease their stress levels over time whereas the control group stayed equal. Regarding rumination, both groups significantly decreased over time. Although the intervention group decreased more over time than the control group, the interaction effect between time and condition was not significant. For psychological detachment, the pattern is comparable to that of rumination albeit in the opposite direction. Both groups significantly increased over time.

Conclusion: Altogether we can conclude that it is possible to decrease stress and rumination and to foster psychological detachment over time. However, due to lack of power, and the relative success of our control group, not all contrasts between intervention and control group were significant. As a practical implication we can encourage employers to promote a healthy work-life balance for their employees and, if possible, to withheld from work-related smartphone use during evening hours.

Symposium: Digital OHP: Insights from Research and Business into the Development of Online Intervention Tools
Chair: Gregor Jenny
University of Zurich, Zurich, Switzerland

Online tools and interventions are becoming a common sight in the field of OHP. Early meta-reviews have outlined the areas of application (e.g., mindfulness trainings), the underlying theoretical frameworks and methods (e.g., cognitive-behavioural therapy), and their effectiveness. In regard to the latter, contextual and procedural factors have been identified that support the effectiveness of online interventions.

This symposium aims to give insights into the challenges, hindering factors and lessons learned when developing online intervention tools. It will also discuss the need to cooperate with business partners to develop digital applications. Researchers developing online interventions often rely on freely available online platforms, non-professional programmers and a study population with lowered expectations in regard to user interface and user experience. But with wider dissemination and evaluation of these digital approaches, expectations towards the interface and experience become a crucial success factor.

In order to build attractive tools with a high potential for dissemination as well as evidence on their real-life effectiveness, researchers need to build the necessary skills for budgeting, managing and cooperating with IT-firms and other business partners. This symposium brings together researchers and business representatives who have developed digital OHP solutions, presenting a range of mainly-research applications, digital tools developed in cooperation with spin-offs, to business-only applications.

Each contribution will present an online tool and how it was developed and tested. The presentations will be followed by a plenary discussion and involve the experiences of the audience with digital OHP solutions. We will discuss hindering and facilitating factors in the development, application and research of such digital approaches. We will also discuss the pitfalls and opportunities of research-business partnerships and what researchers have to consider when embarking on the endeavor of developing online OHP intervention tools.
**S129: StressPrevention@Work: A Strategy to Manage Work-Related Stress Including A Digital Portal, A Stepwise Approach and Learning Networks**

Irene Houtman¹, Bo Havermans², Cecile Boot², Allard van der Beek²

¹TNO, Leiden, Netherlands. ²VUmc, Amsterdam, Netherlands

Work-related stress is associated with common mental health disorders, such as depression and anxiety, which in turn largely contribute to sick leave and work disability. Furthermore, earlier surveys have shown an increase in self-reported work-related stress over the years; an indication that this problem should be addressed. Effective interventions are available, but not widely used within organisations. In this study, we hypothesise that the implementation of an integral stress prevention strategy will reduce work-related stress in employees. The Stress Prevention@Work strategy consists of: (1) a stepwise work-related stress prevention approach, (2) a collaborative learning network, and (3) a low threshold information technology (IT) platform. This aims to describe the study evaluating the effectiveness of this integral stress prevention strategy.

In a four year project, in year one (2014) a website and an online-platform are developed, particularly the latter accommodates organisations as well as individual workers to follow a step-wise procedure to manage work-related stress. In year two (2015) a pilot is organised and the digital platform will be further improved. In the third year (2016) the trial will be held in a large educational organisation and in a large health care facility. In the final year, the project will be evaluated and the strategy developed will be integrated with another digital portal on sustainable employment, which already links organizations to professional support.

In the presentation an overview of the project will be provided, including the trial. The strategy appeared to be effective in primary prevention of work stress, with stress increasing in the control group, and diminishing slightly in the experimental group. Action has been taken to preserve the SP@W strategy online after the project has stopped, and to extend it for use outside the Netherlands.

**S130: Development and Launch of the Online Employee Survey Tool 'StayEngaged' – Insights from the Business Perspective**

Katharina Vogt¹, Joshua A. Herbst²

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Appreciation, opportunities to have a say, time pressure and interruptions; these are all factors that affect health, satisfaction and work engagement of employees and thereby a company’s long-term success. Employee survey tools are a common way to measure these factors and to identify key areas of action, and allow for the definition of measures for improvement. As part of a symposium on "Digital Occupational Health Psychology (OHP): Insights from research and business into the development of online intervention tools" this presentation aims at giving insights into the development, the scientific background and the practical experiences with the employee survey tool 'StayEngaged' that is currently being launched in Switzerland.

Firstly, the presentation starts by demonstrating the importance of a sound scientific base – both as a prerequisite for real-life effectiveness as well as a crucial selling point. StayEngaged bases on a holistic model for health and performance that combines the principles of Salutogenesis and Positive Psychology. We tested this model with a representative sample of 2000 employees in Switzerland with structural equation modelling. Additionally, further analyses were performed on the factor structure and reliability of the survey tool and in order to obtain a benchmark.
Secondly, we share results from qualitative analyses on the experiences with an individual feedback that employees receive immediately after completing the questionnaire and that aims at encouraging them to promote their own health and to craft their jobs. Thirdly, we present a broad range of non-digital consulting services, offered in connection with the digital survey tool. With these services, as well as recurring analyses and activities, companies are encouraged to make a long-term commitment and sustainable contribution to the health of their employees.

The presentation will be followed by a general discussion on the challenges and opportunities when developing and launching digital tools in the field of OHP.

S131: «wecoach»: Digital Coach Empowering Leaders for Health-oriented Team Development
Georg F. Bauer, Luisa Grimm, Gregor J. Jenny
University of Zurich, Zurich, Switzerland

Background: As customers, from health care to daily customer services, we are witnessing the blending of digital and personal support systems. This is usually done in a stepped way: for standard issues, support is fully automatised and mostly driven by a chatbot, that is, a conversational interface based on a set of rules or algorithms. For more complex issues, support is given personally through online interfaces or face-to face. We developed a web application («wecoach») that applies such a chatbot to empower leaders for team development. The app first enables leaders to reflect upon and to improve their own work situation. Based on this self-experience, the app guides them through an online team survey and supports them in moderating a workshop with their team, where they develop measures to optimise job demands and job resources on the individual, group and organisational level.

Method: The wecoach is based on evidence from both individual capacity building and organisational change approaches, combined with specific knowledge from worksite health promotion. An interdisciplinary team of psychologists and IT experts built and tested the wecoach together with leaders from different branches of business. A University Spin-off is in charge of generating revenues to secure IT stability, support, development and dissemination of the app. The University researchers themselves utilises the wecoach for research on online interventions.

Results: Line managers have been using the first version of the wecoach and provided feedback for improvement by means of focus groups. This pilot test showed that the leaders in diverse organizational contexts and with a range of leadership experience like to interact with the chatbot and perceive the usefulness of the system. However, similar to experiences of other researchers, users need to be very well-guided through the process. The system has to exhibit high attractiveness in terms of variety, information, usefulness of tools and the graphical interface. Further, interacting with IT partners and being realistic about the IT costs to ensure an attractive and reliable IT system are new challenges for researchers in this field.

Discussion: Based on a typical Scrum framework, the second version of the wecoach has been developed and launched. This version is now subject of a cluster randomized controlled trial (cRCT), to test the effectiveness of a digitally supported team development process. We will present the development of the wecoach as well as the design of the cRCT. We will discuss the challenges and benefits of developing online intervention tools, where many parties are involved (such as University researchers, IT partners, a Spin-off, line managers).
Symposium: Building Psychologically Informed Policing to Meet the Changing Needs of a Complex Society
Chair: Nohre Tehrani
Noreen Tehrani Associates Ltd, London, United Kingdom

This symposium involves four presentations each of which looks at different aspects of psychological wellbeing in UK policing. The scene is set in the first presentation which examines initiatives developed and implemented under the auspices of the College of Policing and the Chief Constable responsible for police Wellbeing in the National Police Chiefs’ Council. The second presentation describes the development of a programme of psychological screening and surveillance. This has been implemented in UK police forces and shows how surveillance data is helping to develop ways to move away from simply treating sickness, to one where wellbeing is maximised. The third paper looks at the needs of officers dealing with child abuse and examines the impact of previous traumatic exposure and the relationship of workability on tenure and psychological wellbeing. The final paper brings all the speakers together to present some early findings on ways in which the police have been engaging with stakeholders. It outlines how they are building wellbeing and resilience in officers and staff through a range of interventions, including: Wellbeing Ambassadors, Capacity building Wellbeing workshops, and supportive guidance resources.

This symposium will be of interest to Occupational Health Psychologists who work in organisations where the workers are directly exposed to high levels of emotional labour, stress and trauma including: emergency services, health services, teaching and humanitarians.

S132: It’s Okay Not to Be Okay: Workplace Wellbeing, Not Just the Absence of Ill-health
Ian Hesketh
Lancaster University, Lancaster, United Kingdom. College of Policing, London, United Kingdom

The Police Service is one of the blue-light emergency responders in the UK. Policing is undergoing the most significant change in its recent history because of the demands imposed by financial cutbacks, reducing officer and staff numbers, increasing crime and increasing levels of sickness absence. These well-documented changes have resulted in significant challenges to working practices. These have included redeployment issues, as well as significant health challenges for the workforce. These challenges are to both their working and personal lives.

There is a well-documented link between employee wellbeing and organisational performance. The hypothesis presented here is that the Oscar Kilo Blue-Light Wellbeing Framework offers an opportunity to create an environment within emergency responders that develops environmental conditions conducive to wellbeing. These conditions include educating leaders as to the high value to be placed in having a workforce that has wellbeing at its core. We contend that it is not just the absence of ill-health and that personal resilience can strengthen coping mechanisms to deal with life’s stressors. We posit that the challenge is to have the operational capability in policing to accurately understand, intervene and manage wellbeing effectively.

In this presentation, we will review the journey to date of the first sector-specific wellbeing framework aimed at blue-light emergency services in the UK - Oscar Kilo (OK). We will detail the huge success of this movement to improve the wellbeing of emergency service workers across the UK, providing practical examples to illustrate both the challenges and successes. The session will include the criticality of evidence-based practice, and the great strength in academic-practitioner networking, drawing on examples from the close relationship with policing and academia.
We propose three learning outcomes for delegates to take home:
1. How wellbeing is addressed within Blue-Light Services
2. To what extent wellbeing can be managed, shaped and influenced by evidence-based practices
3. To what extent are academic/practitioner partnerships critical to the success

S133: Enhancing Wellbeing: The Need for a Change in Focus
Romin Tehrani
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Typically, psychological screening and surveillance programmes have focussed on identifying and treating psychological ill health. Whilst the focus on ill health is an important strategy for reducing sickness absence and turn-over of staff it ignores the potential benefits that may be achieved by an increased focus on wellbeing and resilience in those people deemed to be “fit”.

To meet the legal requirements to protect the health and wellbeing of employees many organisations have introduced screening and surveillance programmes. These organisations include: policing, fire and rescue, ambulance services, humanitarian organisations and youth safeguarding teams. Early results from these organisations have shown that in most working populations 80% of employees are fit, 15% need some wellbeing advice or support and only 5% require a form of intervention. To date, most of the occupational health activities and resources have gone into supporting the 20% deemed to be unfit.

This presentation will turn the focus onto the needs of the 80%. The surveillance data gathered provides an insight into the personality, coping styles, lifestyle, sense of coherence and belief structures in addition to their clinical scores of anxiety, depression, burnout, primary and secondary trauma. The interrogation of the screening results gathered on 10,000 employees has shown that within the “fit” group there are issues with sub-optimal coping skills, lifestyle deficits and issues with core resilience factors.

This presentation will discuss some of the data gathered from psychological surveillance programmes and uses the data to demonstrate the effectiveness of sense of coherence, lifestyle, locus of control, coping skills and style in identifying employee resilience. It further discusses the value of online psychological surveillance in the workplace, describing how it can be used to monitor the impact of organisational change, the benefits of wellbeing interventions and the opportunities to develop tailored wellbeing programmes that can improve staff retention and improve employee resilience.

We wish to offer three learning outcomes for the delegates. First, why it is important to focus on the fit as a way of improving employee resilience; second to know which tools are the most effective in predicting long-term wellbeing; and third why it is important to monitor and evaluate the effects of organisational change, development and wellbeing interventions

S134: This Work Hurts: But When Did the Pain Start?
Noreen Tehrani
Noreen Tehrani Associates Ltd, London, United Kingdom

The protection of children by the police is regionally organised in the UK. Within each force, child protection is investigated by specialist child protection units, including the front-line child abuse investigation teams (CAIT). These teams respond to cases of physical, emotional and sexual abuse. Historic Child Abuse Teams investigate allegations of sexual abuse made by adult
victims. Paedophile On-Line Investigation Teams (POLIT) investigate the production and transmission of images of child sexual abuse. Further, in most UK police forces, there are other specialist teams investigating grooming and safeguarding needs of children vulnerable to the activities of child sexual abusers. In addition to these investigating officers, there is police staff who support the investigations by gathering intelligence and forensically examining computers, smartphones and other high-tech equipment for evidence of child abuse. Some officers and staff work with social workers, teachers and healthcare professionals in multi-agency child safeguarding teams. Occupational Health Psychologists working within the police forces are aware of the adverse effect of direct and indirect exposure to child abuse images and materials. Within the Child Protection Professionals (CPP), these can manifest by way of higher levels of sickness absence, the need for redeployments to other roles, and in extreme cases, medical retirement. Psychological risk assessments of the CPP roles indicates that police officers and staff undertaking this child protection work falls within a psychological high-risk group that requires regular screening and support.

The surveillance measures used in this study examined levels of anxiety, depression, primary and secondary trauma. In addition, demographic information on the gender, time in role (tenure), Adverse Childhood Experiences (ACE) scores and Workability were also collected. The study used these surveillance data to address the following questions:

- What is the evidence that time in role (tenure) and workability are related to higher levels of primary and secondary traumatic stress?
- Does the number of early life traumas (ACE scores) increase the incidence of higher levels of traumatic stress symptoms?

The results from a psychological surveillance programme identified that CPP’s are at risk of developing symptoms of anxiety, depression, primary and secondary trauma because of their work. There is a statistically significant relationship between the clinical symptoms and Workability, Tenure and Adverse Childhood Experience (ACE) scores. A regression analysis showed that Workability, Tenure and ACE scores explain between 12% and 23% of the variance. There were also gender differences with women, having statistically significant higher levels of symptoms. However, the clinical significance was negligible for all but the primary trauma scores.

S135: Making the Case: Building the Engagement of UK Policing
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The final paper will be interactive, designed to encourage greater participation between the symposia’s speakers and the audience. The discussant will chart the journey emphasising the benefit of a cyclical process in which theory guides practice and practice informs theory. Using case studies and experiences in the field the three presenters will use their experiences to talk about the opportunities for occupational health psychology in policing and highlight the challenges of influencing policing strategies, policies and operations to make a difference to the lives of officers and staff.

The world of policing is a complex, creating difficulties in introducing notions of wellbeing into the working landscape. The occupational health psychologist needs to be cognizant of the political influences and dimensions, the high levels of emotional labour and emerging crime types taking their toll. Choosing to work in the policing environment produces practical challenges which are not for the faint-hearted.
Effective engagement is vital and the speakers will present some strategies which they have adopted to increase engagement but are equally keen to learn from the audience. It is recognised that increasing wellbeing in policing is an ongoing process, which needs to provide practical interventions and positive outcomes for the workplace.

The session will focus on creating a positive framework for increasing wellbeing in policing. A framework which can also be applied in other blue light and high-risk organisations. By the end of the symposia, we will equip the delegates with the basic knowledge to be able to apply practical approaches in their own workplace. Using case studies, we will discuss the importance of engaging with key stakeholders such as government, education providers and health providers to ensure the health needs of policing are recognised and addressed effectively.

Symposium: Healthy Enterprise Standard (HES) Evaluation Project
Chair: 1Hélène Sultan-Taïeb & 2France St Hilaire
1Université du Québec à Montréal, Montréal, Canada; 2Université de Sherbrooke, Sherbrooke, Canada.

Introduction: The voluntary Healthy Enterprise Standard (HES) (BNQ 9700-800/2008) is related to a certification program in Québec (Canada) that aims to recognise enterprises that promote a healthy workplace.

After an auditing process by the Bureau of Standards of Québec (Bureau de Normalisation du Québec), an employer may obtain the HES certification when a series of criteria are met: explicit involvement of higher management towards the HES, creation of an ad hoc committee composed of employees to design and follow-up on interventions, assessment of employees’ needs and occupational exposures diagnosis, effective implementation of actions to improve employees’ health. To obtain HES certification, an organisation has to implement interventions in at least two of the four areas of the standard: (1) Healthy life habits (physical activity, nutrition, and alcohol and tobacco use), this area being mandatory; (2) Management practices and psychosocial constraints; (3) Physical environment; (4) Work–life balance. As a result, preventive interventions within this framework are very diverse, such as lectures on nutrition, training of first-level managers to improve rewards in teamwork, or the creation of a time bank to promote work–life balance.

This symposium aims at presenting for the first time results of a 4-year research project on the evaluation of interventions within the HES framework in Québec. Little is known in the literature on the evaluation of voluntary occupational health standards in general and the HES has never been evaluated before. The four areas of the standard may have an impact on adverse psychosocial and physical work factors, as well as health outcomes such as psychological distress and musculoskeletal disorders, which are increasing concerns for policy makers and employers. Finally, the evaluation of health and economic effects of interventions needs to be interpreted in the light of the evaluation of implementation process to produce recommendations and to contribute to the reproducibility of interventions in various organisational contexts.

Four presentations will answer the following research questions:
- What were the effects of the HES on adverse occupational exposures and employees’ health? (adverse psychosocial work factors, psychological distress, work-life balance, healthy life habits and work-related musculoskeletal problems);
- How did Psychosocial Safety Climate, as an organisational context variable, influence exposure to interventions and what effect had this exposure on psychological distress?
How could qualitative results on implementation process explain economic results (benefits and costs) of interventions from the employer’s perspective in a 2-case analysis?

What was the adequacy between workers’ needs and implemented activities within the HES?

Methods: We used a sequential mixed-method design with quantitative and qualitative data. All active employees of ten Quebec organisations were solicited to fill in a questionnaire composed of validated scales before (T1=2849) and 24-38 months (T2=2560) following the standard’s implementation. Economic data were collected from key informers and human resources registries in seven organisations. Focus groups (n=7) and semi-directed interviews (n=27) as well as documentary data were collected in seven organisations and coded. More information on methods and results is presented in the four attached abstracts.

S136: Healthy Enterprise Standard (HES) evaluation: Effects on Adverse Occupational Exposures and Employees’ Health

Caroline Duchaine¹, Karine Aubé¹, Marie-Claude Letellier¹, Anne-Frédérique Lambert-Slythe¹, David Bellemare¹, Mahée Gilbert-Ouimet¹, Michel Vézina², Clermont Dionne¹, Marie-Michèle Mantha-Bélisle², Caroline Biron¹, France St-Hilaire³, Hélène Sultan-Taieb⁴, Chantal Brisson¹

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Introduction: The voluntary Healthy Enterprise Standard (HES) targets four intervention areas known to have an impact on employees’ health: Healthy life habits, Work-life balance, Physical environment and Management practices. The aim of this project was to evaluate the effects of the HES on adverse occupational exposures and on indicators of employees’ health.

Methods: This was an intervention study with before-after and cross-sectional designs. Employees of 10 Quebec organizations completed a questionnaire before (T1; n=2849) and 2-3 years following HES implementation (T2; n=2560). Validated items and scales were used to assess employees’ healthy life habits (smoking status, physical activity, consumption of fruits and vegetables), self-rated health, work-life balance (WLB), adverse physical and adverse psychosocial work exposures as well as work-related musculoskeletal problems (WMSP) and psychological distress at T1 and again at T2. Exposure to interventions from the four areas of the HES was determined by self-reported items from the T2 questionnaire and complemented by qualitative data.

Results: Following HES implementation, an improvement in several life habits (physical activity and smoking) was observed among men and employees aged 55 or older. However, the self-rated health status of these employees remained unchanged from T1 to T2. The improvement of life habits for both male employees and those aged 55 or older following HES interventions is significant since scientific literature suggests that these groups are generally less inclined to participate in health promotion workplace interventions. Regarding WLB, a deterioration was observed for both women and men from T1 to T2. Of the two organizations that implemented specific interventions to promote WLB, only one implemented recognized interventions (flexible schedule and telecommute). In this organization, a slight improvement in WLB was observed for men and especially for women. These results suggest that workplace interventions implementing recognized and specific measures to promote employees’ WLB may be effective. For WMSP, both adverse physical and psychosocial work exposures contribute to its development. Respectively, the Physical environment and Management practices areas of the HES aim to reduce these occupational exposures. In cross-sectional analyses, employees exposed to...
interventions in these two HES areas had a lower prevalence of one adverse physical and three adverse psychosocial work exposures. Among men exposed to both these areas simultaneously, the results for neck WMSP are compatible with a positive intervention effect of more than 15%, although this was not statistically significant.

Discussion: Taken together with the literature, these results suggest that further research to evaluate the effectiveness of intervention strategies targeting these adverse physical and psychosocial work exposures on WMSP is warranted. Using data aggregated at the organizational-level, an improvement in the psychosocial work environment was observed among organizations more exposed to interventions in the Management practices area. Moreover, beneficial effects of interventions in the Management practices area were observed on the prevalence of psychological distress. These results suggest that psychosocial interventions implemented in the context of this standard improved the psychosocial work environment and had beneficial effects on employees’ mental health.

Introduction: In Quebec, the “Healthy Enterprise Standard” (HES) is becoming an influential motivator for organisations wanting to improve and structure their preventive efforts. Despite the increasing interest for obtaining a certification or an award for being considered a proactive organisation, there is little known regarding the factors influencing the implementation of interventions in the framework of a voluntary standard. Psychosocial safety climate (PSC) is considered as a facet of organisational climate as it characterises senior management values and attitudes towards employees’ health. In this study, PSC was considered as a precursor and determinant of intervention exposure. This study aims to evaluate how PSC influences exposure to interventions relating to the four areas of the HES and the effect of this exposure to interventions on psychological distress.

Methods: All active employees of ten Quebec organisations (n=2560) were solicited to fill in a questionnaire 24-38 months after the beginning of the HES implementation. Intervention exposure was measured using items specifically relating to the four areas of the HES. We used the 4-item PSC scale (Dollar & Bakker, 2010) and adapted the items to measure attitudes towards the implementation of the HES. Variations in psychological distress before and 2-3 years after the implementation of interventions were measured with the Kessler-6, a 6-item validated scale.

Results: Results of the binomial regression analysis showed a significant positive relationship between PSC and exposure to all types of interventions. PSC increased exposure to interventions related to “Management Practices”, “Healthy life habits”, “Work-life balance”, and finally, to changes in the “Physical environment”. When data was aggregated at the organisation level (N = 10), significant decrease in psychological distress was found in organisations with higher levels of exposure to interventions relating to “Management practices”, whereas no change in distress was found in the 5 organisations less exposed to “Management practices interventions”. Being exposed to the other three areas of the standard had no effect on psychological distress.
Discussion: Given that interventions are notoriously difficult to implement, this study offers some insight in its implementation process, showing that PSC is a determinant factor for its success. Whereas most intervention research concludes that top management commitment is a crucial factor for the success of the intervention programme, this study highlights the role of PSC and its effect on perceived exposure to interventions in each area of the standard. It also highlights the relevance of organisational-level interventions for improving workplace mental health.


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Introduction: Economic evaluations of interventions provide useful information in the field of occupational health. Very little is known about the costs and the benefits of interventions implemented within the framework of voluntary standards such as HES. Such information could play an important role in the dissemination of occupational standards among organisations in a context of scarce resources available for prevention. However, to be used as a tool for decision-making, economic results must be interpreted in the light of implementation process evaluation. Employers wishing to invest in a voluntary standard should know if the costs and benefits assessed in a given organisation were due to specific obstacles or facilitating factors, to a particular organisational context or situational factors. The aim of this study is to assess economic results (benefits and costs) of interventions within the framework of HES from the employer’s perspective in a two-case analysis and interpret them in the light of results provided by the implementation process evaluation.

Methods: We used a before-after design and a sequential mixed method approach. In two organisations from different sectors, quantitative data were collected with a questionnaire among all active employees before the standard’s implementation (T1 organisation A=186, organisation B=1081) and 25-31 months after (T2 A=190, B=975). Employees’ exposure to interventions in the four areas of the standard and presenteeism (as a benefit) were measured. Intervention costs were collected among key informers from the ad hoc committee in charge of the HES: working time spent by employees to design, plan and schedule activities, working time spent to participate to activities, equipment and material, external experts fees, certification fees. For benefit assessment, absences data were collected at T1 and T2 from organisations’ registries. Qualitative data were collected through three interviews (one employee, one supervisor and one key informant) and one focus group with the ad-hoc committee in A (respectively 13 and 1 in B given the size of this organisation). Qualitative data were recorded, transcribed and coded in order to perform template analysis.

Results and discussion: The average cost per employee per year of the standard implementation was very similar for A and B ($233 and $277 CAD) and distribution of cost categories slightly differed. There was no correlation between the average implementation cost per employee per year and the percentage of employees having perceived changes in the different areas of the HES. Benefits, resulting from absence and presenteeism variations between T1 and T2, were negative in A and highly positive in B. Implementation analysis showed that different types of activities have been implemented in the two organisations, with more interventions in the management practices area in B. Obstacles were identified in A, especially during the implementation phase of the activities, which was not the case in B. Co-interventions were different in the two organisations, with the implementation of a lean management in A and a series of organisational changes in B. These results show that the implementation process analysis provides interesting insights into the interpretation of benefit differences between the two organisations.
Intervening in primary prevention to improve employees’ health remains a challenge for organizations. Standards and guidelines are frames of reference to support organizations in the implementation of intervention. Notwithstanding, we still know little about the organizational interventions that are effective to improve workers’ health and the way these activities are chosen within the framework of a voluntary standard. According to McFillen and colleagues (2013), the knowledge in organizational change interventions concern essentially how to conduct interventions rather than 1) demonstrates scientific evidence for the efficacy of activities or the appropriateness of one activity over another in specific situations, and 2) establish criteria to choose an activity. The aim of this study is to 1) assess the adequacy between employees’ needs and implemented activities within the HES framework, and 2) understand the levers and obstacles involved in the choice of activities.

**Method**: We used a mixed method protocol. For the quantitative data, all employees of the seven participating organizations were invited to complete a questionnaire administered at the workplace during work hours. It included validated and adapted instruments to assess workers’ exposure to psychosocial risk factors (demand-control-support and effort-reward imbalance models), healthy life habits (physical activity, nutrition, alcohol, tobacco use), physical constraints, work–life imbalance. It also included health outcomes (psychological distress with the validated Kessler-6; musculoskeletal disorders). From these results, the Institut national de santé publique du Québec (National Institute of Public Health of Québec) provided a diagnosis for each organization with three levels of priority for risk factors and health outcomes. For the qualitative data, focus groups (n = 7) with health and wellness committees, semi-directed interviews with managers and employees (n = 27), and documentary data collection (actions plans) were conducted in seven organizations. All focus groups and interviews were transcribed. Those data and documentary data were coded following the template analysis technique (King, 2012) and the thematic analysis technique (Braun & Clark, 2006). The QDA Miner software was used for all the qualitative analyses.

**Results**: The results showed that there was a gap between the areas of intervention to be prioritized by the organizations (diagnosis) and the areas on which they intervened. If the majority of the seven organizations should have improved recognition, control over work and workload, no activities have been implemented regarding the lack of control and workload. Activities mostly implemented were focused on the healthy life habits area of the HES. This area also corresponded to the highest variety of activities. Analysis of the implantation process highlighted factors that may explain this gap, such as the capacity and the legitimacy of the committee to suggest activities in the management competencies areas and their understanding of the area, the financial constraints or the importance of integrating the HES with human resources management and governance to achieve the expected effects.

**Discussion**: These results will contribute to better understanding the choice of organizational interventions as compared to the needs of workers identified in the diagnosis before the implementation of interventions within the framework of a voluntary standard.
The goal of Total Worker Health® (TWH) programmes is to integrate protection from work-related safety and health hazards with promotion of injury and illness prevention efforts to advance worker wellbeing. Researchers in the Center for the Promotion of Health in the New England Workplace (CPH-NEW; https://www.uml.edu/Research/CPH-NEW/), a TWH center of excellence supported by the National Institute for Occupational Safety and Health (NIOSH; https://www.cdc.gov/niosh/twh/) in the United States, have developed a set of tools for planning, implementing and evaluating a Healthy Workplace Participatory Programme (HWPP). The HWPP includes a structured approach for employees to participate in the design of TWH interventions. Both the physical and psychosocial features of work organisation are focused on in this structured approach because of their direct and indirect impacts on the health and wellbeing of workers.

This symposium focuses on the second-generation set of tools and approaches developed for ensuring successful implementation of a HWPP. The symposium begins with a brief overview of the TWH initiative spearheaded by NIOSH and a summary of the challenges revealed in field tests of the HWPP. Four papers are then presented, each highlighting how specific challenges across the HWPP implementation timeline are being addressed with these new tools and approaches.

Paper #1, Using leadership interviews to assess organisational readiness for a participatory, wellbeing programme: The value of real-time inputs to guide implementation, presented by Suzanne Nobrega, describes how interviews with organisational leaders are used to assess organisational readiness to implement a participatory TWH program. Awareness of the extent of management support and other organisational factors can help an organisation overcome obstacles that can delay or impede program implementation. Paper #2, Participatory action research in corrections: Narrowing down the focus for intervention, presented by Sarah Berger, focuses on a multi-level participatory approach to enable employees, who are part of a “design team” of line-level workers, to organise interventions that incorporate broader health and safety issues and concerns of fellow workers.

Paper #3, Finding the right balance: Expert OSH support that does not undermine participatory design of interventions by employees, presented by Robert Henning, offers guidelines for occupational safety and health professionals who are asked to support employee participatory intervention design efforts as subject matter experts. This paper emphasises research-to-practice opportunities consistent with dissemination and implementation science. Paper #4, Contextualising surveys for American correctional officers, presented by Jeffrey Hanrahan, focuses on what to do when conventional survey instruments are non-responsive to participatory interventions because the demands of extreme work environments are skewing response patterns. Effective evaluation methods are needed to guide iterative intervention design efforts as part of a continuous improvement process for program sustainability.

Questions will be invited after each paper presentation but some time will be reserved, after all papers are presented, for a general discussion with audience participation of the many challenges associated with supporting and evaluating employee participatory programs.
S140: Using Leadership Interviews to Assess Organisational Readiness for a Participatory, Wellbeing Program: The Value of Real-time Inputs to Guide Implementation

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The Healthy Workplace Participatory Program (HWPP) (Nobrega et al., 2017) is a research-to-practice toolkit for implementing a participatory, “Total Worker Health” programme. Initially disseminated in 2014, the HWPP was designed to help engage employees at all levels of a workplace in participatory design efforts to improve health, safety and wellbeing. Front-line employees, with help from a trained facilitator, identify root causes to problems and then work together to design interventions and propose them to upper management. One key goal is to encourage communication, collaboration and learning at all levels of the organisation throughout the intervention design process. Other HWPP goals are to identify and remedy unhealthy aspects of work organisation, and to increase employee control and self-efficacy in order to reduce job stress.

The literature on participatory ergonomics interventions cites several factors associated with successful program outcomes, e.g., management support, training, and availability of employees to meet in teams (Van Eerd et al., 2010). The importance of management support and other organisational features are similarly highlighted in dissemination and implementation (D&I) science frameworks as predictors of successful programme implementation (Chaudoir et al., 2013). Addressing potential barriers early in programme implementation may facilitate more successful adoption, an important goal for bridging the research to practice gap in occupational health (Dugan and Punnett, 2017). This knowledge could also improve our understanding of underlying obstacles and facilitators for good practice more generally.

We used a D&I framework (Chaudoir, et al., 2013) to evaluate prospectively the potential organisational facilitators and barriers prior to implementation of the HWPP in six public-sector health care facilities in USA. Six to ten organisational leaders in each facility (e.g. clinical and administrative directors, union leaders) were each interviewed for 45-60 minutes. Discussion topics included concerns related to employee safety, health and wellbeing; operations and effectiveness of the current facility safety and health programme(s); the HWPP goals and implementation plan; perceived alignment of the HWPP with the goals of organisational goals; and possible obstacles to HWPP success.

Interview discussions were recorded and notes were typed. A content analysis was performed using NVivo software to identify similarities and discrepancies of themes and concepts among participants from the same organisations. Results are being summarised and presented to organisational leaders with the joint goals of strengthening management support and encouraging resource allocation to meet the challenges identified. Early evaluation results will be presented to illustrate how interview data were received and used by organisational leaders early in the programme implementation phase.

S141: Participatory Action Research in Corrections: Narrowing Down the Focus for Intervention

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The Center for the Promotion of Health in the New England Workplace’s (CPH-NEW) Health Improvement Through Employee Control (HITEC) project employs the participatory action research (PAR) approach in a study with corrections workers who develop interventions through Design Teams (DT). In the present study, we report on the effectiveness of a structured
participatory needs analysis phase preceding DT development of participatory interventions. The approach was advanced to resolve a dilemma posed by conflicting principles of maintaining both participatory action and comparability across study arms.

Previous focus groups and surveys established stress and mental health as pressing, although generic, concerns. Based on the information gathered, the study team identified four consensus priority areas: 1) overtime and sleep, 2) family support and work, 3) fitness and work culture, and 4) mental health in a violent culture. These were consistently identified in previous HITEC studies as posing health and safety risks related to worsening health, and health and safety (Cherniack, et al., 2016; Buden, Dugan, Namazi, Huedo-Mdina, Tania, & Cherniack, 2016; Morse, DussetSchleger, Warren, & Cherniack, 2011). They were then expanded to a set of eight common themes via established through review by corrections administrators, by a study-wide steering committee (SWSC) consisting of management and union representatives, and by the executive councils of union locals. In order to refine priority and to reconsider omitted areas, new focus groups were then conducted with small groups of corrections line staff. Participants first completed a survey on work conditions and perceptions, and on current and potential levels of engagement. The survey was completed by 15 staff members, including 6 COs, 3 other staff members (counselors), 5 supervisors, and 1 warden/deputy warden. In the ensuing facilitated focus groups, participants provided bi-dimensional rankings for the set of eight themes; one ranking for importance and the other ranking for difficulty.

Supervisors and line officers and other staff differed in their ranking. There was greatest agreement on the importance of “Health culture including fitness and nutrition in corrections”, There was less agreement between supervisors and staff over perceived difficulty of the intervention. COs/staff believed that the theme of “Mental Health of COs in violent culture” would be most difficult to affect, where supervisors believed the theme “Corrections: making the public case for its value” would be most formidable.

The SWSC presented these findings to the formative DTs with recommendation on priority. Early indications are that this ranking system has accelerated intervention design efforts. Introducing structured participatory methods (non-top down) from the onset may have contributed to consistent decisions by DTs to date to select the most important and difficult areas – mental health and work culture.

We have concluded that conducting a more extensive needs analysis phase is an essential step in the startup of a Healthy Workplace Participatory Program (HWPP) in corrections. Bi-dimensional and multi-level review of rankings is unique to the HITEC III study, and necessitated workforce involvement in weighing the trade-offs between theme importance and difficulty.

S142: Finding the Right Balance: Expert OSH Support that Does Not Undermine Participatory Design of Interventions by Employees
Robert Henning, Michelle Robertson, Alicia Dugan
University of Connecticut, Storrs, USA

Supporting employee participation in intervention design efforts offers a unique research-to-practice (R2P) opportunity for the translation of occupational safety and health (OSH) science. This presentation focuses on the many opportunities OSH professionals have to provide training on OSH principles and methods when employees of an organization are engaged in the participatory design of interventions to benefit their own health and wellbeing. The role of the OSH professional in this context is considered from the perspective of dissemination and implementation science. A structured intervention design process developed by the Center for the Promotion of Health in the New England Workplace (CPH-NEW), a research-to-practice
center supported by the National Institute for Occupational Safety and Health (NIOSH) in the United States, serves as a case in point to describe specific R2P opportunities that are present within each step of a structured intervention design process. CPH-New developed a toolkit to implement a Healthy Workplace Participatory Program (HWPP), and this incorporates many of the same features found in successful participatory ergonomics programs. In a HWPP, a “design team” consisting of line-level employees first selects an OSH problem or issue to focus on, and then a trained facilitator helps the design team use the Intervention DEsign and Analysis Scorecard (IDEAS) Tool to design interventions in a stepwise manner. Intervention proposals are later submitted to management for consideration and eventual implementation, sometimes after collaboration with the design team on specific aspects of the intervention. When OSH professionals are brought in as subject matter experts, one challenge they face is finding the right balance between providing expert OSH guidance while also supporting employee control over the intervention design process. Supporting employees engaged in a participatory intervention design process is a role that is unfamiliar to many OSH professionals because they are more accustomed to applying their professional skills directly to address OSH issues and solve OSH problems. A case study is used to highlight the importance of OSH professionals finding the right balance between providing OSH guidance and supporting participatory design efforts in each step of the multi-step intervention design process. IAQ was identified by employees as a high-priority physical environment/ergonomics problem and also viewed by them as a major contributor to discomfort and illness. Subject matter experts were university researchers separate from the study team who were brought in to help the employee design team assess IAQ and consider solutions. This field study provided indications that, when OSH professionals adopt practices consistent with dissemination and implementation science, positive intervention outcomes can occur. In addition, diffusion of the IAQ intervention elsewhere in the organization reflected organizational learning and a commitment to continuous improvement of employee health and wellbeing through participatory intervention design.

**S143: Contextualizing Surveys for American Correctional Officers**

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Researchers in the Center for the Promotion of Health in the New England Workplace (CPH-NEW) determined that newly employed correctional officers (COs) are at high risk of developing health problems within their first two years of employment. Approximately one third (31%) had scores of 10 or more on the Center for Epidemiologic Studies Depression Scale (CES-D), high rates of work-family conflict was identified by the majority of respondents, and a high prevalence of obesity also appeared to emerge early in work tenure (Cherniack et al., 2016). Participatory action research methods, engaged two unions and management in a Department of Corrections, leading to an officer-led peer health mentoring programme designed to lower health risks of new officers through application of Total Worker Health® principles. Two cadet classes (N=86) were assigned to a Standard Programme, and three classes (N=183) were assigned to a Mentor Programme with peer mentors. All groups completed physical evaluation and health and wellness questionnaires at inception and after 12 months. Separate focus groups with 11 mentors and 11 mentees revealed high satisfaction with the mentor programme (Namazi et al., 2016).

Questionnaires based on widely used validated domains had more muted results, and failed to adequately assess the constructs they had been designed to measure. Problematic survey items in this dataset that violated statistical assumptions [n=21] were identified by Barr et al. (2017). Twenty questions had abnormal distributions (positively or negatively skewed, kurtosis, and
heteroscedasticity issues) with 1 trending towards abnormal. We suspected that these irregularities in response patterns may be attributable to the extreme working conditions of CO’s rather than survey items being too elliptic. Therefore, one goal of the present effort was to revise problematic survey items to ensure accurate construct measurement in these highly stressful jobs. The present effort addresses the root cause of the item skewness by contextualising items as opposed to performing statistical transformations to normalise the distributions after data collection. For example, the high ratings of emotional labour in our analyses indicated that CO’s must manage their expressions and interactions out of fear of unfavorable inmate response, or the “tough” culture pressure from fellow officers that has been alternatively described as the "John Wayne Syndrome" (Schaufeli & Peeters, 2000). To address such phenomena, subject matter experts contextualised survey items identified as problematically irregular in order to be more applicable to the corrections workplace. In addition, creation of some new survey items is planned based on focus group findings, where both mentors and mentees expressed a great deal of enthusiasm about the value of specific features of the program.

A second follow-up survey to evaluate the impact of the officer-led peer health mentoring programme will be administered in late spring of 2018. Following data collection, analyses will be conducted to determine if the response distribution problems identified in the earlier dataset have disappeared following survey item contextualisation. If the violation of statistical assumptions can be avoided, this will demonstrate that contextualising standardised measures can facilitate more effective research in these high stress occupations.

Symposium: Deconstructing Recovery: Why, How, and When It Occurs (PART II)
Chair: Despoina Xanthopoulou¹ & Ana Sanz-Verge²
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Recovery from work-related demands refers to a restorative process through which psychological and physiological systems that have been activated during work, return to a pre-stressor level. Successful recovery is crucial to stay healthy and functional. The area of Occupational Health Psychology has paid attention to this important process over the last 20 years, but experts in the field recognise that there is still much more to learn about why, how, and when this process occurs (Sonnentag et al., 2017). For instance, results on what kind of activities and experiences are particularly beneficial or detrimental for recovery are often inconsistent. This calls for more studies on third variables that determine when recovery is more likely to occur. In this second part of the symposium entitled ‘Deconstructing recovery: Why, how, and when it occurs’, we aim to learn more about the boundary conditions (both in the person and the environment) that explain recovery.

In the first study, Kinnunen, de Bloom, and Virtanen focus on the recovery experiences (i.e., detachment and relaxation) during breaks at work and how these relate to burnout and performance. Importantly, they investigate the moderating role of age on these relationships. Results indicate that successful recovery during work breaks is particularly beneficial for older vs. younger employees. In the second study, Binnewies and Dounova focus on the role of both work-related and personal factors in explaining the recovery of knowledge workers, who often deal with unfinished tasks. Their results show that work engagement and promotion focus moderate the negative relationship between daily unfinished tasks and psychological detachment, in a way that these relationships are stronger for employees with high work engagement and promotion focus. The daily diary study by Demerouti highlights the importance of self-work conflict conceived as a proxy of insufficient recovery and its effects on vigour at work during the same and the next day. Results suggest that active jobs positively activate employees even when an additional demand (i.e., self-work conflict) is experienced on that day. However, the activating effect diminishes the next day and these jobs drain employees' energy. Finally,
Rivkin and Unger examine whether daily recovery experiences during the commute to and from work affect employees’ psychological health and whether the aversiveness of travel and the detachment during travelling time function as boundary conditions determining this relationship. They find that while travel aversiveness on the way to work attenuate the negative effect of detachment on ego depletion, there is no significant interaction between these variables on the commute home.

These findings have important theoretical and practical implications. From a theoretical point of view, they shed light on the boundary conditions both in the person and in the environment, that may determine when recovery is more likely to occur. From a practical point of view, they clarify what facilitates recovery depending on what the target group and the condition at hand are.

**S144: Do Older Teachers Benefit More from Workday Break Recovery Than Younger Ones?**

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Aging is a topical issue in working life. However, age has not received much attention in the research on work stress recovery. The aim of this study was to examine whether age plays a role in the relationship between recovery experiences (detachment and relaxation) during workday breaks and recovery outcomes (burnout and task performance) among Finnish class and subject teachers. We hypothesised that older teachers would benefit more from recovery experiences during breaks at work than younger ones. We based our expectation on the view that because older teachers are likely in a greater need for recovery during workdays, therefore recovery experiences during breaks may benefit them more than younger teachers.

Together 769 teachers took part in a cross-sectional questionnaire study. Of them, 58% worked as class teachers in comprehensive schools and 42% as subject teachers in both comprehensive and upper secondary schools. Their average age was 49.8 years (range 18–68 years) and the majority (83%) were women. Detachment and relaxation experiences were measured with items from the Finnish version of the REQ (modified to concern breaks), burnout with Bergen Burnout Indicator and task performance with the IWPQ. The data were analysed using moderated hierarchical regression analysis.

The preliminary results show that both recovery experiences (detachment and relaxation) during breaks (lunchbreaks and breaks between classes) were negatively related with burnout symptoms (exhaustion, cynicism and sense of inadequacy), and positively related with self-reported task performance. Age played a significant role only in sense of inadequacy: older teachers had a higher sense of inadequacy. However, age moderated the relationships of both recovery experiences with exhaustion, sense of inadequacy and task performance among subject teachers. All significant interactions suggest that older subject teachers benefit more from recovery experiences than younger ones. However, none of the interactions was significant among class teachers. This may relate to the fact that class teachers had fewer opportunities to enjoy recovery experiences during workdays.

Our results suggest that detachment from work and relaxation during workday breaks promote wellbeing and task performance among teachers. Thus, detachment and relaxation are important also during shorter workday breaks and not only during off-job time. However, older subject teachers benefit more from these recovery experiences than younger ones in terms of reporting less exhaustion, sense of inadequacy and better task performance. This benefit was not valid among class teachers probably because they have fewer opportunities to have recovering breaks during workdays. For example, they eat more often together with pupils during their lunchbreaks.
and spend their breaks between classes in their classroom. The cross-sectional study design permits no causal conclusions. Due to the use of self-reports common method variance may have affected our findings, although its role in moderator effects is considered smaller. From practical perspective, we should find ways to promote detachment and relaxation during workday breaks in all teachers but especially in older subject teachers.

S145: The Interplay of Unfinished Tasks, Work Engagement and Regulatory Focus for Daily Psychological Detachment from Work
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Switching off from work is difficult for many employees, particularly for so-called knowledge workers who can often work anytime and anywhere they want. As psychological detachment from work is important for employees' recovery and health, it is crucial to identify risk and prevention factors both in the workplace and in employees. In our study, we examined the interplay between daily unfinished tasks as a job demand and work engagement as well as regulatory focus as personal characteristics predicting daily psychological detachment from work. On the one hand, we hypothesised negative main effects of unfinished tasks and prevention focus on psychological detachment from work. In addition, we proposed interaction effects between unfinished tasks and personal characteristics hypothesising that the negative effect of unfinished tasks on psychological detachment will be stronger for people with high work engagement, promotion focus and prevention focus.

We conducted an online diary study with 107 academics (405 day-level observations) over the course of five working days. Before daily surveys were filled in, participants responded to a general survey assessing work engagement, regulatory focus, and demographics. Each evening, participants answered questions about their workday (unfinished tasks and time pressure as control) and their psychological detachment from work during the evening.

Hierarchical linear modeling controlling for daily time pressure revealed that daily unfinished tasks negatively predicted daily detachment from work. Prevention focus was also a negative predictor of daily detachment from work. Moderator analyses showed that both work engagement and promotion focus moderated the relationship between daily unfinished tasks and psychological detachment, in the sense that negative relationships were stronger for employees with high work engagement and promotion focus.

In sum, our results indicate that both unfinished tasks and having a high prevention focus are risk factors for a lack of psychological detachment in the evening beyond experiencing time pressure. Moreover, employees with high work engagement and high promotion focus are at risk of experiencing a lack of psychological detachment when they have tasks unfinished. Consequently, it is important to develop and offer interventions which specifically target employees with high work engagement, promotion focus, and prevention focus to decrease (the perception of) unfinished tasks and apply strategies to promote psychological detachment from work.

S146: How Long Do Active Jobs Make Individuals Vigorous? A Daily Diary Study
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Jobs that combine high demands with high autonomy are called active jobs and they have been found to stimulate learning, work engagement and proactive behavior because they give employees the opportunity to increase their competency, self-efficacy, skill development, and
personal growth (Karasek, 1998). Most research on the effects of active jobs is cross-sectional or longitudinal, taking longer time frames into consideration. The question that still remains unanswered is, whether on a day that a job is active, the individual still experiences positive outcomes even when an additional demand, i.e. the interference of private life with work (or self-work conflict) is imposed on the individual and whether the effect of an active job is experienced only the same day or is extended over days. A total of 65 employees completed a daily diary at the end of the work for five consecutive working days. Data were analysed with multi-level analysis.

Results indicated that on days that employees experienced high work pressure, high autonomy and high self-work conflict they also reported high vigour at work. However, this effect reversed the next day after controlling for same day's work pressure, autonomy and self-work conflict. Specifically, previous day's work pressure was negatively related to next day's vigor when the previous day's autonomy and self-work conflict were high.

This study uncovered that active jobs still positively activate employees when an additional demand is experienced on that day. However, the activating effect diminishes the next day and these jobs drain the employees' energy. In this way, the study uncovered the importance of self-work conflict (which is a proxy of insufficient recovery) for vigour at work (which can be seen as the outcome of recovery). The reliance on self-report data is a limitation of this study. The study highlights the importance of considering daily constellations of working conditions that activate employees (i.e. active jobs) and their costs for the energy of employees over the days.

S147: The Interplay of Psychological Detachment and Aversiveness of Travel During the Commute to Work and Home
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Even though in recent years new forms of work (e.g., telecommuting) have become increasingly popular, commuting remains a daily routine for many employees. So far studies have demonstrated adverse effects of a person's perception of commuting constraints (i.e., aversiveness of travel) on various indicators of psychological health. However, research on experiences during the commute, which can positively affect employees' psychological health is scarce. Moreover, commuting on the way to work and home have not been investigated as distinct experiences so far. In the present study we address these research gaps by examining the direct and interaction effects of psychological detachment and aversiveness of travel. Drawing on theoretical notions of the strength model of self-control that a) acts of self-control consume limited regulatory resources facilitating ego depletion, a state of reduced ability for further self-control and b) refraining from self-control restores regulatory resources, we propose that psychological detachment, a recovery experience during the commute, which is characterised by an absence of self-control can replenish employees' regulatory resources. Thus, psychological detachment during the commute is negatively related to ego depletion. In contrast, coping with aversiveness of travel during the commute necessitates self-control and depletes employees' regulatory resources. Accordingly, aversiveness of travel is positively related to ego depletion. Finally, we propose that detachment and aversiveness of travel interact to predict ego depletion. More specifically, we argue that high aversiveness of travel during the commute necessitates self-control and thus should prevent the recovery effects of detachment, which stem from the absence of self-control. Thus, the relationship between detachment and ego depletion is expected to get weaker as a function of aversiveness of travel. In the present study we examine the proposed relations for the commute to work in the morning and home in the evening respectively.
We conducted a daily diary study across ten days with employees, who were foremost occupied in service professions (N=54). On each day in the morning after arriving at work and in the evening after arriving home participants rated aversiveness of travel and detachment during their commute as well as momentary ego depletion.

Our results demonstrate that detachment during the commute had a negative effect on ego depletion at work and at home respectively. In contrast to our prediction there was no significant relation between aversiveness of travel on the way to work on ego depletion. However, aversiveness of travel on the way home was positively related to ego depletion. Finally, our data indicates a distinct pattern of the interactions between detachment and aversiveness of travel. While on the way to work aversiveness of travel attenuated the negative effect of detachment on ego depletion, there was no significant interaction between these variables on the commute home.

Our results demonstrate that the effects of aversiveness of travel on the recovering function of detachment are distinct between the commute to work and home. From practitioners’ point of view employees need to avoid aversiveness of travel during their commute to work to benefit from psychological detachment.

Symposium: Return to Work: Focusing on What Works and Exploring New Directions
Chair: Roxane Gervais
Independent Practitioner, Manchester, United Kingdom

Return to work (RTW) remains a core component of the work environment; it is a process that helps individuals to stay employed. Previous research has shown work is good for people, and returning to work after ill health could thereby enhance individuals’ quality of life and wellbeing. Within the United Kingdom, the occurrences of mental health related conditions, such as work-related stress, depression and fatigue, have not decreased over the past few years and neither have the incidents of musculoskeletal disorders. This has resulted in more workers managing their ill health through long-term sickness absence.

When workers are required to be on long-term sickness absence, organisations must assess how best they can facilitate these workers in returning to work. Many employers offer employee assistance programmes, use a case management system or other processes and guidelines to facilitate employees’ return to work. These are valuable services as research shows that individuals benefit more from returning to work, than remaining on long-term sickness absence to manage their disorder, or by removing themselves from the workplace. However, despite the relevance of the concept to the present work environment, the ‘solutions’ of how RTW can be managed best are developing still, especially as any intervention should focus at the individual level. Some existing interventions are not as extensive as they could be, or are not suited necessarily to the worker or their condition.

This symposium seeks to add to the evidence by exploring what works; it includes four papers that approach RTW solutions from different perspectives.

Karina Nielsen and colleagues focus on common mental disorders (CMDs), i.e. depression, anxiety, adjustment disorders, which could have a significant negative impact in the workplace. They acknowledge that one of the ways to assist persons with CMDs is by assessing the resources that are available to them, and by ensuring that these resources could support individuals in having a sustainable return to work.
Louise Thomson follows to highlight the benefits of meaningful activity to individuals with mental health conditions. In this technique, the worker remains involved and does not feel alienated from the workplace. Louise looks specifically at the individual placement and support (IPS) approach in retaining higher rates of employment.

In the next paper Fehmidah Munir presents the evidence for leadership and managerial skills in supporting workers with poor mental health. She discusses those organisational wellbeing strategies that supports leaders and managers in gaining the required competencies to provide such assistance.

Joanna Yarker outlines the development and evaluation of a new online toolkit designed to help employees and employees navigate the return to work process following mental ill-health absence. She discusses the evidence based approach underpinning the design, including a rigorous evaluation of existing available guidance in the UK, shares features of the toolkit and findings from the evaluation.

The presenters will discuss how their solutions could relate to your workplace. Attendees to the session will be asked to add to the discussion to assess if and how the solutions would work in their respective organisations.

S148: Resources Enabling Sustainable Return to Work for Workers with Common Mental Disorders (CMDs)
Karina Nielsen1, Joanna Yarker2, Fehmidah Munir3, Ute Bultmann4
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The individual, social and economic costs of poor mental health in the workforce are significant (Bilsker et al., 2006). Common mental disorders (CMDs) such as depression, anxiety disorders and adjustment disorders present a major problem in the OECD countries (OECD, 2015). It is estimated that 15% of the working population suffer from common mental disorders (CMDs) and 1 in 2 experience mental ill-health problems at least once in their life, which has serious implications for employment prospects, productivity and wages (Hewlett & Moran, 2014). Typically, the unemployment rate among people with mental health problems is twice as high as those without and employment rates are 15-30% lower and it is estimated that 45-50% of unemployment beneficiaries suffer from poor mental health (OECD, 2015). Even if employees with CMDs return to work, keeping them at work presents a major challenge. Koopmans et al. (2011) found that over a period of seven years, 19% of returned employees had a recurrence of absence; 90% of recurrences occurred within 3 years. Recurrent sickness absence spells due to CMDs often last longer than the first period (Koopmans et al., 2011) and frequent periods are related to increased risk of work disability (Koopmans et al., 2011).

Current research on return to work for employees with CMDs suffers from two limitations. First, research mostly focuses on the influence of resources during the absence period ignoring the resources that may facilitate sustainable return to work (i.e., employees continuing to work and thrive at work post-return). Second, research tends to view the work and non-work domains separately and fails to consider the interaction of resources at the individual, group, leader and organisational levels. These limitations call for an integrated approach focusing on the resources that may promote sustainable return to work (i.e., returning and thriving at work without relapse). We define resources broadly as the factors that an individual may use to achieve their goals (Halbesleben et al., 2014). In this case, sustainable return to work is the goal. In this presentation, we present an integrated, multi-disciplinary framework and a preliminary definition of sustainable
return to work. Based on current occupational health psychology theory and existing research on return to work, we developed ten propositions for the resources in and outside work, which may promote sustainable return to work. In addition to the individual resources (such as self-efficacy and life style), group (friends and family and colleagues’ support), leader (key stakeholders such as General Practitioners and line managers), and organisational (HR practices and community support) levels, we also argue for the importance of the overarching context (i.e., the resources at the societal context and the culture and legislation that may promote sustainable return to work). Our framework raises new questions that need to be addressed to enhance our understanding of how we can support employees with common mental health disorders staying and thriving at work after returning from long-term sick leave.

S149: Return-to-Work for People with Moderate and Severe Mental Health Conditions
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In the UK, it is estimated that mental ill-health costs the economy £70 billion per year through lost productivity, social benefits and health care. Engagement in 'meaningful activity', including volunteering and paid employment, has long been a part of therapeutic work with people with long-term mental ill-health. Evidence has shown that people receiving treatment for severe and enduring mental health problems who are also in employment have fewer and shorter hospital admissions (Burns et al, 2009; Catty et al, 2008) and less outpatients service use (Bush et al, 2009) once in employment.

‘Place and train’ models of employment support are now widely used to help people with severe and enduring mental health problems to return to work. These approaches emphasise a rapid return to competitive work after episodes of mental illness through the provision of ongoing in-work support from specialist employment advisors. Individual placement and support (IPS) is an example of the ‘place and train’ approach which has been clearly defined and implemented in a variety of settings and countries. Evaluation of IPS through trials comparing it to conventional care have shown higher rates of employment through IPS than other interventions (Luciano et al. 2014).

S150: Addressing Mental Health, Sickness Absence and Return to Work Through Compassionate Leadership
Fehmidah Munir
Loughborough University, Loughborough, United Kingdom

There is strong evidence that line managers play a significant role on both influencing and managing workers’ health and wellbeing outcomes. However, the contextual drivers for leadership and management skills in relation to managing mental health in today’s climate has not been examined in detail. Adopting a behavioural perspective and using the ground theory approach, this study examined how employers manage those with poor mental health, particularly during sickness absence, at the point of returning to work and post-return to work. Managers from 18 organisations of varying size, sector and location took part in qualitative interviews. The study results found organisational wellbeing strategies as the key drivers for the emergence of soft skills training and/or compassionate leadership for managing health and wellbeing in general and in supporting a worker with poor mental health. The presentation will discuss the evidence for work and wellbeing outcomes. A conceptual model that considers the link between theories of wellbeing and compassionate leadership as a wellbeing strategy will be presented.
Although IPS demonstrates effectiveness at securing job starts, it is clear from the evidence that additional support is needed for ongoing job retention. One of the challenges in job retention is the reluctance of IPS-supported employees to declare their mental ill health to employers, which prevents the IPS employment specialist from working alongside the line manager to support workplace adjustments.

The aim of this paper is to review the evidence on the effectiveness of IPS in supporting a return-to-work for people with moderate and severe mental health conditions. It will report on findings from focus groups and interviews with line managers on their views of the IPS model and the implications for organisations and managers. It will discuss how in-work support can be provided to employees to promote job retention following successful job starts.

S151: The Development and Evaluation of a New Online Toolkit to Support Return to Work Following Mental-ill Health

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Common mental health conditions such as anxiety and depression affect an estimated 15% of the working population (Hewlett and Moran, 2014), and are cited as the cause in one in three cases certified absence in the UK (NHS Digital, 2017). Early intervention to encourage continued work participation is vital for the employee, the employer and wider society. A number of factors have been found to influence return to work including awareness, understanding and support from managers and colleagues (Arends et al, 2014), and research has helped to identify a number of ways in which the employer support (Yarker et al, 2011) and employee motivation (Joosen et al, 2018). Despite this, evidence suggests the return to work process falls short for many. It is proposed that the learnings gleaned from research are not being put into practice consistently. A preliminary review of practitioner resources and employee guidance indicated a significant gap in the availability of practical guidance for employees and employers.

Aim: To develop and evaluate an online toolkit to help employees and employers better navigate the return to work process.

Method: Using an evidence-based approach (Briner and Rousseau, 2011) the toolkit was informed by four steps: a review of the research evidence; a review of practitioner literature supplemented by a thorough evaluation of existing UK return to work guidance in relation to technical quality, design, readability, accuracy, completeness and behaviour change (drawing from evaluation frameworks developed by Eysenbach et al, 2002; McMillan et al, 2016); in-depth interviews with subject matter experts including policy makers, professionals working in Human Resources, Occupational Health and Rehabilitation; and interviews with 17 employers and 7 employees who had taken absence from work following mental ill-health to better understand the local context.

This information was used to inform the design and development of a six step toolkit, translating research into practical and accessible resources for employees and employers (returntoworkmh.co.uk). The toolkit has been user-tested and an evaluation of the toolkit is underway. Engagement with the toolkit will be monitored using google analytics. Data relating to return to work outcomes including length of absence, readiness to return to work and return to work self-efficacy are currently being collected at 0 and 12 weeks form both employees and employers and an in-depth process evaluation of five employer cases is being conducted to understand the employee journey and engagement with the toolkit.
Findings: Findings suggest that while existing guidance offers succinct information about the process requirements (what needs to be done, when and by whom), there is a significant gap regarding how this needs to be done. Limitations relating to the technical qualities, readability and completeness of existing guidance are also noted. The implications for driving and maintaining behaviour change required by both employees and managers will be discussed. The new toolkit has received positive reactive feedback (e.g. functionality, content, presentation) and information relating to the ongoing evaluation to assess the impact on return to work outcomes will be available by the September.

Symposium: Difference Is Good – Embracing Neurodiversity as a Core Topic in the OHP Community
Chair: Almuth McDowall & Harriet Tenenbaum
1Birkbeck University of London, London, United Kingdom; 2University of Surrey, Guildford, United Kingdom
Discussant: Almuth McDowall
Birkbeck University of London, London, United Kingdom

A recent policy report published by the Division of Occupational Psychology, British Psychological Society UK, identifies neurodiversity as a core topic for psychologists (Weinberg & Doyle, 2017). The term neurodiversity came to prominence over the last few years and stems from the advocacy movement for individuals with Autistic Spectrum Disorder which was then embraced by groups with other neurodevelopmental disabilities such as Attention Deficit Hyperactivity Disorder (ADHD) or broader learning disabilities (Sumner & Brown, 2016). The neurodiversity movement argues that variation in human functioning is natural (Jaarsma & Welin, 2012), rather than ‘deficit’ based, and also talks about the ‘gifts’ of conditions such as dyslexia, autism, and ADHD (Armstrong 2010). Yet, we find little evidence that the occupational health psychology community has sufficiently engaged with the topic and embraced a call to further research and practice in the domain, demonstrated via a lack of peer refereed publications on this topic in relevant journals[i]. In many countries, including the UK, the law mandates that protected characteristics need to be supported through reasonable adjustments to ensure equality of opportunity and fair workplace processes and activities. Yet, current psychological research lacks an evidence base for implementation. This symposium will address this issue through a series of interlinked talks. It is our intention to offer a) a position paper on the state of current research on neurodiversity in the context of work and wellbeing outcomes, b) findings from a systematic review on ADHD and relevant interventions in the workplace, c) an interview study of working individuals with ADHD to provide a qualitative perspective d) a phenomenological study of dyslexia at work and e) an audience discussion forum.

[i] A quick search using the APA database Psyarticles elicited one paper on autism at work (Johnson & Joshi, 2016); two for ADHD (Halbesleben et al, 2013; Manos), one on neurodiversity more broadly (Sumner & Brown, 2015) and none on dyslexia.

S152: Supporting Neurodiversity in the Workplace: Avenues for Research, Practice and Theory
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The term ‘neurodiversity’ has management and workplace support implications. The neurodiversity movement advocates that disability results from natural variation in human functioning. It follows that such naturally occurring differences should be acknowledged and accommodated, rather than remediated or medicalised (Sumners & Brown, 2016). Indeed, the
law mandates in many countries around the globe that any such differences need to be accommodated, or ‘adjusted’ for by employers to provide a suitable working environment (see Doyle & McDowall, 2015). Yet, the evidence base for such accommodations remains sparse. There are several reasons for this which we will outline in this paper.

First, several neurodevelopmental disorders are somewhat poorly understood. Although understanding has improved, this understanding has been slow to support adults with these conditions. For instance, adults with ADHD are unlikely to have received a clear diagnosis in childhood, because diagnostic activities have improved recently. In addition, misconceptions about conditions remain. For example, dyslexia is commonly understood as reading and spelling difficulties, whereas the spectrum of work-related symptoms is much broader and highlights working memory and organisation difficulties that continue into adulthood (Doyle & McDowall, 2015).

Second, there are many aspects where practice is ahead of research. For instance, there is little if any research which underpins accommodations provided to employees, such as coaching, or technological support through specialisation software (Doyle & McDowall, forthcoming). There is also a growing movement of employers targeting neurodiverse employees. Associations such as the National Autistic Society (www.autism.org.uk) provide support to employers. Yet, peer-reviewed evidence on ‘what works’ is still lacking.

Third, anecdotal evidence suggests that there is a stigma associated with disclosure in many contexts which by default makes the provision of targeted support unlikely. It goes in hand with this observation that both in the public and peer-reviewed domain literature on neurodiverse conditions remains negatively coloured in tone and content, for instance suggesting adults with ADHD as a ‘cost’ or ‘burden’ to society (Boseley, 2018). Thus, our fourth observation is that a strength-, rather than deficit-focused perspective is needed to further the neurodiversity agenda.

We outline the implications. For research, the implication is clear-cut, as there is a dearth of work-based intervention studies. It is our observation that research is either seen as too clinical for journals with an occupational angle, or too organisational for health and clinical journals. The research community needs to embrace diversity. For theory, there is a need to articulate theoretically grounded frameworks for interventions which openly acknowledge occupational and social contexts. For practice, the implications are for practitioners to engage in and fund relevant research, and adopt a process-driven perspective to evaluation, so that any activities can be adjusted for the benefit of individuals, organisations and society alike.

S153: A Systematic Review of Support Interventions for Adults with ADHD, Comparing Pharmacological Versus Behavioural Approaches
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Background: From the early 1990’s, Attention Deficit (Hyperactivity) Disorder or ADHD was identified as a disorder that did not diminish in adolescence but persists to adulthood. Yet, research that evaluates any support available to adults rather than children with ADHD remains minimal. ADHD impacts all aspects of an adult’s life, from their interpersonal relationships to their performance, mental health and, wellbeing in the workplace. Workplace interventions for adults with ADHD have received the least attention in the research despite well documented poor employment outcomes for adults with ADHD. Existing systematic reviews and meta-analyses on the support available have omitted workplace support. Therefore, we are conducting a systematic review of the literature to scope what type of support is documented in the literature, alongside the methodology, outcomes, and effectiveness, including any organisational research.
Methods: A step-wise systematic review approach was applied to develop a protocol including search terms, inclusion criteria and brief for the involvement of experts. Databases from the medical, psychological and occupational fields were screened to ensure a multi-disciplinary approach. Due to the review’s aims to include work-based interventions as well as work outcomes, the CIMO (context, intervention, mechanisms, and outcome) framework, developed in the organisational psychology field, was applied to the protocol and extraction.

Studies were screened and extracted using predefined criteria which included any studies that evaluated an intervention aiming to support adults with ADHD, comprising both pharmacological and non-pharmacological interventions. We included published as well as unpublished studies written in English. No date restriction was applied. Studies will be assessed further on their risk of bias and consequently, quality.

Results: From a total of 15 databases, the initial search revealed 3,893 results, 382 full texts from January 1987 to October 2017 are currently being screened. Over 100 articles from the full-text screening have already been identified to have met the inclusion criteria and will be synthesised in the findings.

Preliminary findings suggest the majority of studies are random-control trials of the drug Atomoxetine or Methylphenidate. Non-pharmacological interventions address a wider scope of ADHD symptomatology including self-esteem, however the quality of these interventions, as documented in the literature, is poor. So far, no interventions have been conducted in occupational contexts with the primary outcome to relieve occupational challenges.

Discussion: The systematic review is on target to be completed by the summer of 2018 and the full findings will be presented at the conference. Preliminary scanning of the data so far indicates a heavy bias towards pharmacological treatment approaches which often lack sustainable outcomes. Further research is required that evaluates the effectiveness of workplace interventions on adults with ADHD and subsequent research would benefit from exploring the impact of intervention outcomes beyond the core symptomatology to formulate a more holistic occupational health agenda for this population. Any recommendations resulting from the findings will be discussed by the expert panel and will have the potential to influence policy and practice.

S154: A Narrative Perspective on Career and Work Life Balance of Parents with ADHD and Their Spouses

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The interest in adult Attention Deficit Hyperactivity Disorder (ADHD), marked by pervasive symptoms of inattentiveness, impulsivity and hyperactivity, has grown in the recent years. Longitudinal studies have shown that in the majority of cases ADHD symptoms may persist into adulthood (NICE, 2008). Although it is a common condition that affects millions of people in the work force, ADHD has not been widely explored in the organisational/occupational context. Studies were mostly conducted through the lens of a deficit model focusing on deficiencies of employees with ADHD such as poor and unstable employment and poor performance, (de Graf et al. 2008, Kessler at al., 2009, Biederman et al., 2008). Adamau et al. (2013) suggested that future research should focus on identifying the possible barriers to successful employment and developing focused interventions.
Select recent studies have adopted a different approach suggesting that employees with ADHD are a heterogeneous group with variable levels of functioning and identifying their possible strengths as well as ability to develop coping strategies and perform well in a workplace that fits them (Kupper et al. 2012, Lasky, 2016, Schreur and Dorot, 2017). It seems that more research is needed about adults with ADHD in relation to work and wellbeing.

One of the areas that have been neglected regarding adults with ADHD is work – life balance, which could be particularly challenging for parents given the necessity to juggle parenting responsibilities with other significant areas in life. Whilst there is research on cross over (dyadic research on WLB) more generally, the impact of living with an ADHD spouse on career and employment has not been addressed to our knowledge in previous studies, although it has been suggested that non-ADHD spouses might be compensating for their partner’s difficulties by taking more responsibilities at home as well as in some cases assisting their partner with their work (Eakin et al., 2004). This tendency could potentially have an impact on the career and work – life balance of the non-ADHD partners.

Therefore, the aims of this study are twofold: Firstly, explore the career paths of parents with ADHD and their spouses and the ways these individuals balance work and other aspects of their lives. Second, given the paucity of a strength-focused perspective, we would also like to identify a range of behaviours, strategies and skills that will be helpful to working parents with ADHD with self – management of work – life balance.

This study is exploratory, conducted using a qualitative study design based on narrative analysis of semi-structured, self-developed interviews. Participants are asked to tell about their careers and the way they balance work responsibilities with other aspects of life. Participants diagnosed with ADHD are also interviewed about their ADHD. Our goal is to separately interview 15 dyads (30 interviews) of employed parents diagnosed with ADHD and their spouses. So far 13 interviews have been completed, digitally recorded and transcribed verbatim. Findings will be presented at the conference.

S155: Lived Experiences of Dyslexic Speech and Language Therapists: “Can I Trust You Enough to Tell You?”
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As there is little research on dyslexia in the workplace, the current study took a phenomenological approach to exploring the personal experience of Speech and Language Therapists (SLTs) with a formal diagnosis of dyslexia, working in the National Health Service (NHS). A homogeneous sample of three female qualified London-based SLTs, aged 28-38 years, participated in individual semi-structured interviews to explore their experiences of dyslexia working in multi-disciplinary NHS services. All participants were Caucasian, middle-class females and had between 6 to 15 years of experience working in speech and language therapy. It was our objective to trace the lived experience of working with a developmental disorder, which is commonly misunderstood as reading and writing difficulties, in a language-focused therapeutic context.

We applied Interpretative phenomenological analysis (IPA) following the six-stage IPA guidelines as outlined in Smith, Flowers and Larkin (2009). Master themes were interpreted from each interview, these master themes were then compared across each of the three data sets and clustered together into sub-themes within super-ordinate themes. We interpreted four super-ordinate themes; disclosure, self-determination, awareness and effects. Findings highlight the paradoxical experience of working with dyslexia, where the level of disclosure is inextricably linked with trust, and where misconceptions about the disorder prevail even with qualified personnel. Participants also spoke of their ‘super powers’ and abilities to think outside the box.
The findings from this research are in part consistent with previous limited research on dyslexia in employment. Disclosure was found to be an overarching theme as participants fear stigma and stereotyping from others, and there is active effort to compensate even where there is a lack of awareness at work, specifically from colleagues. Lastly, participants were reflective on the effects of their diagnosis of dyslexia at work.

This is the first known study exploring the experiences of dyslexic SLTs which might contribute to the research literature by offering accounts of trust and disclosure as well as of the deployment of personal strengths and self-determination. Both aspects offer fertile ground for future research. From a practical perspective, the implications are a clear need for awareness raising and training of line management and other relevant staff, given the observed lack of knowledge even in a specialised healthcare setting.

**Symposium: Age, Health, and Retirement: The Role of Human Resources Management Practices**

Chair: Sara Ramos¹ & Donald Truxillo²  
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In this symposium, we aim to discuss the role of human resources management (HRM) practices on workers' health and wellbeing, with a special emphasis on health preservation and worker retention. Ageing is perhaps the greatest current issue challenging European societies, and this is reflected in the gradual ageing of the workforce in most organisations (Schalk et al, 2010; Volkoff, 2012). Encouraging active ageing has been one of the measures proposed by the European Union to respond to this demographic change in Europe. This includes establishing objective targets to increase the employment rate of workers above 55 years of age, as well as increasing the legal age of retirement. This common solution – encourage ageing workers to remain active – cannot be achieved without an adjustment of working conditions, considering their health and needs, providing access to lifelong learning, and rethinking benefits (Vendramin, Valenduc, Molinié, Volkoff, Ajzen & Léonard, 2012).

Despite the increasing attention to these demographic trends, the study of the relationship between age and work has sometimes remained at a macro level with minor impact on what happens inside organisations. Therefore, it is important to study if and how HRM policies are translated into practices, and how these affect the outcomes of older workers. The continuance of the elderly in the labour market increases workforce age diversity inside work organisations, stressing the need to simultaneously manage workers of different ages. It also underscores the importance of rethinking HRM practices, including age-diversity specific practices that have been empirically demonstrated to support both productivity and retention for workers of all ages (Boehm, Kunze, & Bruch, 2014; Kunze, Boehm, & Bruch, 2013).

This changing age demographic within organisations challenges employers to adapt and design HRM practices for successfully integrating and encouraging workers of all ages to remain engaged and active, especially older workers (Truxillo, Cadiz, Rineer, Zaniboni, & Fraccaroli, 2012). It also highlights the importance of supporting the wellbeing of older workers. Thus, our symposium aims to contribute to our understanding of how HRM practices can play a crucial role in protecting the health and work ability of workers, and consequently, influence their retirement expectations and intentions and their decision to remain active.

The oral presentations in this session will generally cover the following themes: the role of age diversity practices in workers' health and wellbeing; HRM practices and their role in the work ability and retirement intentions of older workers; the influence of both chronological age and subjective age (one's perception of aging) on retirement planning and expected wellbeing during retirement; and the role of HRM practices in health and attendance behaviors (for example, sick leave, absenteeism, presenteeism). In addition, we will save time at the end of the session for questions and discussion from the audience.
Pre-retirement planning is a phase in which individuals put effort into preparing their retirement (Wang & Shultz, 2010). Empirical studies demonstrated that individuals engaged in pre-retirement planning activities exhibit better physical and psychological wellbeing (e.g., Wang, 2007; Yeung, 2013; Yeung & Zhou, 2017), positive attitudes and adjustment to retirement (e.g., Muratore & Earl, 2015; Reitzes & Mutran, 2004), higher life satisfaction (e.g., Noone, Loughlin, & Kendig, 2013; Topa & Alcover, 2015). These findings suggest that pre-retirement planning, regardless the domains of preparation, can help in increasing positive outcomes later in retirement. Between the different aspects that may have an impact on pre-retirement planning, the role of age seems not so clear, despite its intuitive sense. Some research showed that being chronologically older increases retirement planning (e.g., Petkoska & Earl, 2009), but in other studies the relation was weak or even not significant (e.g., Noone, Stephens, & Alpass, 2010). Moreover, previous studies in retirement planning didn’t investigate alternative age constructs, such as the subjective age. Research seems to show that subjective age (i.e., the individuals’ experience of being of a certain age) is important in explaining employee behavior in organisations, such as performance (e.g., Kunze, Raes, & Bruch, 2015). However, scholars have been more focused on positive outcomes associated with feeling, looking, and acting younger. The purpose of this contribution is to address a gap in the literature by examining the effect of the subjective age on active pre-retirement planning, which in turn is related to better expected social adjustment and positive retirement expectations (i.e., new beginning and rest). Participants in this first study were 257 employees between the age of 50 and 67 (M = 54.24, SD = 3.18), working in the public sector in Italy. Results show that the chronological age is not significant in affecting the active pre-retirement planning. Instead, the subjective age significantly and positively affects the active pre-retirement planning (B = .24, p = .03). In turn, the active pre-retirement planning is significant and positive in affecting expected social adjustment in the retirement (B = .24, p = .00; indirect effect .06, CI = [.01, .12]), retirement expectation of new beginning (B = .30, p = .00; indirect effect .07, CI = [.01, .15]) and rest (B = .13, p = .03; indirect effect .03, CI = [.00, .09]), but not significant in affecting continuity and imposed disruption. A better understanding of the aspects (i.e., subjective age vs chronological age) that can increase the activity of the retirement planning can have important implications for people and organisation in dealing with the transition.
By setting standards impossible to satisfy and exercising ongoing control on the processes and actions undertaken to achieve them, extreme goal setting and strict monitoring are likely to increase both presenteeism and absenteeism. One of the mechanisms through which this may occur is work intensification, which entails employee perceptions of elevated job demands, such as excessive workload, time pressure, and overtime work (Kinman & Wray, 2018; Miraglia & Johns, 2016; Pohlin, Buruck, Jungbauer, & Leiter, 2016). Indeed, impossible goals and close control may increase pressure and workload on employees, who, to face them, are triggered to exhibit greater presence at work. On the other hand, closely monitoring employees’ activities and setting difficult, unrealistic goals may reduce individual health and wellbeing directly and indirectly (via work intensification), suggesting a health impairment process (Miraglia & Johns, 2016; Pohlin et al., 2016). This can result in increased absenteeism and presenteeism.

Differently, end-of-year performance evaluations that are based on precise criteria set clear – but not unrealistic – standards and likely focus on the outcomes rather than on the process (Ouchi, 1977). In this way, they are expected to reduce both presenteeism and absenteeism, by signaling employees that outcomes count above attendance and compliance. Again, the likely mechanism underlying these relationships is work intensification, which is expected to be negatively associated with evaluations.

We tested our hypotheses on a sample of over 11,000 respondents who completed the French Survey on Working Conditions (2013 wave). We conducted structural equation modeling with negative binomial estimator in Mplus. After controlling for a number of variables, we found that extreme goal setting and monitoring are positively related to intensification while end-of-year evaluations are negatively related to it. Moreover, strict monitoring is positively associated to absenteeism, but does not seem to be mediated by intensification. With regards to presenteeism, extreme goal setting and monitoring display significant and positive relationships and seem to be at least partially mediated by work intensification. End-of-year evaluations do not show any significant associations with attendance behaviors. These results have important theoretical and practical implications about the role of organisational initiatives for managing attendance behaviors and the tools for performance appraisal and management.

S158: Is Age Just a Number? The Impact of Age-Diversity Practices and Workers’ Age on Health and Wellbeing
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Workforces across the world are ageing. Research has been focusing on how Human Resources Management (HRM) can develop and promote sustainable careers for workers of all ages (e.g. Kooij et al., 2013; Schalk et al., 2010; Truxillo, Cadiz, & Hammer, 2015). This study tests two moderation hypotheses: age moderates the effect of perceived age-diversity practices (1) on perceived health and (2) on wellbeing.

Human Resources (HR) practices that consider the needs, goals and preferences of workers of all ages – age-diversity practices – can be a strategy to ensure workers’ wellbeing and health. Perceived age-diversity practices refer to the degree to which individuals perceive that workers of all ages receive non-discriminatory treatment in terms of organisational practices, policies and procedures (Boehm, Kunze, & Bruch, 2014; Kunze, Boehm, & Bruch, 2013). Organisations can implement these practices to support workers’ health and wellbeing over time, by adjusting the physical work environment (e.g., ergonomic aspects) and fostering knowledge and skills.
Age can have an important role in the impact of perceived age-diversity practices on health and wellbeing. The assumption is that these practices are especially important for older workers as they are more likely to experience health limitations due to the ageing process (Hansson, DeKoekkoek, Neece, & Patterson, 1997), and they are frequently the target of age discrimination in the workplace (e.g., Finkelstein, Burke, & Raju, 1995; Posthuma & Campion, 2009).

A sample of 410 participants aged between 19 and 67 years old ($M = 37.74$, $SD = 12.93$) answered to a questionnaire with an on-line and a paper version. The moderation hypotheses were tested by Multiple Linear Regression using PROCESS macro for SPSS (Hayes, 2012). Findings supported the first hypothesis, suggesting that as increases age, also increases the effect of perceived age-diversity practices on perceived health, which means that as age increased, this relationship became more important. The second hypothesis was not supported, because the moderator effect of age was not significant. However, perceived age-diversity practices had a significant main effect on wellbeing, emphasising the importance of these practices to retain all workers, regardless of their age. These findings suggest that organisations should develop age-diversity practices to improve the wellbeing of workers of all ages, and that they could be particularly relevant for older workers' health.

### S159: I’m I too Young to Think about Retirement? The Relationship between Human Resources Management Practices, Work Ability and Retirement Intentions

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The intended age at which employees plan to retire is critical for organizations as retirement leads to the loss of critical knowledge and expertise that is not replaceable due to its tacit nature. Consequently, organizations endeavour to create conditions to retain valuable workers, especially those who have attained such a high level of proficiency and productivity that they add value to the overall operations. However, not all factors that explain the intended age for retirement are under the control of organizations (Truxillo, Cadiz, Rineer, Zaniboni, & Fraccaroli, 2012). The expected quality of retirement life (quality of living, financial stability) is one that is out of reach. However, work ability (physical and mental ability to cope with daily work) might be related with organizational practices, as organizations can change job content to accommodate age needs (Kooij et al., 2013; Schalk et al., 2010; Truxillo, Cadiz, & Hammer, 2015). This is within the capacity of managers, as organizations can deploy a HRM policy that is age related, that is, high potential work practices (HPWP) with an age focus. Examples are recognition-participation, job flexibility, and job reallocation regarding ageing capabilities.

This study is intended to test the extent to which these three factors explain people’s intended retirement age through work ability. The sample comprises a total of 291 employees aged 45 or more years old. Sample eligibility criteria targeted employees actively working aged 45 or more years of age, as this is the group where retirement-focused variables might be more meaningful. This sample is divided in two age subgroups: one comprising 114 individuals 55 or over, and the other comprising 177 individuals from 45 to 54 years of age. Findings show significant relations in the “older sample” (55 years old and above) that don’t occur in the “younger sample” (45-54 years old), which means that age plays a key role in understanding the relationship between organizational practices and retirement intentions. Specifically, age-focused human resources practices seem to explain both work ability and the intended age of retirement, especially for workers over age 55. These results stress the need to study this topic in greater depth for workers that are chronologically closer to the legal retirement age. Our results can also support the importance for organizations in developing age-focused HRM practices when its aim is to retain older workers.
The rapidly changing workforce and increasing retirement age make the study of older workers and their occupational wellbeing a highly relevant topic. The goal of this symposium is to get a better understanding of how age affects different facets of wellbeing and performance at work. Within the symposium, two of the presented studies focus on emotions at work in face of high demands or negative work events, while two studies focus on job crafting and the resulting beneficial outcomes. After the presentations, the talks will be discussed by Prof. Wiese.

Wieck et al. investigate whether age differences in empathy (i.e., the ability to recognise and share others’ emotions) are modulated by emotional job demands. In a laboratory study with 128 employees between the ages of 19 to 65 years the authors found that age differences in workers’ empathy are not modulated by emotional job demands. However, emotional job demands had a main effect on emotional congruence, such that employees with high emotional demands were better able to share other persons’ emotions than employees with a lower level of emotional demands. Moghimi and Scheibe explore the effectiveness of context-dependent emotion- and action-regulation in face of negative daily work events and the resulting daily job satisfaction. The authors test the assumption that emotion regulation leads to higher job satisfaction only in response to negative work events that are uncontrollable. For controllable, negative work events, job satisfaction is rather a result of action-regulation. Given older people’s higher level of life- and work-experience, the authors further suggest that the supposedly more adaptive paths (controllable event à action-regulation, uncontrollable event à emotion regulation) are more pronounced for older workers. The assumptions will be tested in a daily diary study with 242 employees between the ages of 18 and 62 years.

Dello Russo and colleagues investigate (a) the mediating role of job crafting in the relationship of age and job performance, and (b) positive emotions in the relationship of age and job crafting. In a diary study with 256 employees, the authors found that age was positively related to positive emotions and job crafting. Furthermore, age was related to job performance via job crafting. At the day-level high-arousal positive emotions were positively related to job crafting, which was in turn positively related to job performance. Finally, Kooij and colleagues investigate interest crafting in older workers, which is defined as the self-initiated changes that individuals make in their work to make it more enjoyable and – in case of older workers – to age more successfully at work. In a daily diary study among 122 older workers, the authors found that daily job crafting was triggered on days where the experience of autonomy and work pressure were both high. Additionally, daily job crafting was positively related to daily work engagement and performance. These results reveal that by crafting their jobs, older workers are able to align age-related intrapersonal changes to their job and by doing so enhance performance and wellbeing at work in form of work engagement.

S160: The Role of Emotional Job Demands in Age-Related Differences in Empathy
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Do occupational role demands influence how much empathy people develop over the years? Empathy, the ability to recognize others’ emotions accurately (empathic accuracy) and to share these emotions (emotional congruence) has been thought to be a fundamental skill in the work context, particularly in occupational sectors with high emotional demands (e.g., healthcare,
education). Previous research on emotional aging suggests that different facets of empathy show differential age gradients across the adult life span. Whereas older adults are less accurate in perceiving other’s emotions accurately, they typically report similar levels of emotional congruence than young adults (e.g., Wieck & Kunzmann, 2015).

The goal of the current study was to investigate whether these age patterns identified in general population samples are modulated by occupational role demands. Specifically, we investigated the interactive effect of age and emotional job demands on two dimensions of empathy (empathic accuracy, emotional congruence). Given the daily encounter with emotionally challenging situations, we predicted that age differences in empathy may be more positive (or less negative, respectively) in people pursuing emotionally demanding careers, relative to those with emotionally undemanding careers.

In a laboratory study, we recruited 128 employed adults ranging in age from 19 to 65 years ($M = 42.6$, $SD = 12.5$; 53% female) who differed in self-reported emotional job demands (i.e., emotional display demands and sensitivity demands). Participants were presented a series of 13 short film clips, each portraying a person retelling an autobiographical situation in their working life during which they experienced positive (e.g., happiness, pride) or negative (e.g., anger, sadness) emotions. After each clip, participants were asked to rate the intensity of their own emotions during the films and the protagonist’s emotions on a list of 21 emotional adjectives using a response scale ranging from 0 (not at all) to 6 (extremely). We derived scores for empathic accuracy (agreement between the protagonists’ self-reported emotions and the participants’ other-reported emotions) and emotional congruence (agreement between the participants’ self-ratings of their emotions during the film and the protagonists’ self-ratings of their own emotions). We further tested associations between the different facets of empathy and work outcomes (i.e., work satisfaction, burnout).

Initial analyses revealed that — contrary to predictions — age differences in workers’ empathy are not modulated by emotional job demands and parallel those in the general population. However, emotional job demands had a main effect on emotional congruence, such that employees with high emotional demands in their jobs were better able to share other persons’ emotions than employees with a lower level of emotional demands. With this study we contribute to the research on emotional aging and wellbeing at work. The study demonstrates the impact of workers’ daily emotional work on empathic reactions across the entire working life.

S161: Job Satisfaction Despite Negative Work Events? Context-Dependent Action- and Emotion-Regulation at Work and the Role of Age

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Negative daily work events can diminish the experience of daily job satisfaction, yet the degree to which they do so depends on employees’ self-regulatory responses. A long-standing idea in the area of coping is that self-regulatory responses can either be emotion- or problem-focused. In this study, we integrate traditional coping models with modern approaches to emotion- and action regulation, which highlight the importance of strategy-situation fit and emotion-regulation flexibility for adaptive outcomes. From this perspective, regulatory strategies are not adaptive per se, but their adaptiveness is contingent on the context in which they are used. In the present study, we intend to explore the effectiveness of context-dependent emotion- and action-regulation in face of negative daily work events. We suggest that emotion-regulation protects job satisfaction mainly in response to negative work events that are uncontrollable. For controllable, negative work events, maintenance of job satisfaction is rather a result of action-regulation. Furthermore, we suggest that the supposedly more adaptive paths (controllable event à action-
regulation vs. uncontrollable event à emotion-regulation) are more pronounced for older as compared to younger employees due to their higher level of life- and work-experience. We focus on the emotion-regulation strategies of positive reappraisal and distraction and on the action-regulation strategies of selection, optimization, and compensation (SOC). Furthermore, several other event characteristics will be considered, such as event severity or event urgency.

Hypotheses are tested in a daily diary study with 242 employees from different sectors between the ages of 18 and 62 years ($M = 36.22$, $SD = 13.71$). Over the course of three weeks, participants received a link at the end of each workday leading to the daily questionnaire, where they were asked to report –amongst others – a negative work event that occurred over that day.

The present study has theoretical and practical implications. Theoretically, the present study is one of the few where emotion- and action-regulation are considered conjointly as two possible self-regulatory responses to the same event. Furthermore, the present study focuses on the context-dependency of these regulation strategies, rather than focusing on a person-dependent approach. Practically, the present study can serve as a corner stone for future interventions where workers can learn to detect event characteristics and acquire the regulation skills to act accordingly. If the hypothesized age moderation effect can be confirmed, such interventions can be linked to mentoring programs where younger workers learn from older workers’ experiences in emotion- and action-regulation.

S162: Daily Positive Emotions and Daily Work Behaviors: The Role of Age
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Organizations are increasingly called to address age-related issues among their employees, and managers are invited to take the age diversity of their collaborators into account. As a result, the literature on age in the workplace has also grown rapidly. Based on recent studies (Kooij, Tims, & Kanfer, 2015; Kooij, van Woerkom, Wilkenloh, Dorenbosch, & Denissen, 2017), we know that older workers may be able to continue working effectively by crafting their jobs to fit their changing needs and thus enhance their performance. A meta-analysis has also shown that job crafting is positively associated with performance (Rudolph, Katz, Lavigne, & Zacher, 2017), but the extent to which this may be especially true for older workers has yet to be investigated.

Therefore, we place job crafting at the core of a conceptual model that links age to job performance, aiming to reconcile the apparent paradox by which age is positively related to extra-role behaviors rather than to in-role performance (Ng & Feldman, 2008) by envisioning a mediating role of job crafting in the age-performance relationship.

Moreover, it is important to take into account the multiple levels at which job crafting may take place. It is highly likely that people craft their job at a daily level through small adjustments. Accordingly, the second aim of our study is to contribute to the investigation of job crafting predictors at the daily level, and we focus on positive emotions – regarding them also as mediators of the relationship between age and job crafting. A number of researchers have illustrated the importance of investigating the daily emotions of older and younger workers (Scheibe & Zacher, 2013) and their effects on attitudes and behaviors. However, little research has examined how older and younger employees might experience emotions differently in their jobs on a daily basis (Scheibe et al., 2016).
A total of 256 people working in multiple organizations participated in a five-day diary study. Except for age, all other variables, namely positive emotions (both high- and low-arousal), job crafting, and job performance were measured daily. Daily reminders were provided at the end of each working day for individuals to fill in the short questionnaire. The overall number of observations is 1061 (average of 4.1 observations per person). We tested a multilevel 2-1-1 mediation model in which age was related to positive emotions that in turn predicted job crafting and job performance. Findings revealed that, at the person level of analysis, age was significantly and positively related to positive emotions and job crafting and, via job crafting, to job performance. No significant mediation of high- and low-arousal positive emotions was found between age and job crafting. However, at the day level of analysis, high-arousal positive emotions are positively related to job crafting, and this in turn is positively related to job performance. These findings allow to make important theoretical contributions to understanding within-person processes associated with employee age in addition to more traditional between-person factors. They also have implications for managing an aging workforce such as via job crafting.

S163: The Active Role of Older Workers in Daily Work Engagement and Job Performance: Daily Job Crafting in Active Jobs
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Since workforces are ageing rapidly worldwide, older workers need to work longer. Therefore, this study investigated behaviours through which older workers shape their work to improve their wellbeing and age successfully at work. More specifically, we focus on interests crafting which refers to the self-initiated changes that individuals make in their work to make it more enjoyable (Kooij et al., 2017). Building on Social Cognitive Theory (SCT; Bandura, 1982), we argue that activating workdays, characterized by high autonomy and high work pressure, would facilitate older workers to engage in job crafting behaviours aimed at making their job more interesting on that day. By crafting their job, ageing workers are able to continuously adjust their job to intrapersonal changes that are part of the ageing process (Kooij, Tims, & Kanfer, 2015). Therefore, we argue that job crafting behaviours, in turn, enhance the work engagement and job performance of older workers.

We conducted a daily diary study on five consecutive working days among 122 older workers of three Dutch organizations: a casino, a rehabilitation centre, and an online marketing agency. A multilevel path model was built in order to test all hypotheses (as shown in Figure 1) simultaneously in a single model. The proposed model obtained good fit (χ2 = 1.39; ns; df = 4; RMSEA = .00; CFI = 1.00; SRMR within = .01; SRMR between = .00) and demonstrated that all our hypotheses were supported. Most importantly, the analyses show that autonomy was positively related to work engagement through job crafting under conditions of high work pressure (i.e., 1 SD above the mean; b = .11, p < .05), as well as to job performance via job crafting under conditions of high work pressure (b = .05, p < .05), while the indirect effects were nonsignificant for low work pressure (i.e., 1 SD below the mean; work engagement: b = -.01, ns; job performance: b = -.01, ns). Hence, we found that daily job crafting was triggered on activating workdays when experienced autonomy and work pressure were high, and that daily job crafting, in turn, was positively related to daily work engagement and performance.

With this study, we contribute to the literature on ageing and wellbeing at work. Although previous studies on retaining older workers and successful ageing at work have predominantly treated older workers as passive recipients of or mere responders to organizational measures and the work environment, we demonstrate that older workers may play an active role in shaping their work environment and thus in improving their wellbeing at work.
Symposium: Recent Developments in Research on the Antecedents of Work Engagement and Commitment
Chair: Sandrine Schoenenberger & Jari Hakanen
Lille Catholic University, Lille, France; Finnish Institute of Occupational Health, Helsinki, Finland

Research on work engagement has flourished for nearly two decades and on organisational commitment for an even much longer period. Whereas work engagement captures affective wellbeing at work, organisational commitment corresponds to affective, continuance and normative attitudes toward the job and/or workplace. Both constructs are known to be positively related to many employee and organisational outcomes. However, there are still several understudied topics in engagement and commitment research, particularly related to some of the antecedents of these constructs and certain special contexts such as organisational changes. The aim of this symposium is to present innovative approaches to work engagement and commitment research, with particularly focus on their antecedents. Different approaches and study designs will be employed: Epidemiological prevalence design, experience sampling method and actor-partner design, quasi-experimental intervention and longitudinal design.

In the first contribution, Hakanen, Ropponen, Schaufeli and De Witte investigated the prevalence of work engagement using a sample of over 35,000 employees from 30 countries from the sixth European Working Conditions Survey (EWCS) and found that the level of work engagement varied according to many sociodemographic and occupational factors. In the second study, Zeijen, Bakker and Pareskevas used experience sampling data and actor-partner design and found, among other things, that supporting one’s co-worker at work had an engaging potential for the support provider. The third contribution by Peeters, Van Den Heuvel and Demerouti describes the results of a job crafting intervention. Although the intervention did not have impact on work engagement, it increased job resources, decreased workload and boosted meaningfulness at work. In the fourth paper, in the context of an organisational change, Schoenenberger and Ramez study the link between attitude to change and work commitment. Preliminary analyses show a link between affective commitment and support to change.

S164: Who Is Engaged at Work? A Large-scale Study in 30 European Countries
Jari Hakanen, Annina Ropponen, Wilmar Schaufeli, Hans De Witte
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Aims: The purpose of this large-scale study in 30 European countries among over 35,000 employees was twofold: to examine the prevalence of work engagement at the individual-level across different socio-demographic, work-related (e.g. type of contract, working hours) and organisation-related (e.g. size of the company, sector) groups; and to investigate the relative importance of these factors for work engagement.

Method: The study was based on a sample of 17,498 male and 17,897 female employees from the 6th European Working Conditions Survey (EWCS), collected in 2015. We studied work engagement using the adapted three-item Utrecht Work Engagement Scale (UWES). Linear regression models and dominance analysis were used for statistical analyses.

Results: We found several significant differences between the levels of work engagement of the different demographic and work- and organisation-related groups. Lower educational attainment associated with lower work engagement. Managers and professionals reported more work engagement than plant and machine operators and those elementary occupations. Employees working in human service occupations reported higher levels of work engagement than employees in other industries. In the multivariate analysis, being a worker aged over 60; working in health care, social work, education, agriculture, hunting or forestry; being a manager; and
working in the public sector were positively associated with work engagement. In contrast, the likelihood of work engagement was lower among plant and machine operators, assemblers, elementary occupations, clerical support workers, service and sales workers, and those working in a company with 500 or more employees. Relatively, occupational group (68%) and industry (17%) contributed most to work engagement, whereas for example age, part-time vs, full-time work, and size of company only made a minor contribution.

Conclusions: In conclusion, this first large-scale prevalence study shows that an employee’s level of work engagement depends on individual (e.g. education), work-related (e.g. contract) and contextual (e.g. occupation, industry) factors. However, job-related and contractual factors seem to be the most significant determinants of work engagement. It is important to focus on enhancing work engagement, particularly among less educated employees, those without permanent contracts or no contract at all, and in certain (e.g. elementary) occupations.

S165: The Link between Support Provision and the Provider's Work Engagement: The Role of the Receiver’s Emotional Demands
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Purpose: Consistent with self-determination theory (i.e., SDT), previous survey studies (Weinstein & Ryan, 2010) have shown that when the providers of social support are intrinsically motivated, they satisfy their basic psychological needs (i.e., the need for autonomy, competence and relatedness), and, thereby, they experience improved subjective wellbeing. In the present experience sampling study, we aim at further refining these findings within a work context, investigating whether intrinsically motivated provided support to co-workers enhances the work engagement of the support provider via the satisfaction of their basic psychological needs. In addition, we address the role of the support receiver, by examining the extent to which the receiver experiences his or her work as emotionally demanding. According to the JD-R theory (Bakker & Demerouti, 2014), employees with highly demanding jobs need resources such as social support in order to compensate for their demands. Building further on the JD-R and SDT theories, we argue that when an employee supports a co-worker who experiences high emotional demands, the support provider may experience the provided support as more satisfying because the support is well invested and the receiver needs it. Therefore, we test whether the link between support provision and the provider’s need satisfaction is stronger when the receiver’s emotional demands are high.

Design: We collected experience sampling data over three moments on one working day among police agents (N=194 participants and 97 dyads). We conducted the experience sampling by means of a phone application.

Results: Preliminary actor-partner multilevel analyses show that, indeed, intrinsically motivated support provision relates to the provider’s work engagement through basic psychological need satisfaction. In addition, the results show that the relationship between intrinsically motivated support and psychological need satisfaction of the support provider is moderated by the emotional demands experienced by the support receiver. This means that on moments when the support receiver experiences high emotional demands (and therefore needs the support), the intrinsically provided support satisfies the provider’s psychological needs.

Conclusion: Supporting one’s co-worker at work has an engaging potential for the support provider, as it satisfies the provider’s basic psychological needs. In addition, the present results suggest that the support provider is more likely to satisfy his or her psychological needs if the support is given when the receiver most needs it rather when the receiver does not need it.
Limitations: We only gathered data of police agents, therefore, we cannot generalise the results to other professions or sectors.

Originality/Value: Although previous studies have investigated the effects of intrinsically provided social support on the wellbeing outcomes of the receiver in a non-work setting (Weinstein & Ryan, 2010), no research has investigated the effects of intrinsically provided support within a work-setting and on work related outcomes (i.e., work engagement). In addition, no research has incorporated the state of the receiver as a possible factor that influences the experience of the support provider. The results of this experience sampling actor-partner study thus reveal important insights on the question how and when providing support to co-workers is most effective.

S166: Job Crafting as a Recipe for Boosting Engagement? Effects of a Training among Civil Servants
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Introduction: Contemporary organisations strive for engaged employees because engagement has been shown to relate positively to many positive organisation outcomes such as high levels of creativity, task performance, organisational citizenship behaviour and client satisfaction. In addition to ‘top-down’ approaches to boost engagement at work, recent research shows more and more that employees can also influence their levels of engagement themselves via a bottom-up approach called job crafting. Job crafting refers to the self-initiated changes that individuals make in their job demands, job resources and personal resources aimed at improving wellbeing at work. Studies have shown that job crafting is positively related to several positive work outcomes such as engagement, person-job fit and job performance and negatively related to negative outcomes like absenteeism. However, not all employees are aware of the possibilities of job crafting and capable of applying this type of proactive behavior at work. In order to learn and support employees to craft their job, we developed a job crafting intervention.

Aim: The first aim of the presentation is to describe the design of our job crafting intervention and to discuss its theoretical underpinnings. The second aim is to examine the effectiveness of the job crafting intervention in terms of engagement and other work outcomes and to scrutinise on the different pathways through which the intervention can influence engagement.

Methods: We used a quasi-experimental design consisting of one pre-measure (T1, prior to the intervention) and one post-measure (T2, 1–2 weeks after the intervention. The intervention group consisted of 83 civil servants employees who followed the job crafting training. The control group consisted of 62 civil servants who did not receive the training.

Results: We hypothesised that participating in the job crafting leads to higher levels of job crafting, which in turn will boost work engagement. Preliminary analyses show that the results are not completely in line with our expectations. The intervention group did not show increased levels of engagement compared to the control group. However, they did report to find their job more meaningful after the intervention compared to the control group and in addition, they experienced more job resources and less workload.

Conclusion: This study shows that a training to support and learn employees to craft their job has several positive outcomes. However, it is not in all circumstances a recipe for boosting engagement. Methodological as well as theoretical explanations for this conclusion will be discussed.
Introduction: The aim of the paper is to study the progress of organisational commitment in the context of an organisational change in an intensive care unit in a French hospital. In this unit, health care providers (HCPs) changed from an 8h-shift to a 12h-shift. Organisational commitment (affective, normative and continuance commitment, Allen & Meyer, 1990) partly depends on satisfaction with schedules and work life balance. HCPs are more satisfied in 12h-shifts, among other benefits. In this study, the change was made at the HPCs’ request and they had waited for it for years. Our hypothesis was that, as a result, their affective and normative commitment was likely to increase and their continuance commitment decrease after the change (H1).

In the context of an organisational change, employees may be supportive of or resistant to the change (Bareil, 2004). Organisational commitment impacts employees’ attitude to the change in a continuum from resistance to championing. Employees may have either passive resistance to or active support for the change. Therefore, attitude to the change should be seen as a bi-dimensional concept rather than a continuum. In this viewpoint, high levels of affective and normative commitment should increase support for the change and high levels of continuance commitment should increase resistance (H2).

Finally, attitude to change may accentuate organisational commitment. Employees who support the change should have a positive and higher difference in their affective and normative organisational commitment after the change. On the contrary, employees who resist the change should feel a positive and higher difference in their continuance commitment after the change (H3).

Aim: To summarise, our hypotheses are:
- H1: Affective and normative commitment will be higher after the change and continuance commitment will be lower after the change.
- H2: At Time 1, affective and normative commitment are related to support for the change and continuance commitment is related to resistance to the change.
- H3: the difference in organisational commitment before and after the change will be related to employees’ attitude to the change.

Methodology: This research project is based in a French intensive care unit which is changing from an 8h-shift to a 12-h shift. The methodology is based on questionnaires (organisational commitment, Allen & Meyer, 1990; resistance – support for change, Meuniers, 2010) and interviews one month before the change occurred (February - March 2018, Time 1), one month (April - May 2018, Time 2) and three months (June - July 2018, Time 3) after the change. Interviews focus on HCPs’ expectations for their work and the new organisation. The population is composed of HCP’s: nurses and nursing auxiliaries in a French intensive care unit.

Results: First results indicate that HCPs with a high level of affective commitment have a high level of active support ($r = .295$, $p = .05$).

Conclusion: Affective commitment seems linked to support for the change. However, in this study, HCPs were expecting the change which may increase both affective commitment and support for it. More analyses will be made and discussed during the symposium.
The 4th Industrial Revolution and the so-called Industry 4.0 paradigm are transforming in depth the organisations with the massive introduction of new information and communication technologies as well as robotics and related technologies (Brynjolfsson & McAfee, 2015; Schwab, 2016). However, when working continuously through a virtual world there is a sense of loss and detachment from reality that can lead to overwork, stress, and an erosion of barriers between home and work life with negative effects on physical and mental health. Therefore, this symposium aims at both (1) examining some challenges that Industry 4.0 brings up on employee health and wellbeing; and (2) exploring some new opportunities for developing healthy organisations and improving work life quality associated to the transformations linked to the Industry 4.0.

The first goal will be covered by two presentations: Adalgisa Battistelli, Marie Andela, and Guillaume Déprez (Université de Bordeaux, France) examine some consequences of tensions and threats that Industry 4.0 brings up on employee health and wellbeing (e.g., the stress response triggered by working with new technologies); while Jose M. Leon-Perez and Jose M. Leon-Rubio (Universidad de Sevilla, Spain) discuss the role of Occupational Health Psychology in the future organizations as the adoption of these new technologies generate new and complex questions about the ways of working and its consequences for employees' health and wellbeing.

Then, the second goal will be achieved through three intervention studies that provide evidence about best practices in promoting health and safety at work. Aristides Ferreira, Sara Lopes, and Rui Prada (ISCTE-IUL, Portugal) focus on how gamification and virtual intelligent agents can help monitoring health, and they present a gamebased training for promoting health and prevent presenteeism at work. Then, Whitney van den Brande, Elfi Baillien, Tinne Vander Elst, Hans De Witte, and Lode Godderis (KU Leuven, Belgium) examine the effectiveness of an online intervention to deal with workplace bullying. Finally, Marisa Salanova and Isabella Meneghel (WANT research team, Universitat Jaume I, Spain) provide evidence about how several interventions based on the Positive Psychology's principles can increase wellbeing and productivity in different age groups.

**S168: Occupational Health and Wellbeing in the 21st Century Workplace**

Guillaume Déprez, Marie Andela, Adalgisa Battistelli

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Over the last four decades of the 20th century, the nature of work has substantially changed. The growth in the use of information technology at work, the globalization of many industries, organizational restructuring, changes in work contracts and worktime scheduling have radically transformed the nature of work in many organizations. The fourth Industrial Revolution seems very different from previous industrial revolutions (Brynjolfsson & McAfee, 2015).

The Industry 4.0 will radically change the ways of working (Schwab, 2016), and related to that, the way of producing, designing tasks, to learn, to innovate, to work in a team and to manage individuals and teams (Cascio & Montealegre, 2016). Hence, organizations need to deal properly with these challenges to prevent potential negative effects on employees' physical and mental health (Chen, Westman, & Eden, 2009). In particular, the scientific knowledge developed by research in recent decades on organizational behavior and occupational health and safety is certainly essential but needs to evolve and develop a new vision to understand this "4.0 Reality" (Bondarouk, & Brewster, 2016; Coovert & Thompson, 2014; Schwab, 2016).
Thus, among the main issues, this presentation focuses on: (a) how performance and employee wellbeing can be balanced through both a good work design and HR practices (Bondarouk & Brewster, 2016) and positive interpersonal relationships at work (Baillien, Bollen, Euwema, & De Witte, 2014); and (b) how to develop a healthy workforce able to face the tensions and challenges that Industry 4.0 entitles (Syrek, Apostel, & Antoni, 2013), which includes exploring new avenues for promoting people cognitive strengths at work (Herrera, Leon-Perez, & Leon-Rubio, 2017), or the development and acquisition of adapted competencies (Rüßmann et al., 2015). The communication finishes with some conclusions to develop healthy, productive and sustainable organizations under this 4th Industrial revolution framework that may benefit employees’ wellbeing.

S169: Psychosocial Risk Assessment in the Industry 4.0
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Although the so-called Industry 4.0 is more a promise than a reality, the adoption of autonomous robots, the simulation, the big data, the augmented reality and the cloud (just as examples) are changing radically the ways of working, and related to this both the way of producing goods and delivering services, and organising and managing people (Parker et al., 2017). However, the Industry 4.0 pillars are not only technological, but also human and organizational.

The new organisational environments require a workforce with complex, multiple and highly specialised skills related to work activities, even more frequently in multi-tasking and multidisciplinary teams (e.g., cognitive, social, emotional and digital skills, teams using ITCs and collaborating with robots, etc.), but also to be responsive, flexible and adaptive to the constant demands of change (see Rüßmann et al., 2015; Schwab, 2016). Therefore, it seems that some negative implications of the Industry 4.0 will make the current situation regarding psychosocial risks at work even worse. Currently, apart from the negative consequences for employees’ health and wellbeing, the psychosocial risks suppose between 50-60% of all the days of work losses, which represents a cost of 240 billion euros for the European Union. Thus, it is envisaged that Industry 4.0 transformation in jobs and skills profiles will challenge the psychosocial risks assessment in companies.

Particularly, in this presentation we discuss the following challenges: (a) addressing new risks that did not exist before and/or are caused by new processes, technologies or types of workplace (e.g., the stress response triggered by working with new technologies or techno-stress; or how new technologies can constitute new channels for existing psychosocial risks such as cyberbullying); (b) examining emerging risks because the increase in the number of risk factors that give rise to it (e.g., aging of the population; the extension of the working day and the intensification of work may substantially modify work design and challenge employees’ work-private life balance; or the new forms of contracting and the demand of functional adaptation to the market and the new technologies may bring more job insecurity and the risk of social exclusion of those who are not highly skilled); (c) addressing current issues that may become a risk due to a change in social or public perceptions (e.g., addiction to work or workaholism); and (d) exploring some new opportunities for conducting psychosocial risks assessment and implementing interventions in a digital era (e.g., conducting a risk assessment in people working at home; or implementing online interventions and virtual training).
S170: Gamification and Virtual Intelligent Agents: Monitorizing Health and Presenteeism at Work

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This project aims to propose a new comprehensive model that sought to explain which self-regulatory processes contribute to the increase or decrease of the organizational productivity levels due to sickness presence (presenteeism). In addition, this project aims to develop a new tool to monitorize behaviors at work (i.e., dashboard) and a valid and reliable instrument (i.e., intelligent agent) to measure and develop the regulation of presenteeism and health behavior in real contexts. Hence, we propose to present a game-based intervention project that extends the presenteeism and absenteeism Johns’ model (2010) and incorporates the Health Action Process Approach (Schwarzer, 2008), which explains the adoption and maintenance of health behavior. This model measures pre-intentional motivations that lead to behavioral intentions and post intentional volition, which in turn, lead to actual health behavior. For example, recent studies highlighted the importance of serious games to train (Pereira et al., 2012) and collect users’ behavior patterns (Prendinger et al., 2014), with very interesting results in the health sector (Ninaus et al., 2015).

Furthermore, previous studies demonstrated the benefits of integrating autonomous virtual agents as interactive partners in such games, especially when endowed with human-like social intelligence (Prada & Paiva, 2009), empathic behavior (Paiva et al., 2004), or cultural awareness (Mascarenhas et al., 2016). Accordingly, we developed a self-regulatory game-based intervention that will help employees with lower scores in the managerial dashboard (i.e., high productivity losses due to health problems). Specifically, we propose several techniques that will enable an increase in wellbeing and an increase in productivity despite presenteeism through Behavior Change Interventions (BCI - Michie et al., 2013).

The intelligent agent is an avatar program based on artificial intelligence that uses parameters provided by the users, gathers information from the environment and directs its activity toward helping employees achieving health and productivity goals. Moreover, this autonomous virtual agent provides information on the consequences of behavior in general, with World Health Organization (WHO) and medical recommendations on healthy behaviors / nutrition (WHO, 2016) and provides instruction on how to perform the behavior. Moreover, the intervention includes action planning and coping planning exercises (Schwarzer, 2008) techniques to deal with barrier identification/ problem solving (Michie et al., 2011). For example, employees that we identify with high cholesterol we will propose several techniques to introduce behavioral changes and to promote health behaviors such as dietary behavior (Lange et al., 2013) and physical exercise (Luszczynska, 2006). To avoid the Hawthorne effect, employees from the control group will experience a game-based training with different content (i.e. cyberbullying). Managers will contribute and commit to motivating their employees to participate and engage with the game. Supervisors will receive scores from the evaluation and performance of their employees and will compete for a higher position in the ranking of the company. All of the BCI will be anchored in the medicine and occupational health literature.

S171: Quasi-Experimental Study to Evaluate an Online Workplace Bullying Intervention

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Introduction: Over the past years, occupational health scholars have extensively studied workplace bullying. Their findings revealed a range of negative outcomes for employee wellbeing, such as burn-out and post traumatic stress. However, while such detrimental
consequences underline the importance of prevention, very few studies to date tested interventions aiming to reduce workplace bullying. In reply, we evaluate the effectiveness of an online intervention directed at reducing the employee’s exposure to workplace bullying. Following recent findings in the bullying field regarding the role of coping in the development of bullying incidents, we evaluate the effectiveness of an intervention aiming at reducing exposure to workplace bullying behaviours by discouraging emotion-focused coping strategies and stimulating self-efficacy. We hypothesised that the intervention will: (1) decrease emotion-focused coping strategies, (2) stimulate self-efficacy, and (3) reduce exposure to bullying.

**Methods:** We employed a quasi-experimental design with three measurement points for two intervention groups (i.e. Group 1 and Group 2) and one control group (i.e. Group 3). Data were collected in May 2016 (i.e. T0), September 2016 (i.e. T1) and January 2017 (i.e. T2). At T0, participants across the three groups were asked to complete a questionnaire (i.e. pre-test) measuring the variables of interest. The first intervention group (i.e. Group 1) had access to the online intervention immediately after this pre-test. At T1, all participants across the three groups were invited to complete the questionnaire for the second time (i.e. post-test for Group 1 and pre-test for Group 2). Only the second intervention group (i.e. Group 2) had access to the online intervention immediately after this pre-test. At T2, all participants across the three groups were invited to complete the questionnaire for the third time (i.e. post-test for Group 1 and Group 2). The comparison between Group 1 and Group 3 (i.e. control group) allows us to examine the effects of the online intervention on a longer term, whereas the comparison between Group 2 and Group 3 (i.e. control group) merely focuses on short-term effects. The final sample contained 2,873 employees who participated in the study at least twice.

**Results:** The findings from multilevel analyses in R version 3.3.3 partially confirmed our hypotheses: in comparison to the control group, the employees in Group 2 reported lower levels of emotion-focused coping strategies after completing the intervention. Group 1 reported lower levels of exposure to workplace bullying behaviours after completing the intervention. No significant effects were found for self-efficacy.

**Discussion:** Although no consistent results are found for both intervention groups as compared to the control group, this study shows that the online intervention is useful for practitioners in order to reduce workplace bullying behaviours by focusing on emotion-focused coping strategies. However, we argue that it is important to implement this (or similar) interventions considering several boundary factors, such as support from the management. Hence, future intervention studies should also assess boundary factors, such as organisational context and participant’s attitudes that may influence the implementation process of this intervention in order to replicate our findings.

**S172: Managing Aging at Work: Effectiveness of Interventions Based on Occupational Health Psychology**

Marisa Salanova, Isabella Meneghel
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Age diversity is a common occurrence in a large number of organisations and seems to be constantly increasing. This reality poses important research challenges, first, to understand if the different age categories have different requirements and needs in their day to day work and, secondly, to verify if the interventions originated from Occupational Health Psychology can increase wellbeing and productivity in different age groups. The objective of this study was to test different individual- and team-level intervention processes, in order to test their effectiveness and effect in the different age groups. Five kind of interventions was tested: i) Positive Leadership, ii) Micro-Coaching Processes, iii) Positive Psychological Resources, iv) Compassion at work and v) Mindfulness Program based on personal strengths. A sample of five Spanish organisations participated, and each of them applied one of the interventions proposed.
A total of 190 people, distributed in five interventions, took part of this study and filled out the questionnaire about wellbeing (e.g., Engagement, Psychological Capital, and Happiness) and Performance. In general, ANOVAs results of repeated measures indicate no statistically significant differences from pre- and post-interventions depending on age. That is, the results of these interventions are significantly positive regardless of the age group, which shows that they are beneficial for workers of all ages. However, in the results of the intervention about Compassion at work, differences were detected in Global Identity and Compassion, where older people (>50 years) showed higher increase when compared with younger people (<39 years). In addition, the results of the t tests of measures related to the pre- and post-data according to age, showed that there are differences in some variables in the following interventions: Positive Leadership, Micro-Coaching Processes and Compassion at work.

These findings highlight the need to continuously evaluate the interventions and practices carried out by the organisations, without assuming a priori stereotypes that standardise the youngest or the oldest. Regarding management, it means being attentive to the impacts of the practices and policies applied, focusing on what is beneficial for the team and balancing it with the individual, without losing sight of people with their own characteristics and talents. Finally, results suggested that attention should not focus on the "problems" associated with age differences, but on taking advantage of the positive aspects of diversity and developing a more inclusive environment.

**BPS Division of Occupational Psychology Invited Symposium: Focusing on Mental Health at Work: A Broader Perspective**

Chair: Gail Kinman  
*University of Bedfordshire, Bedfordshire, United Kingdom*

Discussant: Roxane Gervais  
*Independent, United Kingdom*

Mental health is the leading cause of disability in the UK and other countries. More knowledge is needed to help organisations protect and improve the psychological wellbeing of employees. This invited symposium arises from a partnership between the British Psychological Society’s Division of Occupational Psychology and the UK Society for Occupational Medicine that aims to identify priorities for action and share best practice in improving wellbeing at work. The five papers included were chosen to reflect some of these priorities. Presenters have used a range of innovative methods to gain insight into contemporary challenges to mental health and ways to improve support and promote wellbeing.

The first and second papers present research from studies conducted in occupational groups where work-related stress, and more serious mental health complaints, are comparatively high. These papers consider how disclosing such problems and seeking support can be stigmatised and the implications for wellbeing. The first presentation draws on a wealth of research studies conducted in the armed forces to examine the stigma attached to mental health problems and post-traumatic stress and how this can discourage help-seeking. The strategies that can help overcome such stigma, encourage open discussion of mental health problems, and improve wellbeing are considered. The second paper reports the findings of a two-wave study of UK prison officers. It examines the prevalence of mental health problems, the perceived stigmatisation of work-related stress, and the availability and perception of support. The effects of personal experiences of violence and harassment on prison officers’ mental health are also considered.
How people negotiate the boundaries between their work and personal life has major implications for recovery and wellbeing. Technology can provide flexibility enabling people to work anywhere and anytime, but it can also blur boundaries and impair recovery. The third paper in this symposium uses innovative methods, such as video diaries, to explore the ways in which people from different employment contexts use technology and social media for negotiating boundaries and transitioning between work and personal domains. Several case studies to illustrate ongoing boundary negotiations and the implications for wellbeing are discussed.

The final two papers focus on the role played by organisations in protecting the mental health of their staff and the need to demonstrate a strong business case for promoting positive wellbeing. The fourth paper reports the findings of a large-scale survey of UK-based employers from the private, public and third sectors. It considers the awareness, uptake and implementation of guidelines provided by the National Institute for Clinical Excellence for the promotion of positive psychosocial environments within these working environments. The fifth and final paper draws together the other presentations and considers their implications for improving mental health at work. It also focuses on the direct and more indirect costs of mental health problems at work and considers the challenges inherent in making a business case, how this may be accomplished, and the benefits of improving wellbeing for all stakeholders.

S173: Mental Health at Work: The Stigmatisation of Helpseeking and Ways to Overcome It
Neil Greenberg
King’s College London, London, United Kingdom

Mental health problems are one of the most common causes of workplace absenteeism and presenteeism. Evidence from the UK suggests that at any point in time around 1 in 6 people experience a significant mental health difficulty with the rates being slightly higher in women (1 in 5) than men (1 in 8). Whilst there are numerous effective treatments for most mental health disorders, there is also good evidence that the majority of people who experience these conditions do not seek any help. Failing to seek help may be related to failure to recognise that one’s difficulties are the result of a mental health problem, feeling embarrassed about seeking help, poor availability or lack of trust in treatment services or other reasons. However, one major barrier to care seeking is stigma which can be categorised into internal stigma (beliefs held about how other people might view or behave towards you), external stigma (how you might view others with mental health problems) and discrimination (intended or unintended procedures or practices which discourage people from revealing they have a mental health problem or seeking help). Drawing on a wealth of research data obtained from workplace settings this presentation will provide information about the prevalence of stigma, its impact on help-seeking, particularly as it relates to mental health problems at work, and strategies to overcome it.

S174: Job Demands, Violence and Mental Health in UK Prisons
Gail Kinman, Andrew Clements, Jacqui Hart
University of Bedfordshire, Luton, United Kingdom

Prisons are high-risk environments and the prison officer’s role is physically and mentally challenging. Research findings indicate that officers have one of the highest rates of work-related stress, illness and injury of all occupational groups and are at greater risk of burnout and post-traumatic stress disorder than other security and emergency professions (Kunst, 2011; Denhof & Spinaris, 2013). In the UK, correctional institutions are increasingly overcrowded and understaffed and recruitment and retention are poor. Drug-taking and self-harm among prisoners are growing concerns and assaults on staff have increased three-fold in the last five years. Although research has been conducted in single or small groups of institutions (e.g. Walker et al. 2015; Bevan et al. 2010), little is yet known about the implications of working conditions for the mental health of prison officers in the UK.
This study examined the incidence of mental health problems in a sample of prison officers across the UK using the GHQ-28, which assesses levels of depression, anxiety and insomnia, social dysfunction and somatic symptoms. It also examined working conditions (i.e. job demands and experiences of aggression and violence from prisoners) as predictors of mental health. The stigmatisation of mental health problems in UK prisons and the availability of support were also examined, along with the role they play in protecting the mental health of staff.

1474 prison officers (86% male) completed validated measures to assess study variables. Seventy-two percent of the sample were classified as mental health ‘cases’ on the GHQ, with levels of anxiety and insomnia and somatic symptoms being particularly high. A high proportion of participants (X) had been physically assaulted by prisoners and the support they received to manage these incidents was generally considered poor. Disclosing work-related stress was highly stigmatised in prison settings, but most officers felt able to discuss their experiences with some of their colleagues. Hierarchical multiple regression, controlling for gender, age and job experience at the first step, found that job demands and experiences of aggression were significant predictors of mental health problems. A culture of support where mental health problems were openly discussed and positive workplace relationships protected officers from the negative effects of job demands and personal experiences of violence and aggression on their wellbeing.

S175: Capturing the Everyday Negotiations of Work-life Boundaries and Transitions
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We report findings from the Digital Brain Switch project. This used an innovative combination of video diaries and interviews to explore the implications of mobile technologies and social media for managing work-life boundaries. Participants are drawn from three groups: social entrepreneurs (working from home and/or in shared offices, mostly self-employed); office workers (office-based employees but utilising flexible working options such as job share, compressed hours or working at home one day a week), and university students (studying, and often living, on university campus, many undertaking voluntary or part-time work; future graduate workers). Our focus here is on a select number of participants as they recount their everyday technology-mediated practices. We applied an in-depth analysis of their video diaries and interview accounts of their negotiation of work-life boundaries and transitions between different domains. Our findings are presented in a series of case studies. These illustrate the importance of capturing ongoing negotiation of boundaries in showing how technologies are ever present expressions of socio-materiality. The approach highlights the significance of individual physical and personal context in the negotiation of transitions between different domains and in which boundaries are most significant. Our participants internalised their responsibility for boundary management responsibility but we look beyond individual control. The findings highlight the limitations of flexible working, recognise the role of others in boundary management and consider the role of identity and power relations in these daily negotiations.

S176: Who Wants to Be a Millionaire? (Why Wellbeing at Work can Mean Everyone Wins)
Ashley Weinberg1, John Hudson2, Anne Pearson1, Sabirah Chowdhury3
1University of Salford, Manchester, United Kingdom. 2University of Staffordshire, Staffordshire, United Kingdom. 3University of Manchester, Manchester, United Kingdom

There are many keys to business success, but all too often organisations and even governments underestimate the importance of employee wellbeing. In a consultation on its recent Industrial Strategy, the UK Government omitted mention of wellbeing altogether and the government
department responsible for commercial success after Brexit could not understand why 40% of its staff left within one year! There is a clear business case for not only providing a psychological safety net for employees but also promoting positive mental health through psychologically healthy working conditions.

Reviews in the UK and US health services identify clear relationships between staff wellbeing and patients’ safety and effectiveness of care. Such outcomes generalise to the financial performance of organisations which indicate an association between employee satisfaction and financial returns. In short, there is evidence of a causal association between wellbeing and positive performance outcomes at both individual and unit levels.

Recognition by UK statutory and expert bodies, including the Health and Safety Executive (HSE), National Institute for Clinical Excellence (NICE) and the British Psychological Society (BPS), of the costs of poor psychological health has focused attention on designing psychosocial environments which encourage ‘good’ work and employee engagement, rather than ignoring workforce potential; for example, fostering positive management styles, while reducing factors which undermine workers’ wellbeing, e.g. low levels of control, job insecurity. Given that annual costs to organisations of poor mental health are estimated to be between £33bn-£42bn (7), the HSE and NICE have previously published standards and guidance in relation to employee wellbeing, but relatively little is known about their uptake and implementation. One previous evaluation of their use in National Health Service (NHS) trusts found that 72% had systems for monitoring employees’ psychological health and 63% trained line managers on promoting and protecting employees’ mental wellbeing.

The current paper presents findings from a broader survey of 163 UK-based private, public and third sector employers with an accumulated minimum number of 322,033 workers. 76.9% of organisations were aware of the NICE guidance for improving mental wellbeing in the workplace, but only 36.9% were familiar with its specific recommendations. Less than half reported systems were in place for monitoring employees’ mental wellbeing and only 11.9% confirmed that this NICE guidance had been implemented in their workplace. However, where employee health and wellbeing featured as a regular board agenda item (two-thirds of participating organisations), awareness and implementation of NICE guidance were more likely. Significant associations were found between sector and size and uptake of NICE guidance for employee wellbeing, with issues highlighted for the private sector and small-medium sized organisation. Compared to 90% in the NHS, 70% of this sample trained managers on making referrals for psychological health problems.

These findings indicate much more needs to be done to raise awareness and facilitate implementation of guidance for improving psychological health at work. In addition to underlining the role of top-level organisational commitment, these results indicate the UK has a clear health-related challenge to remaining competitive in a post-Brexit scenario.

S177: Implications - Making a Business Case for Improving Mental Health at Work
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The need to focus on mental health within the work environment is increasingly recognised. This could be due to the intensified publicity about common mental health conditions or greater awareness of the adverse impact they can have on organisational functioning. For example, mental ill health, more specifically work-related stress, anxiety and depression, had an estimated cost of £5 billion to the UK economy in 2016/2017, with a £1 billion cost to employers over the same period (HSE, 2017). In addition to the direct costs that mental ill health can generate, it can
Affect organisations in other ways, such as through lower productivity. Data shows that 12.5 million days were lost due to work-related stress, anxiety and depression during this period. These figures accounted for 49% of all working days lost due to all causes of ill health and highlight the importance of making a business case to improve mental health at work.

One of the challenges to making a business case to enhance mental health has been establishing an exact cost to economies of these conditions. However, due to more research in this area, this is becoming clearer. This paper highlights the need for organisations to invest in improving the mental health of their staff and will focus on the direct costs, such as those shown above, as well as the indirect costs, such as through presenteeism and the effects of reduced performance, which could be caused by learned helplessness or the inability to cope with change. The paper will discuss the implications of the previous four papers for improving wellbeing in organisations. It will also outline some of the key contributing factors to mental ill health, such as workload pressures, poor interpersonal relationships and workplace change and consider some of the ways that these problems could be addressed. Research has shown that good work benefits people and increases their wellbeing. The business case, therefore, goes beyond financial implications and supports a holistic understanding of the benefits of improving mental health at work.

Symposium: Work-family (Life) Relationship in Contingent Jobs
Chair: Maria José Chambel
Universidade de Lisboa, Lisbon, Portugal

The aim of the proposed symposium is to discuss the evidence from empirical studies conducted on the work-family (life) relationship in contingent jobs. We aim to present four quantitative studies conducted in Portugal. We believe that the diversity of samples and job contexts —contact centre, financial consultants and manufacturing — will add value to the discussion on the contingent jobs that characterise the rapid changes in the workplace which will take place at EAOHP 2018. Economic, organisational, and workforce changes have affected contemporary careers (Greenhaus & Kossek, 2014). For instance, the contingent forms of work have increased all over the world which brings more insecurity to employees due to the limited duration of the job contract (Chambel, Lopes & Batista, 2016). Contingent jobs often entail certain disadvantages for employees — less attractive job content, less job security, fewer benefits and lower promotion opportunities (Hudson, 2007). However, the consequences to employees’ work–family (life) interface have not been so far empirically tested but we may consider that they also imply negative consequences: contingent employees may suffer more than their permanently employed peers from lower organisational work-family support; may have precarious positions and consequently little voice or little room for negotiation and are pressured to work overtime, get less desirable shifts and more uncertain schedules (Bonet, Cappelli & Hamori, 2013); may need to exert higher levels of effort and be willing to accept more stringent positions than permanent workers in order to signal suitability for a permanent position (Chambel & Castanheira, 2007; Chambel, Sobral, Espada & Curral, 2015).

In theories concerning the work–family interface (e.g. Frone, Russell, & Cooper, 1992), work-family conflict refers to a form of role conflict in the sense that work and family demands are incompatible in some respect (Geenhaus & Beutell, 1985) and work-family enrichment, in turn, has an opposite experience because positive emotions experienced or resources obtain in work positively affects family life (Greenhaus & Powell, 2006). Evidence has shown that experiences of work-family conflict and work-family enrichment are crucial in determining workplace wellbeing and general wellbeing (Carvalho & Chambel, 2015, 2017), and thus also merit attention in the field of contingent job research.
The studies conducted contribute to the occupational health psychology literature by demonstrating that contingent jobs should affect the employees’ work-family (life) relationship and, consequently, their wellbeing. A practical implication of our studies is that managers should be attentive not only to permanent workers but also to contingent workers and promote measures in the workplace that permit a balance between work and family (life) for all.

**S178: Does Organizational Affective Commitment Buffer the Relationship Between Work-Personal Life Conflict and Burnout in Temporary Agency and Permanent Workers?**
Silvia Lopes, Maria José Chambel, Daniela Geraldes
Universidade de Lisboa, Lisbon, Portugal

*Purpose:* This study analysed if the organizational affective commitment buffers permanent and temporary agency workers (TAW) against the negative relationship between work-personal life conflict (WPLC) and burnout (i.e. exhaustion and cynicism). According to Meyer and Maltin (2010) the affective liaison with the organization has an important role to buffering the effect of stressors on workers' health and wellbeing. However, TAW have lower expectations regarding their employment relationship with the client company that results in affective commitment (Chambel et al., 2015). In fact, they have less attractive job content, less job security, fewer benefits and lower training and promotion opportunities (Hudson, 2007). Thus, if they experience high affective commitment, this would result in a more positive outcome, i.e. strong buffering effect between the stressor and burnout. In contrast, permanent workers may not experience so strong “buffering effect”, as having an employment relationship that results in high commitment is more expected.

*Design:* Hypotheses were tested with a sample of 435 temporary agency workers and 435 permanent workers (from an original sample of 897 participants) in contact centers. Data were analysed using PROCESS (Hayes, 2013).

*Results:* As expected for both samples, we found a positive relationship between WPLC and exhaustion and cynicism. However, also as expected, while for temporary agency workers, the affective commitment contributed to weakening the relationship between WPLC and exhaustion, and between WPLC and cynicism; for permanent workers, the moderator effect of affective commitment was only found for the relationship between WPLC and cynicism.

*Conclusions:* Our findings showed that WPLC increased burnout. However, this relationship could be weakened when workers have a higher affective commitment – mostly for temporary agency workers. This study highlighted the need to evaluate WPLC, especially in sectors that tend to have young employees. Moreover, this research showed the importance of organizations to develop a positive relationship with workers. Particularly, the development of a positive relationship with TAW was found as having a greater importance to buffer the relationship between WPLC and burnout. Thus, having a permanent or a temporary agency contract may produce differences in the way that workers value the relationship with their organization.

**S179: Demands, Resources and Wellbeing in a Contact Centre: Does the Workers’ Family Characteristics Matter?**
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*Purpose:* Contact centres are pointed as one of the industries that best illustrates the shifts in today’s society (Russell, 2008). The use of outsourced workers (OW) is one of the employment arrangements used by the contact centre industry, which has been on the rise within the Portuguese call centre industry (Sobral, Chambel, & Castanheira, 2016). Outsourced workers
have a highly complex work relation, which involves: the workers, the contractor company (outsourcer), and the client company (e.g., Sobral, et al., 2016). It is likely that this complex relationship and the demands of a call centre have detrimental workers wellbeing (Sobral et al., 2016). Nevertheless, according to the conservation of resources theory (Hobfoll, 2001) resources and demands can impact on the strain within a person’s idiosyncratic ecology. Thus, we may consider that the worker’s family characteristics can also have a say on worker’s wellbeing in a way that workers married and/or with children are more depended on their job for achieving their need satisfaction. In this regard we might expect that, when compared with single workers and/or workers without children, for workers that are married and/or have children job resources are particularly salient, the perceptions of job demands are lower and the perceptions of resources and workplace wellbeing are higher.

**Design:** This research will involve a sample of Portuguese OW working in a contact centre (n=2525). Data will be collected through a self-report questionnaire and analyzed with the Mplus7 software.

**Results:** Results confirmed that workers married and/or with children, perceived lower job demands and burnout and higher job resources and work engagement. Furthermore, job demands and job resources were found as mediators between these family characteristics and these indicators of workplace wellbeing. Therefore, the resources obtained by contact center workers that are married and/or have children, were more salient when compared with workers single and/or without children. Additionally, the first group also showed a better perception of job characteristics and higher wellbeing.

**Conclusions:** According to our hypothesis, and with the COR theory (Hobfoll, 2001) we observed that the effects of job resources and job demands depends of the person’s idiosyncratic ecology, namely the workers family characteristics.

**Limitations:** The study presents two limitations that do not allow the generalization of its results: cross-sectional design and, the use of a self-report questionnaire.

**Originality/Value:** This paper contributes to the research on contingent work relations, namely OW, when working in the specific context of contact centres. Moreover, this study adds to the literature by applying the COR theory and by aiming to understand how family characteristics can impact on workplace wellbeing.

S180: Job Characteristics and Wellbeing at Work through Work-family Conflict and Enrichment: The Case of Temporary Agency Workers (TAW)
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¹Universidade de Lisboa, Lisbon, Portugal. ²Universidade de Coimbra, Coimbra, Portugal

**Purpose:** Gallagher and Connelly (2008) proposed that it is necessary to evaluate whether the existing theory developed in the context of standard employment is adaptable to contingent workers. By building on the work-family theory this study presuppose that this relationship is an important mechanism to explain how job characteristics affect employees’ wellbeing. Previous studies already established the link between job characteristics and wellbeing through work-family conflict (WFC) or work-family enrichment (WFE) in distinct professional sectors. For instance, Carvalho and Chambel (2014), with a sample of bank workers, identified the WFE as a mechanism that explains the relationship between job autonomy, job demands and supervisor support. Also, Carvalho and Chambel (2017), with a sample of Portuguese marine corps, observed that WFE mediated the relationship between job characteristics (job demands, job autonomy, and supervisor support) and engagement and that WFC mediated the relationship between these job characteristics and burnout and engagement.
Design: Based on earlier research, we tested the following hypotheses in temporary agency workers (TAW): (1) WFC mediates the relationship between job characteristics and burnout; (2) WFE mediates the relationship between job characteristics and work engagement. We will present results of a study with a sample of 230 TAW in a financial consultant firm. We perform SEM in MPLUS.

Results: WFE and WFC explained the relationship between job characteristics and wellbeing at work either total or partially. Concerning the total mediation effects: 1) the WFC explained the relationship between the workload and the work engagement and 2) the relationship between supervisor support and burnout was explained either by WFC and WFE. Partial mediations were found in the remaining relationships between job characteristics and wellbeing at work with exception to the relationship between workload and engagement through WFE where no indirect effects were found.

Conclusions: Similar to permanent workers, WFC and WFE were mechanisms that explain how job characteristics related with TAW' wellbeing.

Limitations: Cross-sectional design that not permits concludes causality. We only focused on data of TAW and therefore cannot generalize the results to permanent workers in this company.

Originality/Value: Few studies to date have been able to examine the work-family relationship (i.e. WFC and WFE) on TAW. The results of our study can highlight to the human resource departments the importance of considering measures that considered the job characteristics to prevent WFC and WFE not only to permanent workers but also to temporary agency workers.

S181: Job Insecurity and Work-related Wellbeing among TAWs: Mediation by Work-life Conflict
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Purpose: Based on the transactional stress theory (Lazarus and Folkman, 1984) and the COR theory (Hobfoll, 2002), job insecurity represents a threat to employees' resources and to their capability to maintain wellbeing and several authors reported that insecure employees are more exhausted (Giunchi et al., 2016) and less engaged at work (Bosman et al., 2005). Furthermore, job insecurity can menace employees’ ability to manage their work role and their family role, as it is indicated by some authors that found insecure workers to report more work-family conflict (Richter et al., 2010). Work-family and work-life conflict are forms of inter-role conflicts that occur when work demands drain resources and work role conflicts with other personal roles, including but not just limited to the family one (Siegel et al., 2005). It is likely that the employment uncertainty of temporary agency workers (TAWs) makes difficult for them to balance the work and non-work domain and this may explain their work-related wellbeing. Therefore, this study aims to investigate the relationship between job insecurity, job exhaustion and work engagement in TAWs, considering work-life conflict as a mediator.

Design: This research involved 232 Portuguese TAWs. Mplus7 was used to test the mediation.

Results: Job insecurity was positively related to job exhaustion and negatively to work engagement. Furthermore, job insecurity resulted positively related to work-life conflict that was found as a partial mediator in the relationship between job insecurity and both job exhaustion and work engagement. Therefore, TAWs' job insecurity is likely to make difficult for them to manage the work and non-work domain and this partially explains their work-related wellbeing.
Conclusions: Job insecurity represents a threat to TAWs’ work-related wellbeing and identified work-life conflict as a mechanism that explains how their job insecurity relates to their work-related wellbeing. This paper contributes to extending the research about the potential harm of TAWs’ job insecurity and highlights the role of work-life conflict as a mediator in the relationship between job insecurity and work-related wellbeing outcomes.

Symposium: Psychosocial Risk Management: Monitoring Data Supporting Action
Chair: Irene Houtman
TNO, Leiden, Netherlands

The costs of mental ill-health for society are large, reaching 3-4.5% of GDP across a range of selected OECD countries. It was estimated that the major impact is suffered by the employers due to absenteeism and presenteeism (44%), followed by the economy in terms of lost output (39%), the health care systems due to treatment costs (10%), and the social welfare systems due to disability benefit payments (7%). OSH Legislation as well as public health legislation place emphasis on prevention through tackling risk factors and preventing discrimination. However, despite the fact that a common legal framework in the EU exists in relation to mental health in the workplace through the Framework Directive 89/391/EEC which covers all types of risk to workers’ health, there still appears to be limited awareness of this provision both by employers and other stakeholders.

In this symposium we will present several European and one Australian data sets, allowing analyses providing insights in drivers and barriers for psychosocial risk management, leading to either policy related advice or more practical sector or organisational level advice supporting psychosocial risk management. The symposium is structured as follows:

1. Introduction to the topic (Houtman)
2. Management of psychosocial risks in European workplaces: drivers and barriers in a national and cultural context (Van den Heuvel)
3. Job demands, job resources and innovative behavior: a European union survey (Leka)
4. Psychosocial risk management, psychosocial risks and the role of drivers and barriers: results from a multilevel joint analysis of three European surveys (Houtman)
5. Patterns of Worker Participation in the Management of Psychosocial Risks in European Countries (Ertel)

S182: Management of Psychosocial Risks in European Workplaces: Drivers and Barriers in a National and Cultural Context
Swenne Van den Heuvel, Maartje Bakhuys Roozeboom, Iris Eekhout
TNO, Leiden, Netherlands

General objective of the project commissioned by the European Agency for Safety and Health at Work (EU-OSHA) is to support policy makers in stimulating successful psychosocial risk (PSR) management. Since the national and cultural context may influence the effectiveness of drivers and barriers of PSR management, the following research questions will be answered: (1) What are determinants (drivers and barriers) of PSR management? (2) What is the influence of the cultural context on PSR management? (3) Does cultural context influence the drivers and barriers of PSR management and (4) Do these drivers and barriers have the same impact in a different cultural context?

Multilevel analyses were performed to answer these questions. Data were used from the second edition of a Europe-wide survey among enterprises, the European Survey of Enterprises on New and Emerging Risks (ESENER-2, EU-OSHA), carried out in 2014. The dataset was
supplemented with data on GDP per capita, data on national initiatives regarding occupational safety and health or PSR, and data on three cultural dimensions considered of potential relevance for PSR management (Power Distance, Uncertainty Avoidance and Masculinity) based on Hofstede. All analyses were adjusted for country, size, sector and respondent type. Results from the analyses were discussed in a focus group meeting of international experts from different cultural backgrounds to assist the interpretation of the results.

In line with previous research, results show several drivers and barriers at the organisational level to be associated with PSR management, defined as the amount of measures in place to deal with psychosocial risks. The strongest driver was management commitment, and strongest barriers were lack of awareness among management and lack of expertise. On the cultural dimensions ‘Power Distance’ and ‘Uncertainty Avoidance’, a high score was associated with less PSR management. The cultural dimensions were highly associated with other factors of the national context (a high GDP per capita and national OSH and PSR initiatives), which were also associated with PSR management. The strong relation between the context variables enabled a distinction between a favourable and an unfavourable context for psychosocial risk management. Most drivers and barriers were not or only weakly related to cultural factors. Differences in impact of barriers and drivers in a different cultural context were found, but they were only marginal.

Conclusion of the analyses and the discussion in the focus group was that national context matters and contributes significantly to the level of psychosocial risk management in companies. However, since national context is not easy to change, interventions may best be aimed at encouraging management commitment and employee involvement.

S183: Job Demands, Job Resources and Innovative Work Behaviour: An EU Study
Vlad Dediu, Stavroula Leka, Aditya Jain
University of Nottingham, Nottingham, United Kingdom

This study aims to investigate the relationship between several job design variables and innovative work behaviour (IWB). Guided by the Job Demands Resources model, the aim was to evaluate the relationship between work demands (time constraints), resources (autonomy and social support), and other work factors (task monotony, complexity, and dealing with unforeseen circumstances) with idea generation and idea implementation behaviours in a sample of 12,924 participants from the 27 European Union member states in 2010. We also wished to investigate if individual IWB, at the country level, is associated with country innovative performance (an aggregate of process/product and marketing/organizational innovation). We employed a multilevel generalised structural equation model to test our hypotheses. In our final model autonomy, manager encouragement and dealing with unforeseen problems showed the highest positive relationship with idea generation and idea implementation. Conversely, monotonous tasks and working at high speed were negatively related to IWB. Furthermore, we have found strong indications that country-level IWB positively relates to the odds of a country scoring higher on the aforementioned innovation indicators. Between-country unexplained variance in IWB was reduced from 17.1% in our initial model, to 1.9% in our final iteration. Limitations, implications and suggestions for future research are discussed.

S184: Psychosocial Risk Management and the Role of Drivers and Barriers: Results from a Multilevel Joint Analysis of Three European Surveys
Irene Houtman, Iris Eekhout, Anita Venema, Maartje Bakuys Roozeboom
TNO, Leiden, Netherlands

The aim of this study was to provide answers to questions concerning OSH risk management, and in particular psychosocial risk management: (1) Is exposure to OSH risks, both in general and more specifically in relation to environmental risks, risks of musculoskeletal disorders
(MSDs) and psychosocial risks (PSRs), as reported by employees, related to risk awareness and risk management in enterprises? (2) Are work-related health outcomes and wellbeing, as reported by employees, related to risk awareness and risk management in enterprises? (3) How well is risk management explained by exposure to work-related risks, both general and specific, and by work-related health outcomes, as reported by employees? Do drivers, such as management commitment and employee participation, or barriers, such as lack of resources or expertise, explain the relationship between risk management at the enterprise level and risk perception by employees?

These questions are answered by a combined analysis of data from enterprises in the European Survey of Enterprises on New and Emerging Risks (ESENER-2), data from employees in the Labour Force Survey 2013 ad hoc module on accidents at work and other work related health problems (LFS 2013 ad hoc module) and the 6th European Working Conditions Survey (6th EWCS). For the multilevel modelling we used two common background variables ‘country’ and ‘sector (within countries)’ to combine the data sets.

Risks reported by employees are positively related to risk management for all three types of risks studied (OSH/environmental risks, MSDs and PSRs), meaning that more risk exposure as reported by employees is related to more risk management in enterprises. Specific information on risks as reported by employees (EWCS) strongly increased the explained variance in risk management in enterprises. As for health problems, only the reporting of mental health problems by employees significantly increased the variance explained in psychosocial risk management in enterprises. For the management of psychosocial risks, involvement of employees in the design and set-up of measures specifically directed at psychosocial risks significantly and positively related to psychosocial risk management.

Factors explaining PSR management differ from those explaining OSH and MSD risk management. Additionally, PSR management is better explained at country level, whereas OSH and MSD risk management is better explained at sector level. Findings will be discussed.

S185: Patterns of Worker Participation in the Management of Psychosocial Risks in European Countries - A Qualitative Case Study
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Federal Intitute for Occupational Safety and Health (BAuA), Berlin, Germany

Statement of the problem & research question: Worker participation is an essential component of the European OSH regulatory framework, and the activity of health and safety representatives has been shown to be conducive to the management of psychosocial risks (Lenhardt & Ertel 2012) which are perceived as more challenging than other risks by many organizations (Wadsworth & Walters 2018). Within the framework of a qualitative research project on psychosocial risk management in a European comparison we explored how worker participation in the management of psychosocial risks operates in different national and organizational contexts.

Approach & Methods: Altogether 41 semi-structured interviews with key OSH players (management and worker representatives) were conducted in ten organizations in Denmark, Sweden, the UK and Spain. The interviews were tape-recorded, transcribed and analyzed using content analysis along organization-related factors, focusing on participative practices in psychosocial risk management. This study was conducted by the Federal Institute for Occupational Safety and Health (BAuA) and with the financial support of the Hans Boeckler Foundation.
Results: We observed a wide variety of workplace practices with regard to the representative participation of workers in psychosocial risk management. The spectrum ranged from an initiating role, where management (at first) shows no commitment to addressing psychosocial risks, through to a more accompanying or subordinate role where risk assessment is embedded in prevention activities initiated and/or controlled by management (e.g. in the manufacturing company in the UK). In the NHS trust in the UK, which was under financial pressure, management and staff representatives jointly took the initiative to address psychosocial risks. In Sweden and Denmark, the statutory framework that grants extensive rights to workers' representatives in companies is "implicitly" present in a participation culture that has evolved historically and participation structures in which psychosocial risk management could be embedded already existed in all the examined enterprises in both countries. In Spain, to counteract a dominant authoritarian company culture, the union institute ISTAS supports worker representatives in the framework of a comprehensive strategy. This is done through training sessions, empowerment, and provision of a validated and field-tested instrument that contains a structured approach for risk assessment to improve working conditions. At the same time, company participation culture is developed and/or intensified in the process of risk management.

Discussion & Outlook: Particularly in those cases where the (initial) willingness of management to address psychosocial risks was low, worker representatives played a dominant role in preparing, initiating and driving the process, backed by law. By using a qualitative case study approach, we were able to gain insight into the interaction dynamics of OSH players in organizations when addressing psychosocial risks. At the same time, or study was not intended to make statements on the representative distribution of phenomena in the sense of statistical generalization. Instead, our study aimed at "analytical generalization" which allows conclusions to be drawn for similar contexts based on the mechanisms identified in psychosocial risk management.
PAPERS
O1: Interaction Effects of Psychosocial Occupational Factors on Burnout and Depressive Symptoms: Cross-Sectional Analyses of 3,547 German Employees
Hermann Burr¹, Grit Müller², Uwe Rose¹, Maren Formazin¹, Clausen Thomas³, Anika Schulz¹, Hanne Berthelsen⁴, Peter Martus⁵, Guy Potter⁶, Anne Pohrt¹

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Background: To test assumptions of the demand control (DC) and effort-reward (ERI) models, we investigated – among office and manual workers – whether control (i.e. influence and possibilities for development), modifies the association of demands (i.e. work pace) with mental health; and, whether reward (i.e. job security and quality of leadership), modifies the effect of efforts (i.e. amount of work) on mental health, and if imbalance of rewards and efforts explain mental health independently of their main effects.

Methods: In the German Study of Mental Health at Work (S-MGA) 2011 (response 36%), 1,882 manual and 1,665 office workers were interviewed. Linear regressions were conducted.

Results: Among manual workers, influence modified the association of work pace with burnout (p = .001) and depressive symptoms (p < .001), quality of leadership modified the association of amount of work with burnout (p = .023), and job security modified the association of amount of work with depressive symptoms (p = .003). In these cases, high control and high reward buffered the association of demands with mental health. These interactions explained hardly any additional variance (Δ R²=0.002-0.007). No other significant interactions were found. Imbalance of job security and amount of work was significantly associated with depressive symptoms (p<0.001; Δ R² = 0.006), no other imbalances were significant. Differences in these results between job sectors were not significant apart from the imbalance mentioned.

Conclusions: The assumptions of the DC and ERI models regarding moderation and imbalance seem to be of negligible importance for mental health as compared to main effects of demands, effort, control and rewards. Should the present and a few other studies’ similar findings be confirmed in further longitudinal studies, there might be a need in occupational health for focusing on main effects of demands, effort, control and rewards.

O2: Resources and Stressors in Leaders’ Work Life: The Relevance of Follower Behaviour for Leader Wellbeing
Stefanie Richter, Judith Volmer
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Social interactions at the workplace are a crucial source of resources and stressors in our everyday work life. In previous research, the relationship and interactions between leaders and followers were examined intensively with regard to their consequences on followers’ wellbeing. However, research mainly neglected the consequences of leader-follower interactions on leader wellbeing. Only recently, research on leadership and wellbeing has started to shift the focus in the leadership process and to address the consequences of follower behaviour for leaders. This study aims at adopting this new perspective and thus investigates how organisational follower behaviour is related to the experiences and wellbeing of leaders. We assume organisational follower behaviour to be relevant for leaders because it is crucial for the accomplishment of a leader’s goals. Thus, follower behaviours threatening leader’s goal accomplishment may result in additional efforts and drain resources. Similarly, follower behaviours supporting leader’s goal accomplishment may represent a resource for the leader and also a contribution to the leader-follower relationship.
We applied a web-based experimental study and manipulated organisational follower behaviour. Participants (German students, N=170) were asked to put themselves in the role of a leading person and received further information about the job and the company they were told to work for. Participants were presented with one of three randomised vignettes describing a follower showing a) counterproductive work behaviour (CPW-Condition), b) extra-role behaviour (ER-Condition), or c) intra-role behaviour (IR-Condition). As dependent variables, participants rated relational energy, satisfaction with the follower, as well as perceived relationship quality from the leader's perspective.

Results revealed significant relationships between organisational follower behaviour and the dependent variables. Participants in the CPW-Condition showed significantly lower scores in relational energy, follower satisfaction and perceived relationship quality than participants in the ER- or IR-Condition. Participants in the ER-Condition indicated higher relational energy, higher perceived relationship quality, and reported higher satisfaction with the presented follower compared to participants in the other two conditions.

The results of this study highlight the relevance of followers and their everyday working behaviour for leaders and leader wellbeing. Thus, research as well as occupational health interventions focusing on the relationship between leadership and wellbeing should integrate this perspective to promote both employee and leader wellbeing. Further investigations using samples from the working population and a validation of the results based on field studies are still in progress.

O3: Daily Experiences of Commuting Strain and Self-control at Work and at Home: A Diary Study
Bettina S. Wiese, Olivia Chaillié, Ruth Noppeney, Anna M. Stertz
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Commuting denotes the journey between home and work. It is a widespread experience for many employees. As a potentially stressful experience, it is known to also affect physical and psychological health indicators. Given that daily commuting experiences occur immediately before entering the work environment and before coming home, respectively, we expect this proximity to increase the likelihood of spillover into the workplace as well as into family life. More precisely, with a focus on the experiences of long-distance train commuters, we have investigated whether stressful commutes (from home to work and from work to home) affect subsequent self-control capacity at work and at home.

Data were gathered in a quantitative online diary-study with daily surveys on evenings within one working week, i.e., from Monday to Friday. The analyses were based on data of N = 202 train commuters (54% male). Multilevel analyses confirmed negative effects of daily commuting strain: On days with higher strain during the morning ride from home to work, commuters reported stronger irritability and lower concentration at work. In addition, on days with higher strain during the ride home from work, commuters reported significant irritability at home.

In sum, this study provides evidence for detrimental effects of train commuters’ daily strain on their self-control capacity at work as well as at home. Suggestions for future research are discussed, including, for instance, a comparison of effects for commuters using different means of transportation (e.g., car, bus, train).
O4: “Charging the Batteries” or the “Monday Blues?” A Daily Diary Study Examining Stress Experience Over the Work Week.
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Temporal rhythms exist across days of the work week, but their effects on stressors, strains, and their relationships are unclear. Two competing theoretical perspectives are developed based on the conservation of resources theory (COR; Hobfoll, 1989) and the transactional stress theory (Lazarus & Folkman, 1984). These theoretical perspectives result in opposite predictions on whether stressors and strains will be higher (“Monday Blues”) or lower (“Charging the Batteries”) at the beginning of the work week.

Building on these two perspectives, the current study tests whether individuals will start their week recharged and better able to cope with stressors, or depleted and more vulnerable to stressor experiences. This is one of the first studies to examine the effects of distance from the weekend on the experience of work stressors, and is able to meaningfully extend prior work (Nicholson & Griffin, 2017).

We used a daily diary design with a sample of 139 employees working the traditional work week, surveyed twice a day for two weeks. Results showed that individuals experienced more incivility and organisational constraints, and less job satisfaction at the beginning of the week. In addition, the incivility-satisfaction relationship was stronger at the beginning of the week. These findings suggest that the idea that resources are replenished over the weekend, leading to a greater ability to cope with the demands of the job is an oversimplification, and a more complicated process is probably involved. The discussion examines possible explanations for the observed differences between the mild social stressor (i.e., incivility) and the more task oriented stressor (i.e., constraints) in light of the weekly patterns observed. Practical implications include the suggestion that daily recovery activities may be more important earlier in the week.

O5: Morningness and Schedule Misfit: Implications for Work and Health Outcomes
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Shift work is employment that falls outside the standard day schedule of 9 a.m. to 5 p.m. Many employers, such as those in the healthcare sector, perform vital services that mandate 24-hour staffing. Yet, fulfilling these staffing needs often has an adverse impact on worker wellbeing (Barnes-Farrell et al., 2008). There is substantive evidence that shift work is associated with sleep disturbances, worsened health, and diminished performance as well as higher injury rates. These provide compelling reasons for researchers to seek a deeper understanding of the physiological and social-organizational challenges posed to these workers.

Many adverse effects of shift work stem from a disruption in the circadian rhythm (Costa, 1996); thus, a crucial dispositional factor to examine is morningness preferences. Those with stronger morningness preferences tend to function optimally in the morning hours, whereas those with stronger evenness preferences perform best during the afternoon and evening. The goal of this study is to extend the literature on the role of morningness preferences by considering two aspects of morningness: a) readiness for cognitive activity, and b) preference for starting the day (Di Milia, Wikman, & Smith, 2008), and the work-related and personal health implications of morningness preferences for healthcare workers who work shifts that are congruent or non-congruent with their morningness-evenness preferences. We hypothesize that H1: The
strength of both morningness preferences will buffer against end-of-day strain for day shift workers and exacerbate end-of-day strain for night shift workers. H2: Shift and morningness preferences have an interactive effect on work and health outcomes, mediated by end-of-day strain.

Data were collected from 129 healthcare workers from Australia (n = 44) and the United States (n = 85) who worked day (n = 96) or night (n = 33) fixed work schedules. Morningness was assessed with the two factor version of the revised Preferences Scale (Di Milia, 2005). An adaptation of the International Healthcare Professionals (IHP) Survey was used to assess end-of-day strain. Work-family conflict was assessed using a composite adapted from Frone, Russell, and Cooper (1992). An adaptation of the Global Job Satisfaction measure was used to assess job satisfaction. An adaptation of the measure developed by Hanisch and Hulin (1990) was used to assess turnover intentions. Finally, 9 distinct indicators of health were assessed with the Center for Disease Control (CDC) Healthy Days measure.

We used the PROCESS macro for SPSS and bias-corrected bootstrapping to test the moderated mediational hypotheses, controlling for age, job tenure, nation, and job demands. Partially confirming hypothesis 1, the shift x cognitive readiness interaction significantly affected end-of-day strain. Partially supporting hypothesis 2, the PROCESS results indicated a significant conditional indirect effect of the shift x cognitive readiness interaction on job satisfaction, work-family conflict, and all personal health variables mediated by end-of-day strain. No significant results emerged for the ‘preference for starting day’ factor.

We use these data to discuss the direct and indirect effects of cognitive readiness and shift work on the lives of healthcare workers, and the implications of misfit for selection procedures.

O6: How Does Experiencing a Positive Day at Work Make Me a Better Partner at Home? 
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A substantial body of spillover literature focused on the negative spillover from the work to the home domain, such that work experiences not only influence work, but also exert influence beyond the work domain. Yet, to date, less work-home research focused on positive spillover effects and the underlying mechanisms explaining these effects. In this study, we aim to examine how positive work experiences can improve employees’ private spousal life. Specifically, we explored how daily positive work experiences can make an employee more psychologically available as a partner at home (i.e., to be physically, emotionally and cognitively available). To that end, we investigated the mediating role of both interpersonal capitalization (i.e., reflecting on and sharing positive experiences, emotions and thoughts) and psychological detachment (i.e., abstaining from work-related thoughts, feelings and experiences after working hours). Data were collected of 55 employees during five consecutive working days. Multilevel path analyses found no support for a direct relation between daily positive work experiences and an employee’s psychological availability in the evening. Daily positive work experiences do relate positively with interpersonal capitalization, which in turn relates positively with being a psychological available partner at home. Whereas daily positive work experiences do not relate significantly to psychological detachment, being able to mentally and physically leave one’s work behind does make an employee psychologically more available. Our study has implications for practice, such that although interpersonal capitalization and psychological detachment seem semantic opposites they can co-occur and improve employees’ private life.
O7: The Successful Leader in Occupational Health Interventions
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\textit{Aim:} After many years of research on the leader's role during organisational change and interventions, there is a well-established fact that the leader is essential for successful occupational health interventions to occur. Nevertheless, we know it is rather complicated to design, implement and evaluate complex organisational health interventions; it is also acknowledged that leadership is a complex phenomenon. This calls for a further examination of the different aspects of leadership and their significance for the intervention process and effect.

\textit{Method:} Over six years, we have studied an occupational health intervention in the same organisation that has been deemed successful according to both the implementation process and outcome. Leadership was found to be one of the key assets to gaining success over time. In this paper, we have gone further into our results and added some new information through 11 interviews about the main role of leadership.

\textit{Results and implications:} We found the following central elements of leadership: leader support from external consultants, leader engagement, and empowering leadership and leader trust. Leader support from external consultants may offer valuable support and guidance for leaders during the intervention processes, but consultants can quite easily take over the initiative and replace the leaders. The idea that the manager always must be in control over the consultants can be challenged. A better view is to base the relationship on dialogue and networking. The most important lesson drawn from our project, therefore, is to spend much time before the project starts to develop a co-generated plan where various roles are worked through.

In our project it seems that the underlying wish for improvement and making an effort for the employees were crucial to the project's success. Leader engagement that is reflected in concrete work environment priorities seems to be of high importance; for this reason, organisations are well advised to promote engaging leadership during organisational health interventions.

In our project we concluded that the intervention was successful in improving the psychosocial work environment through reducing conflicts among employees and strengthening the social community, empowering leadership, and increasing trust in management. Designing leadership development programs that target engaging and empowering leadership may be one important way to improve intervention processes and effects.

O8: Pay One Take Two? A Meta-Analysis of the Effectiveness of Interventions for Engagement and Burnout
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Most employees that suffer from occupational burnout also report low levels of work engagement. Independent meta-analyses previously reported similar effect sizes of interventions aimed at reducing burnout and of interventions aimed at enhancing work engagement. Although similar effect sizes could suggest that interventions are equally effective on both variables, it is unclear whether the same intervention has a simultaneous effect on both burnout and engagement. To fill this gap, we reviewed the controlled trials that used both burnout and engagement scales to assess intervention effectiveness. We conducted a systematic search of online databases (PsychInfo, Eric, MedLine, EconLit), using combinations of keywords such as "engagement",
"exhaustion", "cynicism", "personal accomplishment" "burnout", "vigour", "dedication", "absorption", "intervention", "trial", "control", "intervention". The search yielded 447 results (539 unique research studies). The eligibility criteria were: a) to report a controlled trial, b) to assess the intervention efficacy using a burnout scale, and c) to assess the intervention efficacy using a work engagement scale. For burnout, all studies reported data for exhaustion, but not for cynicism and personal accomplishment. Using a random-effects approach, we analysed 16 controlled trials (overall N control = 1908, overall N intervention = 1318) which met the eligibility criteria.

To assess intervention efficacy, we computed the standardised differences (d-Cohen) between the experimental and the control group, in the post-intervention measures. The general effect for exhaustion (for all measurement moments) is statistically significant (d_{general} = .34, k = 16, SE=.12, p = .004). Also, the general effect for work engagement has a similar value (d_{general} = .39, k = 16, SE=.10, p < .001). In order to investigate whether interventions were equally effective on burnout and engagement, we conducted a meta-regression with the exhaustion effect size as criterion and the effect size for work engagement as predictor. We obtained a weak, marginally significant effect (B = .191, SE = .095, k = 16, p = .046) when we analysed the first post-intervention effect sizes. However, because this effect was not always measured immediately after the intervention (e.g. in some studied the first measurement was 10 months after the end of intervention), we conducted a more restrictive analysis that included only effect sizes measured in the first month after the intervention. The result of the restrictive analysis tends is close to null ( B = -.014, SE = .111, k = 10, p = .903). Our results suggest that, in the same interventions, the effects on exhaustion are not associated with the effect on work engagement. To our knowledge, this is the first quantitative review of controlled interventions aimed at improving both employee engagement and exhaustion.

O9: Can App-based Mindfulness Training Reduce Employee Stress? Preliminary Results from a Randomized Controlled Trial in an Australian Public Sector Workforce

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**Background:** Stress at work is common and can be disruptive and costly. Mindfulness training (MT) is increasingly popular in workplaces to help employees better manage stress. Yet the efficacy of MT is largely based on standardized programs that involve significant time commitments to daily practices and weekly classes. Because this can be difficult to accommodate in contemporary work environments, employers often opt for ‘low dose’ MT interventions involving less practice and class time, or using online delivery or smart phone applications (apps) to increase accessibility.

There is emerging evidence that lowering the training ‘dose’ and using flexible delivery methods for workplace-based MT can still return positive effects for reducing employee stress. In some cases, the effects of lighter touch interventions are stronger than those with more demanding protocols and time commitments. However, despite increasing in popularity and use, mindfulness apps have not been well studied and there is currently no published evidence from controlled studies of app-based MT in the work environment. Therefore, this randomized controlled trial (RCT) will test the efficacy of app-based MT for reducing employee stress, and explore the differential effects of including seminar attendance in training protocols compared with self-guided app use only.

**Method:** We are conducting a three-arm parallel group RCT in an Australian public-sector workforce, using the ten-week, app-based Smiling Mind Workplace Program (SMWP). Arm 1 is
the self-guided use of the SMWP App plus four hour-long seminars. Arm 2 is the SMWP App without supporting seminars. Arm 3 is a wait-list control. The primary outcome is perceived stress, and secondary outcomes include psychological distress, job quality, incident recovery, productivity and quality of life. Data collection will be via online surveys at baseline, post-intervention for all groups, and for Arms 1 and 2 at 20 weeks then 12-months follow up. User-data from the SMWP app server and seminar attendance will be used as measures of adherence to training protocols. Group by time effects will be assessed using maximum likelihood linear mixed models.

**Results:** Approved expressions of interest were received from 285 employees, and baseline surveys were administered prior to eligibility screening. People who did not complete the baseline survey, were unable to commit to training schedules, or who had unmanaged mental health conditions, or in another concurrent stress management intervention were excluded. Eligible participants (n=211) were randomly allocated to group, and Arms 1 and 2 commenced training early March. Preliminary results of the RCT, including effects for stress and other study outcomes at post-intervention will be presented. The moderating effects of readiness for change, seminar attendance, adherence, location and work role will also be reported.

**Discussion:** This research is one of the first RCTs to investigate app-based MT for reducing employee stress. It will examine whether the inclusion of seminars to support self-guided learning improves outcomes, and whether employee characteristics, delivery mode and adherence influence results. This work addresses calls for controlled studies of low-dose, workplace MT and can help guide employers’ decision-making for workplace based stress management training.

**O10: Safety Self-efficacy and Internal Locus of Control as Mediators of Safety Motivation – Randomised Controlled Trial (RCT)**

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Safety related actions that workers exhibit play an important role in preventing occupational injuries and illnesses. Previous studies have shown that engaging in safety behaviour is influenced by safety motivation of workers. However, there is little understanding of the cognitive factors that contribute to safety motivation. In this study, we examine internal safety locus of control and safety self-efficacy as mediators of safety intervention effects on safety motivation. Eight vocational schools in Finland and 464 students participated in the school-based cluster randomised, controlled intervention study conducted in 2016. In the multiple mediation model investigated with SEM analysis, participation in the safety intervention predicted significantly increases in both safety related self-efficacies and internal safety locus of control. The intervention also predicted significantly increases in safety motivation with no mediators in the model. In the model, there was no significant direct path from intervention condition to safety motivation if mediators were included in the model which indicated full mediation. The indirect effect of safety intervention on the safety motivation via the internal safety locus of control was statistically significant. Study results indicated that the effect of a safety intervention on safety motivation was dependent on internal safety locus of control as an intermediate factor. Our study advances understanding of how safety interventions work and helps to develop more effective intervention approaches in future in vocational education and workplaces. By identifying factors that have an impact on safety motivation, future intervention efforts can be targeted at competencies that contribute to positive motivational outcomes. We propose, that in order to increase safety motivation, training should aim at modifying safety locus of control.
O11: From Co-located to Dispersed Work – First Experiences of Commuter Hubs as Stress Intervention
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The headquarters of the Ministry of Justice (MoJ) is in Westminster within London, UK. The cost of property within this location is much higher than elsewhere in the country and the Department has sought multiple ways of reducing these costs. Rising housing prices compared to income also meant that employees increasingly are located in towns and cities with more affordable housing. However, moving out of London created a new situation where employees spend more time commuting to the London office and wellbeing surveys pointed at this as a core reason for many frustrations.

In 2014, the MoJ developed a commuter hub concept. The aim of the concept was i) improve worklife balance for staff by reducing the amount of commuting and ii) to facilitate a reduction in demand for expensive office space within central London. A commuter hub makes use of existing regional properties, is an official workplace placed closer to where people live and offers the facilities that staff expect in their main office. The office space is typically open and consists of bookable staff desks. Since the start, the MoJ have established close to 50 hubs from Brighton to York with plans for more hubs.

The MoJ initiative, establishing new office hubs, can be considered as a primary intervention where the whole organisation focuses on reducing the stressors - in this case frustrations over time wasted. This project aims to study the development and intervention process of the commuter hubs, where an organisation is the target, and to evaluate the effects. The main part of the project is expected to start in 2019; however, this paper presents the findings from a small pilot study carried out in January 2018.

Method: To gain initial insight and understanding of the development and intervention process, the pilot study applied focus group (FG) interview based on a semi-structured interview guide in combination with secondary data i.e MoJ process documents and blogs. Three people participated in the FG interview in their role as programme manager, Commuter Hub leader and facilitator. The FG interview themes were i) the drivers of the preventive change (commuter hubs) and expected outcomes, ii) the implementation process and finally iii) the participants’ experiences of the process and change.

Analysis and results: Applying a template analysis, there are a number of points worth noting. First, the drivers for establishing the commuter hubs were clear; to reduce stressful time wasted on commuting and reduce the high rent for MoJ. Second, the commuter hubs resulted in reduced frustrations as the employees spend less time commuting and gave them a choice and more flexibility, and consequently more time with the families striking a good work/life balance. Finally, increased proximity/closeness to home resulted in more disperse work and colleagues and consequently, the daily on-site management was changed into distance management, which required new ways of working and managerial behaviour. The FG interview only provided limited insight into the process, which will one of the focus points in the project starting in 2019.
O12: The Influences of Trainees’ Felt-Responsibility and Supervisor Support in the Transfer of Safety Training
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This study aims to analyse the relationship between the trainees’ felt responsibility and the transfer of safety training, and how this relationship is affected by the supervisors’ social support in the workplace.

Training is an important component of occupational health and safety programs, developed to improve employees’ safety knowledge, attitudes and behaviors, and to protect their health. The training interventions rest on the assumption that once transferred to the workplace they will protect workers from existing and probable occupational hazards.

The extent to which trainees feel personally obligated to apply the training in their work may explain their decisions and efforts to transfer. Felt-responsibility is a critical psychological state (Hackman & Oldhams, 1975, 1976, 2010), subject to environmental influences, that may help to understanding and predicting transfer-related behaviors. If trainees feel more personal responsible for transfer, they will experience greater intrinsic motivation to use the training in their work. However, empirical investigation of the felt-responsibility construct has been scarce, including in the field of the transfer of training (TT).

Supervisors may reinforce and support the employees’ efforts to use training or instead they may act indifferently, give negative feedback or demonstrate an active opposition to the TT. Research has demonstrated contradictory results regarding the role of supervisor support in the TT and the studies on the role of supervisor sanctions has not been particularly extensive.

Most of the empirical evidence on the TT has been conducted with employees with higher educational attainment and very little has been done from the perspective of the low qualified. This study sought to contribute to the existent knowledge on the moderator role of supervisor support and supervisor sanctions in the transfer process, in a sample of low-qualified workers. We tested a model where the relationship between the trainee’s felt responsibility and the transfer of the safety training is influenced by the moderating influence of supervisor support/sanctions. A two-time data collection was implemented among four city council blue-collar employees ($n=203$) who attended a fundamental safety training program. All participants were low-qualified with lower-skill jobs (i.e. jobs that require limited experience and formal education at the point of hiring - e.g. gardening, cleaning, refuse collection, etc.).

Data analysis revealed that the trainees’ felt-responsibility were significantly and positively related to the TT. This effect was moderated by supervisor sanctions, but not by supervisor support. The results suggest that high sanctions aggravate the negative effect of low self-responsibility and, unexpectedly, enhance the positive effect of high self-responsibility on TT. Our results are consistent with previous research that suggest the existence of particularities in the transfer process among low-qualified or low-skilled employees, namely on how they perceive the social support in the workplace. Our study confirms the important, although complex, role supervisors play in the safety TT and it contributes to the understanding of how social support for transfer mechanisms function among the less skilled/qualified employees. The results have implications for the design and evaluation of safety training programs, especially if aimed to these populations.
**O13: Impact of Psychosocial Hazards on Workers’ Health and Human Development: A Study of the 5th European Social Survey**  
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Introduction: This study advances the debate about human development, the working environment, and subjective health in Europe. Reducing psychosocial hazards and promoting workers’ health can lead to higher human capabilities and personal freedom. Indeed, better working conditions can positively influence national levels of human development (measured by the Human Development Index). This study examines the impact of several psychosocial risk factors (job content, workload, work organisation, physical risks to health, co-worker support, satisfaction with salary, financial stress, job satisfaction, work-life balance), on self-perceived health of European workers and human development index of the country in which respondents live, after controlling for gender, age and educational background. It also analyses whether human development at the country level can influence the association between psychosocial hazards and perceived health.

Methods: Data from the European Social Survey (round 5, 2010 – the only time that the ESS included questions about the working environment) comprising of 14,876 employees (aged 15 years and over) from 22 European countries were used for this study. We used multilevel modelling which allowed the inclusion of additional error terms that reflect the complex pattern of variation introduced by the hierarchical structure of the data (random effects).

Results: Most of work variables were significantly related to subjective health after accounting for the effects of the control variables. Thus, individuals with a more varied job, with help of co-workers, less worried by their job when not working, satisfied with the balance between their job and other areas of their life, more satisfied with their salary, under low health-risk conditions at work or satisfied with their job, reported significantly better health conditions. The country Human Development Index was also significantly associated with the subjective health of citizens. The presence of significant cross-level interactions suggested, however, that the influence of HDI on individual's health might be better understood as an influence on the way other significant correlates are associated with subjective health. In this sense, health risk at work presents a greater influence on subjective health under lower HDI conditions, while satisfaction with balance between job and other areas of life seemed to influence health to a greater extent in countries with higher HDI.

Discussion: The reporting of psychosocial risks at work by European workers, is associated to lower levels of subjective wellbeing, after controlling individual-level and country-level characteristics. However, we found that the level of human development of a country affects the relationship among some psychosocial risks and subjective health. Organisations have an impact on workers’ health, but also on their capabilities to live a plentiful life, and on the human and economic development of their communities. These macro-economic issues also influence workers’ health within organisations.

**O14: How Intimate Partner Violence Impacts the Workplace in Terms of the Victim, Team and Manager**  
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Intimate Partner Violence (IPV) is a growing area of concern for Australian policy makers and health care workers. Statistics show that considerable portions of IPV victims are employed and as such, organisations are paying attention to IPV as an important workplace issue. There is also
a growing trend for IPV leave entitlements to be a standard inclusion in new EBA negotiations. The workplace can be a place of refuge for victims, and some may disclose their abuse to co-workers and managers in order to seek assistance. Learning that a colleague is a victim of IPV may also have an impact on employees. Little research has examined the help seeking experiences of victims and/or the experiences of colleagues who provide help to IPV victims in the workplace. A mixed methods approach was used to investigate how IPV impacts the workplace in terms of the victim, team and manager. Specifically, awareness of family and domestic violence (F&DV) policy/strategy; victim help seeking (including barriers to help seeking) in the workplace and colleague experiences of providing support to victims in the workplace were examined. Data were collected via an online survey sent to union members at 13 participating universities across Australia. The final sample consisted of 930 participants. Of the participants, 278 were IPV victims and 29 reported seeking help within their workplace. One hundred and eight participants reported having provided help and support to an IPV victim, of which 40% were managers. It was found that almost half of the participants (48%) did not know if an F&DV policy existed in their workplace and of the IPV victims, 47% did not know if a policy existed. Most IPV victims did not seek help in the workplace, with the most common reasons being: shame or embarrassment; the issue was not work-related; the stigma associated with violence; and fear of losing my job. The 29 IPV victims who sought help in the workplace experienced greater mental health impacts than IPV victims who did not seek help at work. Managers and Employee Assistance Providers were the most common sources of support for IPV victims who sought help at work and approximately one third of help seekers reported being dissatisfied with the support provided to them. Help providers reported that confidence and having available resources assisted their ability to provide help to IPV victims in the workplace, while a lack of experience, an unsupportive workplace and a reluctance to assist hindered their ability to provide help. Help providers were found to provide two main types of support: emotional support to comfort the victim and practical support to assist them in making changes to their lives. Help providers reported an emotional impact, a personal impact and a work impact when asked about the outcomes for them in providing help to an IPV victim at work. These findings have implications for workplace interventions and policy development.

O15: How do Job Insecurity and Organisational Injustice relate to Mental Health Problems? A Multilevel Study on Synchronous and Delayed Effects

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Background: With the continuous changing world of work towards more automation, and global competition that requires organisations to cut costs wherever possible, job insecurity is a concern of workers across many different occupations. Job insecurity is a stressful experience and its negative impact on wellbeing and health is well-documented. However, the exact mechanisms for the link between job insecurity and health need further study.

We argue that job insecurity is a breach of the psychological contract for permanent workers, leading to perceptions that the employer acts unfairly, which is related to immediate (synchronous) and long-term (two years delayed) negative health effects. Thus, we firstly hypothesise indirect effects between job insecurity on depressive symptoms and sleep difficulties via organisational injustice at the within person level. Furthermore, because employees who often experience job insecurity may no longer have security expectations in their psychological contract, we suggest that the strength of the job insecurity-injustice relationship differs between individuals, such that the relationship is weaker for individuals with higher average levels of job insecurity over time. Finally, we hypothesised that the relationship between organisational injustice and depressive symptoms and sleep difficulties is stronger for individuals who
experience more over time-variation in organisational injustice. We expect this pattern because recent research shows that injustice has stronger effects for individuals whose justice experiences vary as opposed to relatively stable injustice perceptions.

Method: The study population consisted of participants in the Swedish Longitudinal Occupational Survey of Health (SLOSH) study, a nationally representative longitudinal cohort survey. We selected only permanent workers over four consecutive data waves (2010, 2012, 2014, 2016) and analyzed the data with multilevel analysis.

Results: At the within-person level, we found significant direct effects of job insecurity on organisational injustice. Job insecurity and organisational injustice displayed direct synchronous effects on both health outcomes, but few delayed effects were found. The indirect effects were significant for synchronous but not for delayed health outcomes. Significant cross-level interactions were found for between-individual differences in job insecurity, but not for between-individual differences in organisational justice. In particular, as hypothesised, the link between job insecurity and organisational injustice at each wave was weaker for individuals with higher average levels of job insecurity perceptions but stronger for those who rarely experienced job insecurity during the time of the study.

Discussion: This study is one of the few studies investigating within- and between-person mechanisms that link feelings of job insecurity to the experience of organisational injustice and health outcomes over time. It also adds to the debate whether job insecurity and organisational injustice associate with health via mediation or moderation mechanisms by showing that both mechanisms may operate simultaneously yet on different levels. Furthermore, this study highlights that permanent workers view their organisation as less fair when they experience job insecurity, the more so if their psychological contract is largely intact and builds on security expectations. Both job insecurity and injustice have rather direct effects for health.

O16: Job Insecurity and Self-rated Health: Findings from a Five-wave Study in Switzerland
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The detrimental effects of employees’ exposure to uncertain and stressful working environments have been in focus for years. Against the backdrop of the modern world of work, characterised by high pace and low predictability, its impact on employee health is an issue of major concern. Generally, the work psychology literature maintains that job-insecure, stressful or otherwise demanding working conditions may trigger a health impairment process, which increases the likelihood of burnout (Schaufeli, Bakker, & Van Rhenen, 2009), mental strain (LaMontagne et al., 2014), and somatic health complaints (László et al., 2010). However, the recurring question concerns the complexity of the relationship between work stressors (such as job insecurity) and health outcomes over time. To date, most of the accumulated evidence has underlined the negative effects from job insecurity to employee health (e.g., De Witte, Pienaar, & De Cuyper, 2016). While the reversed or reciprocal causation is equally possible (Vander Elst, Notelaers, & Skogstad, 2017), it still needs to be properly tested, especially considering a longer time perspective. Given that many psychological longitudinal studies in the field tend to rely only on a few waves of data and do not always consider alternative causation models, a more comprehensive longitudinal model, including more than two measurement occasions, is necessary to pin down the potentially reciprocal relationships between job insecurity and impaired health.
The present study aims to address the above-mentioned issues by investigating cross-lagged relationships between job insecurity and self-rated somatic health status across five yearly measurement points. This way, we aim to clarify the direction of the cross-lagged relationships and to identify the pattern that best characterises the detrimental effects of one variable upon another.

The study uses a longitudinal dataset collected from 2012 to 2016 at the Swiss National Centre of Competence in Research—Overcoming Vulnerabilities: Life Course Perspectives (LIVES). It is based on a roughly representative sample of the German- and French-speaking Swiss population in terms of age, gender, and linguistic region. The data from five consecutive measurement occasions separated by a one-year lag each were used from a sample of 928 employed adults. The analyses were conducted using a cross-lagged structural equation modelling.

A comparison of alternative cross-lagged models showed that a reciprocal cross-lagged model between job insecurity and self-rated health status was superior to the normal causation model and to the reversed causation model. It was retained as the best fitting model illustrating an interchangeable direction of the relationship between job insecurity and somatic health over the course of the study. These findings may offer important theoretical and practical implications. They draw attention to the repetitive pattern of bi-directional detrimental effects that seem to extend over time (i.e., job insecurity predicts an impairment in somatic health one year later, which in turn predicts a subsequent increase in job insecurity, etc.). Notably, the observed interchangeable cross-lagged relationships may imply the existence of a health impairment spiral, which means that job insecurity and somatic health complaints may build upon each other.

O17: Justifying the Labour Market in Spain: Boltanski and Thévenot, the Six Worlds of Justification and the Organisational wellbeing
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This paper presents the results of a discourse analysis of different labour market stakeholders, as they explain and justify increasing precariousness and decreasing organisational welfare by appealing to certain features of the Spanish Labour market.

We aim to show how discourses are constructed to justify the current labour scenario marked by high unemployment, degradation of working conditions particularly since the financial crisis of 2008, and the worsening of mental health. We find that discourses create a set of Worlds of Justification or values/worth that establish and maintain such precariousness and psychological influences on workers. Thus, we will dissect the way in which key social agents construct their story about recent changes in the demands upon labour, so that they serve to justify working conditions that damage organisational welfare.

In order to provide a complete context for the interpretation of discourses about the labour market and their subjective justification, our methodology utilises the qualitative method. We conducted 46 semi-structured interviews. Six themes figured in the script of the interview: a review of demands of the Spanish labour market, responsibility, assessment, consequences, coping strategies, and proposals. These interviews were applied to Human Resource (HR) practitioners, occupational risk prevention technicians, unions, public officers, HR and Corporate Social Responsibility (CSR) managers, HR and CSR consultants and labour experts. The aim is to complete a comprehensive exploration of the context within which these discourses are constructed. Data was analysed using NVIVO 11 software. Participation was voluntary. Confidentiality and anonymity were guaranteed.
We aim to show that current discourses about the Spanish labour market contribute to workers’ acceptation of the fact that precariousness is here to stay and that, therefore, there is no point in demanding any improvement of their organisational wellbeing. For this purpose, the data obtained from the interviews was analysed from the perspective of the social discourse analysis, using as a theoretical framework the ‘Worlds of Justification’ - Boltanski and Thévenot (1991), and Boltanski and Chiapello (2002).

We found that four ‘common worlds’ are articulated by most of the social agents’ discourses; understanding work as epicentre of the Spanish society. These ‘cities’ are: civic world, project city, industrial world and market world. The market city prevails more in consultants and managers and the civic world, on the contrary, in union delegates. Differences will be presented at the conference.

These findings should shed light on the possibility of generating legitimating discourses given the uncertain and flexible nature of the labour context. At this point, this possibility seems more and more difficult. But of course justifications for precariousness and other labour market stresses must remain in place somehow, in the form of new discourses of legitimation. Our research should help define these discourses and provide critical standpoints towards them and proposals to improve organisational wellbeing.

At the conference, the results, theoretical framework and method will be presented.

O18: Meta-analysis on Job Insecurity and Its Outcomes: Investigating Cross-sectional and Longitudinal Associations
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Job insecurity, which reflects employees’ concerns about losing one’s job, is generally characterised as a predominant work stressor. The research literature in this field has been steadily growing since the early 1980s and numerous studies have concluded that job insecurity may have detrimental consequences for both employees and organisations. Thus far, two meta-analyses have been published on the consequences of job insecurity for employee work attitudes, work-related behaviour, and health. However, these meta-analyses were published in 2002 and 2008 and contain only a few broad outcomes. Since then, the amount of published job insecurity studies have increased substantially, investigating a wider range of outcomes. There are still a number of important research gaps, including how job insecurity relates to a wide range of potential outcomes, and whether the associations differ between cross-sectional and longitudinal data. The aim of the present meta-analysis was to extend previous knowledge by (1) investigating the effects of job insecurity on a broader spectrum of outcomes than the previous meta-analyses have done, and (2) comparing cross-sectional and longitudinal associations.

A literature search with the search terms “job insecurity”, “job uncertainty”, “job security”, and “job security satisfaction” in Psycinfo, Web of Science, and EBSCO produced a sample of 553 samples from peer-reviewed papers published between 1980 and June 2017. The associations between job insecurity and various types of work-related and health-related outcomes were coded based on whether the associations reported were cross-sectional and longitudinal. The results indicate that job insecurity has a substantial and negative influence on employees’ work-related attitudes, job performance, and mental and physical health, and may also result in impaired safety outcomes and negative spillover effects to life outside work. In general, the cross-sectional and longitudinal associations were of similar magnitude, thus indicating that the
negative consequences remain also over time. While the study cannot address the question of direction of the relationships investigated (causality) and the analyses did not control for potential confounding variables, the results indicate that job insecurity may have strong, negative effects on a wide range of individual as well as organisational outcomes, both within and over time. The findings reported in the present meta-analysis both broaden and deepen the understanding of the negative consequences associated with job insecurity.

O19: Beyond Bullying: An Exploration of Other Facets of Workplace Abuse
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Prior research has identified a variety of forms of workplace abuse (e.g. bullying, ostracism), and various forms of workplace incivility. To explore other forms of workplace abuse, 354 participants from several different occupations, were surveyed utilising a questionnaire developed by the authors (Beyond Bullying Questionnaire, BBQ) which explores other acts of workplace incivility e.g. exploitation, abusiveness, broken promises and ignored needs/marginalization). When compared with the Negative Acts Questionnaire-Revised (NAQ-R, Einarsen, Hoel, & Nottelears, 2009), the BBQ revealed nearly equal percentages (64.86% and 64.95% respectively), of participants endorsing one or more items on both measures, suggesting a likelihood that those who experienced bullying may also be subjected to other forms of workplace abuse. Significant correlations were found between the full scale or composite scores of the NAQ-R and the BBQ, however, the subscales were not strongly correlated, suggesting these scales measure distinct aspects of workplace abuse. In order to investigate the impact of bullying and these other forms of workplace abuse, three dependent measures were administered: the Brief Symptom Inventory, the Impact of Events Scale-Revised and the Perceived Stress Scale. Multiple regression analysis revealed that Person-Related Bullying subscale of the NAQ-R, the Exploitation subscale of the BBQ along with the participant’s age and overall number of stressors were found to be significant predictors of psychological distress as measured by the Global Severity Index of the Brief Symptom Inventory suggesting that the other forms of workplace abuse caused both stress and psychological distress for workers who experienced these behaviours. Overall, however, being subjected to bullying behaviours resulted in higher levels of psychological distress as measured by the Brief Symptom Inventory, higher levels of traumatic symptoms, as measured by the Impact of Events Scale-Revised and higher levels of stress as measured by the Perceived Stress Scale when compared to other forms of workplace abuse.

O20: Workplace Bullying in Sweden: A Randomized Representative Sample of the Swedish Workforce
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Although much research on workplace bullying during the last decades have pointed to conditions in which bullying occurs, relationships between different organisational factors and exposure to bullying, as well as its severity for health and wellbeing, it is still a widespread phenomenon in working life. Understanding the conditions for workplace bullying in different sectors of working life, and within these, how different individual and organisational factors create conditions for bullying to occur and to increase is important. The last ten years have seen studies on bullying based on nationally representative samples of the workforces of e.g. Norway, Japan, Finland, and Belgium (Flemish) (Baillien et al., 2015; Glambek, Skogstad, & Einarsen, 2015; Salin, 2015; Tsuno et al., 2015). In Sweden, we need to go back to the end of the 1980’s to find a representative sample studying bullying (Leymann, 1996).
Data for the current study was collected September-November 2017 from a representative sample of the Swedish workforce working at workplaces with ten or more employees (n = 1838). Bullying was measured using Negative Acts Questionnaire-Revised (NAQ-R, Einarson, Hoel, & Notelaers, 2009) and as a single item based on a definition. Both individual work experience and organisational factors were measured using the PSYWEQ survey instrument (Rosander & Blomberg, 2018). Additionally, measures of health (Salutogenic Health Indicator Scale, SHIS; Bringsén, Andersson. & Ejertsson, 2009), sick leave, and sickness presenteeism were included. Prevalence of bullying in total, in Sweden, in different sectors as well as for a number of other demographic variables will be presented (e.g. gender, age, country of birth, marital status, income, and education). Preliminary results on the relationship between exposure to bullying and health, sick leave, sickness presenteeism, individual work experience, and different organizational factors will also be presented. All results reported are quantitative.

The current presentation is the first based on this new representative dataset of the Swedish workforce. As a conclusion to the presentation, some thoughts on further directions based on the data, as well as the coming longitudinal focus of the research project, will be introduced. The representative sample is also part of the larger data set in the research project called WHOLE (Work, Health, Organisation, Leadership and Experience) in which longitudinal data from three different sectors (government, municipal and private sectors) is currently being collected using the same instrument.

O21: Preventing Workplace Bullying through Person-job Fit, and the Diminishing Impact of Job Insecurity.
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Workplace bullying has been established as a severe social stressor. Consequently, scholars investigated job factors as leads for organizational prevention. Interestingly, their studies have mostly applied a ‘one size fits all’ lens: employees tend to respond to job factors in a similar way. However, workplace bullying has been defined as stemming from job-related and person-related factors (Zapf & Einarson, 2011). We, therefore, aim to add to knowledge by introducing Person-Job Fit (PJF) theory into bullying research. PJF theory builds on the employee’s congruence between his/her own person-related aspects and his/her job-related factors (Edwards, 1996). We posit PJF as a preventive factor for bullying: high PJF associates with less bullying. From the angle of PJF, studies revealed that high PJF is indirectly related to its outcomes through its negative relationship with strain (Luksyte et al., 2011). From the angle of bullying, stress has been established as an important explanatory process with (high) strain linking job stressors to (more) bullying (Samnani & Singh, 2012). Combining this knowledge, we hypothesize that (high) PJF is associated with (low) bullying, mediated by (low) strain. Adhering to current economic evolutions, we investigate whether this preventive effect of PJF preserves when employees are job insecure. Conservation of Resources Theory (COR; Hobfoll, 1989) argues that the threat of losing a valued resource (i.e. the (highly) fitting job) brings along strain. As such, job insecurity would buffer the preventive association between PJF and bullying by diminishing the negative relationship between PJF and strain. Moreover, COR theory posits that strain triggers resource loss. From the target’s perspective, resource depletion further wears out the employee, making him/her an (even) easier target of bullying. From the perpetrator’s perspective, the employee may strive to protect his/her resources and avoid actual loss. As such, the employee may (even more) easily adopt bullying to eliminate competitors or to vent strain. From this, we hypothesize that job insecurity diminishes the indirect association between PJF and bullying through strain (i.e. moderated mediation). Multigroup SEM (Mplus) in a sample of 4834 employees confirmed the indirect effect for both targets and perpetrators of bullying. For targets, this indirect effect was...
not moderated by job insecurity, attesting the preventive role of PJF even in an insecure situation. For perpetrators, the preventive chain from PJF to bullying enactment via strain could not be found for employees experiencing middle and high job insecurity. In all, our findings underline the importance of recruiting highly fitting employees with the job and continuous investments in job fit for workplace bullying prevention, particularly because high PJF relates to low levels of strain. However, high PJF is not the panacea: its indirect relationship with bullying enactment disappears when employees experience high job insecurity. Combining this observation with earlier findings that job insecurity triggers bullying, organizations aiming to prevent bullying should stay aware of building a secure job environment for the employees even when the right employees are sitting in the right chair.

O22: “First, Do No Harm”: Understanding the Role of Negative Emotions and Moral Disengagement in Targets of Workplace Aggression
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Work-related aggression and violence are serious safety and health hazards. Workplace aggression is associated with lower psychological wellbeing and life satisfaction, lower levels of self-esteem, higher absenteeism, health problems and burnout (e.g. Camerino et al., 2008; Hills & Joyce, 2013). However, less is known about the possible negative impact such aggression may have on the (un)ethical behaviour of victims at work.

The aim of this research is to fill this gap. Specifically, by adopting the discrete emotions perspective we aim to investigate the association of workplace aggression not only with targets’ health but also with their engagement in counterproductive work behaviour (CWB). Overall, although the hypothesis that targets of aggression may also be perpetrators is not new within the workplace aggression literature, there are no studies to date examining this by adopting the discrete emotions perspective and investigate whether the substantive qualities of anger, fear and sadness may play a specific role beyond their common negative valence. Indeed, as suggested by Kong & Drew (2016) “collapsing all negative emotions into a single category belies the fact that humans experience a variety of negative emotions, which may have differential effects on disengagement from unethical behaviour” (p. 24).

An additional contribution of this research also lies in the examination of discrete emotions in relation to moral disengagement (MD) a social–cognitive construct referring to a set of processes by which individuals can justify and legitimate their misbehaviour. Indeed, although some authors suggested the role of negative emotions in increasing the likelihood of the recourse of MD mechanisms (Fida et al., 2015; Rubio-Garay, Carrasco, & Amor 2016) no studies, to the best of our knowledge, have examined whether and how the discrete emotions under study may be differently associated with MD.

Results from two independent studies (N_{Study1} = 439; N_{Study2} = 416) confirm the hypotheses that being target of workplace aggression (bullying or third-party aggression) is not only associated with health symptoms but also with misbehaviour. In addition, the results of structural equation modelling attest the importance of examining specific discrete negative emotions and MD for better understanding misbehaviour at work. In particular, this research shows for the first time that anger, fear, and sadness, generally aggregated into a single dimension, are indeed differently associated with MD, misbehaviour and health symptoms. In particular, the main findings, cross-validated in both studies, are: anger is associated with the engagement in specific forms of CWB, although contrary to our expectation only directly; fear is associated with the
engagement in CWB mainly through the mediation of MD; and sadness is not significantly associated with CWB, being only related to physical symptoms (as anger and fear as well).

Overall, the results of our study highlight the importance of designing trainings for preventing workplace violence considering the pivotal role of the emotional experience. Indeed, developing emotional regulation skills could also help in preventing the risk of activating justification cognitive processes as MD, especially when targets of aggression experience fear.

O23: Trajectories in Effort-Reward Imbalance Over Time and their Associations with Health Complaints
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Objectives: The effort-reward imbalance (ERI) model is one of the predominant models in contemporary stress research. It defines stress as a combination of high efforts at work and low work-related rewards. While ERI has been found to be related to a range of health outcomes, little is known about developments in ERI over time. The aim of this study is to (i) identify long-term patterns (trajectories) of effort-reward imbalance in the Swedish working population, to (ii) describe these trajectories with respect to background and work-related factors, and to (iii) evaluate health complaints associated with these trajectories.

Methods: The study was based on panel data with four measurement points (2010, 2012, 2014, 2016) collected within the Swedish Longitudinal Occupational Survey of Health. Latent class growth modelling was conducted and differences in background and work factors as well as differences in health outcomes, covering self-rated health, sickness absence, depression, musculoskeletal disorder, migraine, cardiovascular heart disease, and blood pressure between trajectories, were analysed.

Results: Four trajectories were found. A low imbalance trajectory characterised by moderate values of effort and reward comprised the majority of the study population (90%). The next largest trajectory, comprising 4% of all participants, showed the highest baseline value of effort and the lowest baseline value of reward. This trajectory was characterised by a decrease in ERI score followed by an increase and labelled as U-shaped imbalance. The third trajectory, which we called inverted U-shaped, represented 3% of all participants. It was characterised by moderate values of effort matched with moderate values of reward. Its development showed an increase in ERI followed by a decrease. The last trajectory also represented 3% of all participants and was characterised by a rather high mean value in effort in combination with a moderate mean value of reward. This trajectory showed an accelerating increase in ERI over time. We labelled it the increasing imbalance trajectory. The most favourable trajectory was dominated by men working in the private sector, while women were overrepresented in the less favourable ERI trajectories. Also, being in a less favourable trajectory was found to be associated with health complaints and diseases. For the increasing imbalance trajectory, this association remained stable also after controlling for baseline health.

Conclusion: Our results indicate that about 10% of all employees experience an imbalance between efforts and received rewards at work. To a large extent, these workers are women working in the public sector. As effort-reward imbalance is a contributing factor to these workers’ ill-health, measures should be taken to increase balance between efforts and rewards, particularly in the most vulnerable groups identified in this study.
**O24: Nurses’ Experiences of Time Pressure and Psychological Distress at Work – Does Electronic Health Records or Nurses’ Competence have a Role?**

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**Introduction:** Adapting the patient care to the use of electronic health records (EHRs) and eHealth tools changes work profoundly in health care. Usability of EHRs or informatics competence can have significant effects on experiences of time pressure and psychological distress in health care work.

**Methods:** A nationwide survey was conducted for registered nurses in 2017. The study sample included 3,607 working age nurses (94.9% women, mean age 46.3 years). We examined the association of age, sex, employment sector, EHR-related factors, and nurses’ informatics competence with time pressure and psychological distress at work. Employment sector was categorized as hospital, primary care, private practice, social care, and other. The EHR-related factors were reliability, ease of use, impact on quality of service, and cooperation and information flow. The factors of nurses’ informatics competence were the use of the Finnish Care Classification system, the use of eHealth tools in tailoring patient care, electronic documentation of patient data, and ethics and data security using EHR. Time pressure was measured with two items: “Continuing time pressure and pressure on unfinished work”, and “Too little time to do the job properly”. The items were framed with the statement “How often have you been distracted, worried, or stressed about (during the past half-year period)”, which was rated on a Likert scale (1, never to 5, very often). Psychological distress was measured by 4 items from the General Health Questionnaire. Analyses of covariance were used to examine the associations of independent variables with time pressure and psychological distress. The study is part of the Information Systems and Stress in Health Care (funded by the Finnish Work Environment Fund, project 116104) project. The data was collected under Steps–project (Ministry of social affairs and health in Finland; project number 514916001).

**Results.** The EHR-related factors that were associated with high time pressure were low reliability (F=23.75, p<0.001) and low ease of use (F=13.38, p<0.001). Regarding the factors of nurses’ competence in using EHR, only low competence of using eHealth tools in tailoring patient care was associated with high time pressure (F=17.58, p<0.001). Working in primary healthcare was associated with high time pressure (F=5.99, p<0.001). From information system-related factors, low reliability (F=5.64, p=0.018), and low cooperation and information flow (F=9.46, p=0.002) were associated with high psychological distress. Low competence of using eHealth tools in tailoring patient care (F=12.55, p<0.001) was associated with high psychological distress from competence factors.

**Discussion:** Unreliability and poor usability of EHRs seem prominent sources of time pressure and psychological distress among nurses in Finland. Nurses’ competence to use eHealth tools to tailor patient care should be strengthened through organizational and regional actions, for example: house rules about how to use eHealth tools, and instructions of common practices in co-operation with other organizations could be useful. Building up care pathways for typical patient cases is an option to strengthen integrated care for patients in modern digital health care. This would also ease nurses’ decision-making process of care management.
A large amount of research evidence has suggested that overtime work is a risk factor of poor health, and in particular of heart disease (McInnes 2010). However, overtime work may have different effects on health, depending on the availability of financial or work-time related rewards, and depending on social stratification of vulnerable populations. To disentangle this problem we analysed prospective data derived from a large representative sample of the German working population, the GSOEP (German Socio-Economic Panel) study. Based on data from 6345 workers who were free from any heart disease in 2011, and who were followed up two years later, we examined whether they did overtime work at baseline, and if so, whether overtime work was compensated with time-off / pay or not compensated at all. In 2013, participants reported whether or not they had a physician-based diagnosis of an incident heart disease. Multivariable Poisson regression analysis revealed that, compared to workers without overtime work, the risk of developing heart disease was not notably high among those who worked overtime while receiving compensation with time-off or pay [relative risk (RR) = 1.18], whereas the risk was significantly elevated among those who did overtime work but lacked any compensation [RR = 1.85], after adjusting for a number of relevant confounders. Further sub-group analyses indicated the effects were more obvious in disadvantaged populations, such as in low income group, and in women.

This finding is in line with the stress-theoretical model of effort-reward imbalance (ERI) at work that postulates adverse health effects resulting from a mismatch between recurrently spent high efforts and inappropriate or missing rewards received in turn, where rewards include monetary, status-related and non-material socio-emotional return (Siegrist 1996). While several prospective cohort studies applying the original ERI scales or proxy measures supported this notion, especially in socially deprived groups (Kivimäki & Siegrist 2016), our study is among the first to demonstrate a respective association in the frame of overtime work. Interestingly, a previous report found a similar association of unpaid involuntary overtime work with fatigue and work dissatisfaction (Beckers et al 2008). This presentation will present updated findings and discuss their significance within the current policy debate about work time arrangement and health.

‘Work arrangement’ includes many characteristics of a job as well as work across multiple jobs. There is no consistent definition for non-standard work arrangements but they involve temporariness, instability, irregularity, and lack of legal protections and social and financial benefits for workers. This may affect worker safety, health, and wellbeing. Because non-standard arrangements are understudied but increasingly prevalent, the National Institute for Occupational Safety and Health (NIOSH) considers them a high priority topic. A workgroup is assessing the state of the science, proposing a taxonomy, drafting a research agenda, and conducting and communicating research findings. We present findings and conclusions for taxonomy and data collection, and research.

Analyses: Different data sources commonly categorise workers as independent contractors, on-call workers, workers paid by a temporary agency, or contract workers. Specific arrangement categories in each data source may differ, and information on gig and volunteer workers is scarce. The NIOSH workgroup has reached out to partners to address taxonomy and data collection needs, including standardising work arrangement terms, models on the determinants and effects of work arrangements, and linking databases.
Recent analyses used data from four Quality of Worklife modules that supplemented the General Social Survey since 2002, and the National Health Interview Survey and accompanying 2010 and 2015 Occupational Health Supplements. These analyses examined the characteristics of workers in non-standard arrangements and the associated work precariousness; the effect of work arrangement and precariousness on job stress; the effect of work arrangement on income, benefits, and financial stress; and the association between job stress and health-related quality of life (HRQL) by work arrangement.

Results: The workgroup proposed a matrix of work arrangement elements (job security, work schedule, compensation type, pay level and security, benefits, and having single versus dual or multiple employers) and categories (being employed [permanent, temporary, or intern] or self-employed [with or without own businesses], or volunteering).

Analyses demonstrated differences in the characteristics of workers by arrangement. Independent contractors and on call workers reported less job demand, higher decision latitude, higher job satisfaction, lower job stress, and higher HRQL, compared with temporary and contract workers. Work precariousness was positively associated with job stress. Compared with others, workers in non-standard arrangements were paid less, were less likely to live above the federal poverty level and have access to benefits, and were more likely to experience financial stress. Work arrangement was a predictor of job stress, and stressed workers in all arrangements reported more days lost due to poor physical and mental health, and days with activity limitations.

Conclusions: Use the proposed taxonomy categories rather than the currently commonly used categories to collect data. Consider workers’ overall work arrangement including all jobs held at one time as well as the sequence of different jobs or periods of unemployment over time. Develop and use consistent definitions for work arrangements, contingent workers, vulnerable workers, and work precariousness. Link work arrangements and work precariousness to metrics of safety, health, and wellbeing for workers and their families, in order to develop effective interventions to reduce precariousness.

O27: Changing the Game: A 12-Week Workplace Team Sports Intervention to Improve Social Cohesion and Communication at Work
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Background: Workplace physical activity interventions can positively influence employee and organisational health. Whilst some of these workplace physical activity interventions and workplace team sports interventions involve groups or teams of employees, they do not assess the impact of physical activity on organisational team working or team cohesion. We argue that participation in workplace team sport has the capacity to improve not only individual health, but also workplace team cohesion and communication.

Methods: A 12-week multi-team sport programme was provided to employees of a large services organisation. Two regional worksites of office workers were assigned to the team sport intervention (n = 28 participants) or control (n = 20 participants) groups. The team sport sessions were underpinned by self-determination theory and consisted of weekly 1-h team sport sessions for 12 weeks. Measures of aerobic fitness, physical activity behaviour, group cohesion, interaction and communication and psychological wellbeing, were measured pre- and post-intervention. Data were analysed using a series of mixed ANOVAs.

Results: After 12 weeks significant improvements were observed in VO2 max (p < .002), interpersonal communication within teams (p <.042) and mean weekly physical activity duration (p < .002) in the intervention group. No other significant differences were observed.
Conclusions: Participation in a team sport may be an effective method to promote interpersonal communication between colleagues as well as improve physical activity behaviour of employees. The extent of which these findings are replicable across a scope of organisations should be examined objectively over the long term.

O28: Effects of an Intervention Program to Promote Workplace Social Capital and Work Engagement in Industrial Settings
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In this study, we investigate intervention methods to enhance workplace social capital and work engagement among employees in the Danish Dairy industry. The concept of workplace social capital refers to the potential resources in the cooperative relations between employees in a workplace. Recent conceptual developments point towards four types of social capital in modern workplaces: Social capital within work teams (Bonding), Social capital between work teams (Bridging), Social capital between employees and their immediate manager (Linking), Social capital between employees and the workplace as a whole (Linking). Workplace social capital can be considered a job resource as workplace social capital may facilitate 1) the completion of work tasks and 2) employee wellbeing. It is therefore expected that interventions aimed at boosting the social capital in the workplace also enhance work engagement in affected employees. The aim of the study was to investigate whether it is possible to enhance workplace social capital and work engagement in employees in industrial settings.

Six Danish dairy companies counting 68 work teams participated in the project. We completed intervention mapping workshops in 38 teams. Each intervention mapping workshop lasted two hours and in the workshops participants were asked to discuss team-specific results from a survey on social capital and work engagement to 1) identify aspects of social capital that the team wished to improve and 2) to develop action plans outlining how they would improve the chosen aspect of the social capital. In the 38 workshops the teams developed 57 action plans focusing on the four different types of social capital.

Intervention mapping workshops were conducted in the winter of 2015-16 and we conducted surveys measuring social capital and work engagement before and after the intervention mapping workshops. Follow-up questionnaires were sent to the six dairy companies approximately one year after the intervention mapping workshop.

Comparisons of the development in social capital and work engagement for the intervention group (36 teams) and the control group (30 teams) showed that the increase in linking social capital towards the workplace as a whole was significantly higher (p<0.05) for the intervention group than for the control group. Likewise, we found that the increase in work engagement was significantly higher (p<0.05) for the intervention group. Moreover, we found that the development in linking social capital between employees and their immediate manager was higher for the intervention group compared to the control group. This difference was borderline significant (p=0.053). There were no differences between the two groups when looking at bonding and bridging social capital. Results from further analyses will be presented.

Overall, the results indicate that participatory methods, such as intervention mapping workshops, may contribute towards enhancing workplace social capital and work engagement in industrial settings.
**O29: Reducing Harmful Sun Exposure in Construction Workers Using a Smartphone Intervention**

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Many occupations require employees to routinely work out of doors. Exposure to sunlight can be both beneficial and detrimental to health. Sunlight enables us to synthesise Vitamin D. However, in some climates, for example, Northern Europe, the sun’s rays are not strong enough during the winter months to facilitate this. At the same time, excessive exposure to sunlight has been conclusively associated with the development of skin cancers. This paper reports findings from a project that aimed to optimise sun exposure among construction workers.

A randomised controlled crossover trial was conducted involving construction workers who were employed on building sites in the North and South of the UK. In total 112 participants, from five sites in Central Scotland, and four in Southern England took part in the study. Randomisation to control or intervention group took place at site level.

The Theory of Planned Behaviour was used to develop an intervention. Participants in the intervention groups received daily text messages in combination with a supporting smartphone app. Three waves of data collection were carried out; Wave 1 (winter), Wave 2 (summer), and Wave 3 (winter). Each wave lasted 21 days. Within each wave, there were an intervention and a control group. Both groups completed survey instruments before and after each data collection wave. The survey instruments comprised a battery of questionnaires which measured the Theory of Planned Behaviour, Stages of Change, and additional demographic/behavioural items. Participants’ exposure to UV rays was also determined using personal UV monitors.

This paper reports preliminary results relating to the effectiveness of the intervention aimed at reducing harm due to excessive sun exposure. Theory of Planned Behaviour findings from Wave 2 suggest positive behavioural change, potentially as a consequence of our intervention. This is further supported by our analysis of the Stages of Change data for Wave 2. For example, construction workers were found to have significantly increased action towards wearing sun glasses to protect their eyes when working outside. In conclusion, the scope and effectiveness of a text message intervention (plus supporting smartphone app) is discussed, along with directions for future work in this area.

**O30: Comparative Assessment Of Professionals On Organisational Cultural Dimensions In Pakistan: An Indigenous Perspective**

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*Background:* Globally rapid transformation within contemporary organisational structures, economic upheavals, workforce diversity, political conditions and technological developments take along new challenges affecting many aspects of professional workforce productivity. These latest developments resulted in increased competitiveness among organisations poses threats for building and maintaining flourishing productive workforce. Though some researches have focused on exploring the external orientation within the organisational culture, scarcity of indigenous literature on comparison of multiple dimensions of organisational culture of diverse professionals call the need for analysing this important domain.

*Aim:* The present research aimed to provide comparative assessment of diverse professionals on organisational culture traits dimensions i.e., involvement, consistency adaptability and mission in an effort to explore the professional groups which are more sensitive to adopting with the current demands and are remain flexible in coping with the external pressures.
Method: Survey questionnaire booklets were distributed to 622 professionals belonging to health care sector, telecommunication sector, consultancy companies, banking sector, and educational institutions located at Rawalpindi, Islamabad, Lahore and Karachi. Denison’s organisation culture survey was used for measuring organisation culture traits i.e., involvement, consistency, adaptability and mission traits among health care professionals and other professional categories. Descriptive of the measures of the study were computed via SPSS 20. Multivariate Analysis of Variance was computed for analysing mean differences on dimensions of organisation culture traits among health care professionals and other professional categories.

Results: Descriptive statistics revealed satisfactory psychometrics of Denison’s organisation culture survey on the present data (α=.94) and its subscales involvement (α = .86), consistency (α =.84), adaptability (α=.78) and mission (α = .83). Findings showed significant multivariate Wilks λ=.835, F (7, 28) = 2.69 *** indicating significant mean differences on organisation culture traits among diverse professional groups. Analysis of variance further revealed significant mean differences for involvement F (4,413=6.15***, P< .001), consistency F (4,413=3.03** p<.01), adaptability F (4,413) =4.74**, p <.01) and mission F (4,413=5.93***, p<.001) among the professional categories. Posthoc analysis using Tukey LSD was used for further analysing mean differences among health care professionals and other professional categories.

Conclusion: Among all the professional categories, telecom employees have shown the highest mean on involvement, adaptability and mission traits. This suggest telecom organisations have nurtured a culture that is more flexible to adapting changes leading to greater customer satisfaction as compared to banks, the health care sector, and educational institutes. The originality of this paper is that it provides useful implication for different types of organisations to understand the organisational culture and innovation to improve their interfunctional coordination, to introduce innovative products and processes and to improve their cultural elements as well as resulting in high performance.

O31: Associations of Length, Tempo and Timing of Working Hours with Fatigue: A Within-Subject Longitudinal Study.
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Introduction: The length, timing and tempo of working hours may be related to fatigue at work and during free days. We examined whether changes in these working hours dimensions were associated with changes in fatigue during work and free days.

Methods: Questionnaire responses of hospital employees (physicians excluded, n=29 246, 88% women) in 2004, 2008, 2012, 2014 and 2015 were linked to daily electronic records of working hours during 3 months preceding each survey. Information on the average weekly working hours, work tempo (perceived haste based on four items from the Nurse Stress Index) and timing of the work (night vs. non-night work) were obtained from each survey. The percentage of long work weeks (over 40 and over 48 hours), short work weeks (35 hours or less) and long work shifts (over 12 hours) was calculated from the objective working hour data of hospitals. We used conditional logistic regression and longitudinal fixed effects within-subject analyses to investigate the association of within-individual changes in different working hour dimensions with changes in perceived fatigue during work and free days. The participants were non-cases in the survey waves where they had fatigue no more than 3 times per month and cases when they reported fatigue at least 2 times per week.
Results: A change in weekly working hours from 35-40 hours to over 48 hours was associated with increased odds for fatigue during work (OR 1.35, 95% CI 1.00-1.82) and free days (OR 1.92, 95% CI 1.38-2.67) while a decrease to 35 hours or less compared to 35-40 hours was associated with decreased odds for fatigue during work (OR 0.72, 95% CI 0.61-0.84). When over 10% of the working weeks lasted over 48 working hours fatigue tended to increase during free-time (OR 1.23, CI 1.00-1.50). Both night work and, especially, high work tempo increased fatigue during work (night work: OR 1.39, 95% CI 1.16-1.66; high work tempo: OR 3.33, 95% CI 2.88-3.86) and during the free days (OR 1.41, 95% CI 1.17-1.70; OR 2.70, 95% CI 2.31-3.16, respectively).

Conclusions: The results suggest that compared to 35-40 weekly working hours, shortening the weeks to 35 hours or less decrease fatigue and extending the weeks to over 48 hours increase fatigue. Shifting to non-night work and slowing down the work tempo decreases fatigue.

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Employee engagement has generated great interest among Human Resource Development scholars over the past few years (e.g., Rana, Ardichvili, & Tkachenko, 2014). Over the past two decades, significant efforts have been made by scholars to study engagement and by practitioners to develop organisation development related interventions to raise the levels of engagement among organisational members. The present study aims to analyse the relationship between human resource management practices and employee engagement. Based on the norms of social exchange theory, this study has developed the framework to examine the role of colleagues’ supportive behavior on human resource management practices-employee engagement linkage.

Survey data has been collected from employees who are working in different organisations in Portugal. This study has used a sample of 758 employees.

The results of structural equation modeling revealed that HRM practices were significantly and positively related to employee engagement. The results also showed that colleagues’ supportive behavior can moderate the relationship between HRM practices and employee engagement. It suggests that in the presence of colleagues’ supportive behavior, relatively low level of employees’ perceptions regarding job related resources will exert a high level of employees’ behavioral outcomes (such as, engagement). The implications and suggestions for future research have also been discussed.

O33: Entrepreneurship and Wellbeing: the Role of National Entrepreneurship Norm and the importance of Meaningfulness at Work
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This study investigates whether entrepreneurship (operationalized as self-employment status) is related to higher levels of meaningfulness at work and individual’s wellbeing, specifically subjective vitality, when compared to regular employment. We propose that the impact of self-employment on meaningfulness at work would depend on countries’ normative context, namely on the national entrepreneurship prescriptive norm. We analysed 2010’s data from the Global
Entrepreneurship Monitor and the European Social Survey on 16 European countries and tested a cross-level moderated mediation model. Results showed that entrepreneurship is positively related to individual's wellbeing through the mediating effect of meaningfulness at work. However, the effect of entrepreneurship on individuals' meaningfulness at work and, ultimately, on their subjective vitality, is stronger for people living in countries with less favourable national entrepreneurship norm. These findings provide evidence for framing meaningfulness at work as being contingent on the interaction between self-employment and national normative context and contribute to the literatures on entrepreneurship, meaningfulness, and wellbeing at work.

O34: Already Exhausted when Arriving at Work? Daily Demands of Working Parents and Their Impact on Start-of-Day Fatigue
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Purpose: What causes parents to arrive refreshed at their workplace? Based on the Work-Home Resources Model (ten Brummelhuis, Bakker, 2012), we examined the impact of daily family- and commute-related demands in the morning on changes in fatigue before starting the actual work. We assume, that demands increase fatigue between awakening and arrival at work. Furthermore, we expect that flexible working hours attenuate this effect and that the level of fatigue at arrival at work predict daily job performance.

Design: We conducted an online diary study with working parents on five consecutive days (N=120). Daily fatigue was assessed directly after waking up and at arrival at work on each day. We measured daily demands at arrival at work, daily job performance directly after finishing work and asked for the working hour arrangement in a general survey. To test the main and interaction effects, we conducted hierarchical linear models to combine level 1 and level 2 variables.

Results: The results indicate that fluctuation in daily morning family-related and commute-related demands increased start-of-work time fatigue. Flexible working hours weakened the effect. The daily level of fatigue when arriving at work, in turn, was associated with fluctuations in daily job performance.

Limitations: All variables were self-reported and therefore might be confounded by common method variance.

Research/Practical Implications: To enhance job performance and maintain the wellbeing of working parents, future research should pay more attention to contextual factors before daily work starts and should examine the impact of daily resources in the morning as well.

Originality: By focusing explicitly on the home side before work, our study contributes to widening the debate beyond characteristics of the home domain after work and its influence on work-related outcomes.

O35: Working Time and Recovery in Germany
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The changing work world places increasing flexibility demands on employees. Increased complexity and digitalization challenges traditional working time arrangements. Extended temporal availability for work-related issues can affect recovery processes. According to the effort-recovery-model (Meijman & Mulder, 1998) insufficient recovery accumulates to impaired
wellbeing and health. In our study we aim to investigate different working time characteristics and their relation to the recovery level in a representative sample of the German working population. Data of 8,767 participants of the Working Time Survey 2017 of the Federal Institute for Occupational Safety and Health (BAuA-WTS) are analysed.

Our analysis results show that the majority of employees succeed in recovering. However, long working hours, low control over one's working time and permanent availability are related to lower recovery levels. Our findings help to understand the relation between working time characteristics and workers' recovery. In practice, it should be examined carefully, in which kind of jobs changes of working time characteristics could be implemented to support successful recovery.

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Aligned with the zeitgeist of efficiency and productivity, a prolific and rapidly growing stream of research on high-performance work systems (HPWS) investigates the psychological and social mechanisms through which human resource (HR) practice “bundles” foster job attitudes and behaviors considered instrumental for improving organisational performance. In particular, HPWS based on high-involvement and high-commitment work practices are commonly assumed to be mutually beneficial, creating win-win situations for both employers and employees. However, while economic advantages are increasingly well-established, some studies reinforce concerns that even employee-oriented HPWS strategies are not without human costs. Specifically, motivational processes and social dynamics may trigger self-regulated forms of “subjectivized” work intensification, such that increased organisational involvement leads to overengagement and unsustainably high voluntary expenditure of work effort, resulting in tensions and trade-offs with occupational health.

The present study contributes to the ongoing debate on implications of HPWS for occupational health by testing both mediating and moderating roles of job involvement between employee perceptions of supportive and participatory HR practices and self-reported work ability. Analyses are based on a large-scale employee survey among city employees in Germany (N = 11,871 complete data sets), including white-, blue-, and pink-collar workers (i.e., administrative, technical, and social service staff). Supportive employment practices, participatory management practices, and job involvement were each measured with four internally consistent questionnaire items, drawn from a commercial best employer survey based on content and factorial validity. Occupational health implications were assessed with the widely used work ability index, comprising seven dimensions of subjective work capacity (e.g., estimated ability to fulfill work demands, mental resources) and health status (e.g., sick days, diagnosed diseases).

Multiple linear regression models confirmed both mediating and moderating roles of job involvement. Corresponding with conventional assumptions, involvement partially mediated positive relationships between supportive and participatory HR practices and self-reported work ability. Additionally, however, employee involvement also negatively moderated (i.e., buffered) the beneficial effects of supportive employment and participatory management, such that the health of highly involved workers benefitted less from these employee-oriented HR practices. Evidence for such “diminishing returns” was found with regard to both 2-way interactions as well as the combined 3-way interactive effect of supportive employment practices, participatory management practices, and job involvement on work ability.
Our study extends results on the ambivalent effects of HPWS on employee health. Positive relationships between employee-oriented HR practices and work ability generally strengthen the proposition that by supporting the welfare of employees and creating an engaging and intrinsically motivating work environment, employers can simultaneously develop health-promoting and performance-oriented capabilities. However, our results also suggest trade-offs between employee involvement and occupational health, cautioning that HR practices in the context of HPWS strategies require close monitoring for undesirable side-effects. The new quality of these trade-offs manifests in constraints to employee work ability that are associated with positive motivational states and possibly self-endangering levels of work engagement and performance. We discuss theoretical and practical implications, methodological limitations, alternative explanations for our findings, and future research needs.

**O37: Association of Social Support at Work and in Private Life with Burnout. Results from a National Survey of French Teachers**

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**Objectives:** Numerous studies reported a positive association between social relationships and both physical and mental health outcomes. However, when studying the association between social support at work and burnout, very few studies took into account social support outside the workplace. The present analysis focused on teachers, which are exposed to many job-stressors, and have been identified as particularly at risk of burnout. The specific aim was to investigate among French teachers how social support at work, independently of the private social context, was related to burnout.

**Methods:** Analyses were performed using the “Teachers’ Quality of Life” national survey (MGEN Foundation for Public Health/French Ministry of Education; 2013) including 2,653 in-service teachers of all grades throughout France. Burnout symptomatology was self-evaluated using the 22-item Maslach Burnout Inventory that measures three dimensions of wellbeing for staff dealing with the public: emotional exhaustion (EE), depersonalization (DP) and personal accomplishment (PA). The score on each dimension was classified in tertiles. High scores (3rd tertile) on EE and DP and low score (1st tertile) on PA were indicative of burnout. Level of social support at work was derived from the Karasek Job Content Questionnaire and defined also as tertiles (low, medium and high). The private social context was assessed using the “social relationships” and “environment” subscales of the short version of the World Health Organization Quality of Life questionnaire (WHOQOL-Bref). Among 2,473 teachers with complete data, associations between social support at work and burnout were evaluated by logistic regression models that were adjusted for private social context plus sociodemographic (age, sex, marital status and having children under 7 years old) and work-related characteristics (grade level, seniority, number of pupils taught, quality of relationships with pupils, professional satisfaction, job psychological demand and decision latitude).

**Results:** Our study population consisted of 67% women, was aged 44±10 years old on average, with 12±8 years of seniority, 36% taught in the first degree, 54% in the second and 10% in higher education; 8% of the teachers showed simultaneously high EE, high DP and low PA symptoms and were considered as burnout cases. In the fully adjusted model, teachers who reported high social support at work were significantly less likely to report burnout (odds ratio [95% confidence interval] High vs. Low= 0.63 [0.40, 0.99]). When distinguishing the source of social support at work (i.e. supervisors or coworkers), only high social support from the supervisor was still significantly associated with a lower risk of burnout (0.46 [0.28, 0.74]).
Conclusions: In this representative sample of French teachers, high social support at work, mainly from supervisors, was associated with a decreased risk of reporting burnout. The strength of the association drastically decreased after adjustment for the private life context, suggesting that non-work determinants may play an important role in workers’ mental health. In terms of workplace health promotion, actions to enhance social support from the supervisor may represent an effective strategy to prevent teacher burnout.

O38: Back to Basics: Organizational Trust and Burnout Among Expert Physicians at General Public Hospitals
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The global shortage in physicians is persisting and the demand for acute health services due to the growth of the aging population and chronic illness is rising. Burnout of physicians at hospitals, who are at great risk of burnout, concerns management at health organizations. Burnout among physicians at hospitals contributes to: broken relationships; divorce rates; alcohol use; and suicide rates. At the organizational level burnout decreases: commitment; job satisfaction; patient safety; quality of care; physician safety; and personnel retention. To date, interventions to reduce burnout focused on training to: incorporate a supportive work environment; enhance autonomy; cultivate personal renewal; raise emotional awareness; and connect with colleagues. Previous studies indicate that these interventions were either successful for only the short term or unsuccessful. Organizational level phenomena that may affect burnout were not yet tested. This study is the first to investigate the association between shared organizational trust in top management, organizational commitment and burnout.

Methods: The sample comprises 798 high-level and high-power expert physicians at ten out of twenty-one Israeli public general hospitals. Measures were previously used. Although data are nested, inter-class coefficients test indicated that most of the variance emerged from individual differences and not from differences among departments or hospitals. Moreover, there were no significant differences in the degree to which perceptions were shared amongst physicians within hospitals. Thus, Structural Equation Modelling was performed. To strengthen the research design a model with common method variance was tested and supported the study model.

Results: Antecedents of burnout in the theory-driven model were: meeting job expectations; satisfaction with medicine; organizational trust; organizational commitment; and demographics. The model was recursive, had good fit indices and explained 45% in the variance of burnout. Trust was a two-factor construct: one related to trust in routine and the other related to trust for career development. The strongest antecedents of burnout were: satisfaction with medicine; meeting job expectations and; trust in routine. Organizational commitment was not related to burnout. Physicians in internal medicine department and women had greater burnout. The core professional value of high-quality care that physicians internalize early in medical school was the strongest antecedent of trust in routine which was strongly related to satisfaction with medicine and to meeting job expectations.

Discussion: This study is the first to link burnout with the organizational phenomenon of trust and extend the knowledge on antecedents of burnout beyond job characteristics, work environment, and personal resources. To reduce burnout hospital management should design the work environment to nurture the psychological state of physicians and to establish trust in top management by facilitating high quality of care in work processes. While some regulators may impose constraints on organizational processes, management must assure that these constraints are not detrimental to organizational trust. Hospital management is called upon to rapidly change the workplace by going back to basics and aligning espoused and enacted organizational values to the professional value of high-quality care.
O39: Testing the Association of the Burnout Assessment Tool with Job Demands and Resources
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Burnout, a work related state of mental exhaustion, represents a serious social and economic problem in modern societies as it can be an important cause of sickness absence and work incapacity. The Burnout Assessment Tool (BAT) is a new instrument, based on a new conceptualization of burnout (Desart, Schaufeli, & De Witte, 2017). The BAT assesses four core symptom clusters – exhaustion, mental distance, and impaired emotional and cognitive control – and two secondary symptom clusters – psychological distress and psychosomatic complaints. By developing a new instrument the relationship between burnout and other related constructs needs to be re-examined.

In this study, we explore the relationship between job demands, job resources, burnout and work-related outcomes based on the Job Demands-Resources Model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Schaufeli & Bakker, 2004). Specifically for burnout, the JD-R model explains the link between work characteristics, burnout and work-related outcomes through a stress process. This health impairing process reveals two main effects: 1) high job demands are associated with negative outcomes, via burnout, and 2) poor job resources are associated with negative outcomes, via burnout. The JD-R model also assumes an interaction between job demands and job resources, because resources may buffer the impact of demands on burnout (Schaufeli & Bakker, 2004).

The hypotheses were tested in a cross-sectional design with survey data of a representative sample (N=1500) of the Dutch working population. Job demands are operationalized by work-life conflict, role conflict and conflicts at work; job resources by team spirit and tool availability, burnout by the four core dimensions and the overall score of the BAT, and work-related outcomes by turnover intention and extra-role performance.

Several hierarchical regression analyses were performed, revealing that, after controlling for age and gender, demands are positively related to burnout (work-life conflict: β = .13 to .24, p < 0.01; role conflict: β = .17 to .28, p < 0.01; conflict: β = .16 to .31, p < 0.01) whereas resources are negatively related burnout (team spirit: β = -.18 to -.29, p < 0.01; tools: β = -.09 to -.12, p < 0.01), as expected. Furthermore, after controlling for job characteristics, burnout is positively related to turnover intention (β = .08 to .22, p < 0.01) and negatively related to extra-role performance (β = -.06 to -.12, p < 0.01). The assumed interaction between demands and resources can largely be confirmed (24 out of 30 tests were significant), after controlling for the main effect. For example, the interaction for work-life conflict and conflict is not significant for impaired cognitive control.

The results seem promising for the BAT, but need further confirmation. At the conference, results of a cross-validation analysis using SEM will be presented. The sample will randomly be split in half. In the first subsample (N=750) the proposed JDR-model will be tested, and will be retested in the second subsample (N=750). In order to evaluate goodness-of-fit, the usual appropriate fit indices will be used.
O40: Long-term Profiles of Detached Concern and Their Association with Burnout in Human Service Occupations

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Detached Concern (DC) in human service work is an important emotion regulation resource for human service professionals that face considerable mental health risks. Its core dimensions – employees’ concern (C) and detachment (D) – are indispensable facets of the client interaction process. Cross-sectional results have found four distinct DC types, which range from a ‘balanced’ type with high concern and high detachment, as a health-promoting strategy, to rather dysfunctional and imbalanced types (e.g. ‘empathic’ professionals with high concern but moderate detachment), related to a higher burnout risk. However, long-term profiles and their effects on burnout remain unresolved. In our study, we focus on the identification and development of long-term DC profiles and their prospective association with burnout over time.

We collected longitudinal self-reported survey data from N = 109 healthcare, teaching and social professionals in three waves over a period of 8 months (time lag T1 to T2: 2 months, T2 to T3: 6 months). Latent profile analysis and analysis of covariance of repeated measures were applied. Five relatively stable longitudinal DC profiles emerged: (1) ‘detached’ (high D - low C; n = 35); (2) ‘empathic’ (high C - moderate D; n = 33); (3) ‘balanced’ (high D - high C; n = 23); (4) ‘boundless’ (high C - low D, curvilinear trend; n = 9); (5) ‘moderately uninvolved’ (low C - moderate D, increasing; n = 8). Over a longer period of time employees seem to favour one of these DC profiles. The lowest emotional exhaustion over time occurred among balanced professionals. A stable or increasing risk of exhaustion over time was found in particular among profiles with moderate-to-low levels of detachment. Professionals with imbalanced DC profiles were more prone to experience burnout in the long-run. Another notable finding was the identification of a new ‘boundless’ profile with a distinct tendency to perceive increasing levels of emotional exhaustion over time.

The study provides a differentiated perspective on longitudinal DC profiles and a practical solution in terms of how client-helper interactions can be regulated functionally, thereby supporting health promotion among employees. A highly-balanced DC is most beneficial for the prevention of burnout and complements a positive approach to emotions and emotion regulation in provider-client interaction. The analysis exclusively draws upon self-report data at all measurement points, which may have induced common method bias. Given the significance of burnout and its effects on a person’s life beyond the workplace, findings provide relevant evidence-based information for education and health-promoting interventions. They might also contribute to more self-awareness of the strengths and risks of DC and burnout for human service organisations and professionals.

O41: Burnout and Job Satisfaction among Medical Doctors in Kenya: The Role of Emotional Regulation and Work-Life Balance

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Medical practice is one of the most emotionally complex professions known (Diefendorff, et al, 2011; Hülsheger & Schewe, 2011). Medical practitioners use emotions in making clinical decisions as well as building and maintaining relationships with both patients and staff at the workplace (Figley, Huggard, & Rees, 2013; McNaughton, 2013). As a result, they are faced with multiple situations that challenge their emotional strength and must find ways to regulate it (Austenfeld, Paolo, & Stanton, 2006).
Emotion regulation is the ability to manage and respond to emotions in a way that is socially acceptable or according social norms (Russell, 1983). Two strategies are employed by individuals to regulate emotions, namely surface acting (SA) and deep acting (DA). SA is often referred to as “faking in bad faith” because employees portray emotions that is not their own but one that is consistent with the expectations of the client. DA on the other hand refers to “faking in good faith” whereby the employees alter their intrinsic emotion completely to match the emotional expectations so it seems authentic.

Employees, especially those in service-based jobs where they are in direct contact and/or communication with customers, are required to manage their emotions according to what the employer requires (Hülsheger & Schewe, 2011). When there is a discrepancy between actual and expected emotions, individuals experience a form of emotional dissonance. Repeated exposure to such negative emotional states is highly stressful and could lead to negative psychological wellbeing, reduced job satisfaction and burnout.

The aim of the study was threefold: First, we sought to identify the types of emotional regulation (ER) strategies that were prevalent among medical doctors. Second we looked at the effects of ER on burnout and job satisfaction. And third, we investigated the moderating effects of work-life balance on these relationships.

The data was collected from 226 medical doctors from the Republic of Kenya using an adapted version of the Emotion Regulation Scale and refinement of Emotions at Work Scale, the Copenhagen Burnout Inventory, Minnesota Vocational Questionnaire-SF and the Work-Life Balance scale. Results indicated that ER had differential effects on burnout. Surface acting increased client, personal and work-related burnout while Deep Acting on the other hand reduced client and work-related burnout. Different effects were also noted for job satisfaction—SA increased job satisfaction but DA reduced it. WLB had a moderating effect on ER and JS but not on ER and burnout. The results also showed that medical doctors in Kenya tend to use ER strategies in accordance to the needs of the profession instead of the needs of the patient or their employer.

Areas for development and improvement of support in the realm of emotional management for doctors will be presented further in detail. Implications of the study suggest the need to train doctors to respond better to the emotional needs of their patients and colleagues in order to reduce strain on their wellbeing.

O42: Influence of a Cognitive Behavioral Training Programme on Burnout: A Study Among High School Teachers
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This longitudinal study was carried out to assess the efficacy of a cognitive behavioural training program that was designed to modify the cognitive and emotional processes related burnout and its effects on salivary cortisol levels, over a 7-month period in a sample of high school teachers. The entire sample was made up of 66 high school teachers, 8 (12.1%) men and 58 (87.9%) women. Of these, there were 30 teachers in the training group and 36 teachers in the non-training group. The burnout levels were evaluated with the Spanish Burnout Inventory (SBI) (Gil-Monte & Figueiredo-Ferraz, 2013). Psychosomatic disorders were measured by subscale UNIPSICO and the levels of cortisol were measured by Cortisol Awakening Response (CAR). The training programme was divided into twelve on-site sessions (e.g. Training in the concept of work-related
stress; Training in cognitive techniques; Training in physiological techniques; Control over emotions). The training received by the participants was carried out by clinical psychology practitioners. The study was divided into three time periods, with a gap of three months between T1 and T2 (training program) and four months between T2 and T3 (Follow up). Participation was voluntary, and confidentiality was guaranteed. The training programme significantly reduced burnout levels in the training group from T1 to T2, and it significantly decreased cortisol levels from T1 to T2. The results in the trained group have remained stable in T3. No significant differences were found in the non-training group from T1 to T2 and from T1 to T3.

O43: In the Middle of Change: Managers and Employees as Change Recipients
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Middle managers have mostly been viewed as agents of change. They are, however, recipients of change themselves, an important perspective that has been largely neglected within the organisational change literature (Oreg et al., 2011). Our study investigates how experienced change influences job satisfaction and performance (task and contextual) for both employees and managers.

Participants: Data stem from two surveys distributed to managers and their employees within day care, schools, tax divisions, and banks. In 2015, we sent out 15,130 questionnaires to employees (response rate 41.8%) and 523 to managers (response rate 86.4%). In 2016, we sent out 9,986 questionnaires to employees (response rate 34.5%) and 533 to managers (response rate 64.9%).

Measures: Experienced Change was measured using three items targeting the degree to which respondents had experienced organisational change within the past year (inspired by Kuipers et al., 2014). Response categories ranged from: 1 = no changes to 4 = very extensive changes. Job Satisfaction was measured using a single item: “All in all, on a scale from 0 to 10, how satisfied are you with your current job?” Response categories ranged from 0 = very dissatisfied to 10 = very satisfied. Task Performance was measured using five items (Goodman & Svyantek, 1999). Response categories ranged from 1 = strongly disagree to 7 = strongly agree. Contextual Performance was measured using five items from the Individual Work Performance Questionnaire (IWPO) (Koopmans et al., 2014). Response categories ranged from 0 = never to 5 = always.

Analyses: The analytical framework was a mixed latent and measured variable structural equation panel model across 2015 (T1) and 2016 (T2), examining short-term and longer term direct and indirect effects of Experienced Change. The model was evaluated for both managers and employees, and accommodated the multilevel structure of the data.

Results: Both models had acceptable data-model fit. Briefly, the manager model showed two indirect effects of T1 Experienced Change: a negative effect on T2 Job Satisfaction (through T1 job satisfaction) (-.057; p < .05) and a positive effect on T2 Contextual Performance (through T1 Contextual Performance) (.181; p < .001). These effects are also found in the employee model: on T2 Job Satisfaction (-.041; p < .001) and on T2 Contextual Performance (.073; p < .001). In addition, the employee model showed a direct relation between T1 Experienced Change and T2 Job Satisfaction (.42; p < .05) and an indirect effect on T2 Task Performance (through T1 Task Performance) (-.029; p < .001). Experienced Change, thus, has a negative impact on Job Satisfaction and a positive impact on Contextual Performance for both employees and managers. Only the employee model reveals a negative impact of Experienced Change on Task Performance.
Limitations: Potential limitations lie in data stemming from self-reports (although the analysis of data from two sources reduces this bias).

Applicability of results: Job satisfaction and performance are important outcomes of organisational change. Understanding the positive and negative effects of change on long-term outcomes for both employees and managers can inform recommendations for organisational change interventions.

O44: Occupational Taint and Psychological Empowerment Among South African Informal Recyclers in Cape Town
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The objective of the current study was to investigate occupational health hazards experienced by informal recyclers and how these influence their general wellbeing. Informal recycling in developing countries is a common income generating activity for unemployed individuals. Perceived as precarious work due to the absence of labour regulation and affiliation to a formal organisation, research about informal recycling has increased to determine experiences and other physical outcomes of this work. In South Africa, little is known about experiences of informal recyclers in relation to occupational hazards and wellbeing. Social Identity Theory (SIT) provides the theoretical basis for understanding the experiences of individuals who work in informal recycling. A cross-sectional qualitative approach used a descriptive research design to collect data using observations and seven in-depth structured interviews. Themes extracted using content analysis revealed that physical hazards in relation to chemical waste, accidents and injuries and psychosocial hazards such as stigma were evident amongst the participants. Reported physical and psychosocial hazards experienced by the participants were consistent with global findings on informal recyclers and wellbeing. Psychological empowerment was evident through the meaning of the word performed; self-determination in task performance and feelings of achievement and pride by providing for their families. The findings are consistent with social identity theory and emphasise the importance of personal and group identities for worker wellbeing. This study contributes to the discourse on informal recyclers with psychological empowerment as an emergent theme that require further investigation. The findings on psychological empowerment form an important intervention point for recycling depots to develop these traits further for physical and mental wellbeing of precarious workers that contributes to environmental wellbeing of society. The conditions conducive to the generation of psychological empowerment, present within the informal recyclers in this study, need further investigation to development resources that can grow this perception to enable recyclers become psychologically empowered to deal with negative perceptions about their work. The expected positive benefits of this form of empowerment may help combat the negative outcomes of stigma and socioeconomic vulnerability.

O45: Changing Outcomes Through Words: The Missing Interactional Basis of Occupational Health Psychology?
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Communication forms the basis of sustainable working life. Workplace relationships, leadership, and culture - and interventions targeting their improvement - are constituted through language and interaction. Success in health and safety management is recognised as necessitating effective communication, up, down and across the organisation. Employer support (towards, for
example, those with chronic or mental illness) and leadership ‘style’ are associated with employee self-efficacy, stress and wellbeing. Supervisory interactions are even found to be related to employee blood pressure outcomes. The particulars of communication within occupational health interventions themselves e.g. therapeutic or behaviour change interventions targeting stress also fall within the remit of process evaluation, which can improve the quality of implementation and clarify causal mechanisms. Indeed, occupational health interventions may often fail due to inattention to the effects of implementation processes, but evaluations of these processes are rare in literature. The study of naturally-occurring organisational communication (including the analysis of corpus recordings of intervention communication, service encounters and supervisor-employee interaction or email exchanges) is gaining traction in other fields, particularly medicine. Methods such as conversation analysis, the fine-grained study of talk in situ, analysed it for its systematic patterns and interactional consequences, has contributed to new and ecologically valid understandings of effective and ineffective communication. That is, how subtle features of language, which change the social ‘actions’ being performed, are associated with outcomes, both endogenous e.g. agreement/resistance and exogenous e.g. behavioural and health outcomes. This paper seeks to further understand the potential contribution of conversation analysis, and related methods, in the domain of Occupational Health Psychology (OHP). We present the emerging results of a methodological scoping review to establish 1) the extent to which the study of talk-in-interaction is currently part of OHP’s domain 2) whether methods such as conversation analysis can make a contribution, within the remit of OHP. A systematic search was conducted in the Journal of Occupational Health Psychology, Work & Stress and Occupational Health Science to identify communication-relevant articles and their methodologies. A second broader search, augmented with expert input and recommendations, was employed to identify interactional studies from other contexts with extrapolatable lessons for OHP. The findings are narratively synthesized and discussed in relation to OHP concerns. The authors argue that there is a missing ‘interactional substrate’ to OHP and showcase the ways in which conversation analysis, and related methodologies, can contribute within the purview of occupational health psychologists. Drawing from relevant examples, particularly in a health services context, the authors discuss the role of an interactional approach in relation to the major stages of intervention research and implementation, the development of concrete models of ‘good’ communication for better outcomes, and training in supportive workplace communication/leadership.

O46: Effects of Home-based Telework on Employee Wellbeing and Performance: An Intervention Study
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Purpose: The purpose of this study is to explore the efficacy of a home-based telework practice in increasing employee functioning (i.e., wellbeing and performance) studying pretest-posttest effects as well as daily effects within and between an experimental group (i.e., teleworking group) and a control group (i.e., non-teleworking group). Following literature on boundary role transitions and interruptions (Ashforth et al., 2000; Jett & George, 2003) and drawing on conservation of resources literature (Windeler et al., 2017), we hypothesise that enabling employees to work from home increases their wellbeing and performance not only on days they work from home, but also in general when compared to employees who are not enabled to work from home.

Design/Methodology: We collected survey data from a sample of 39 teleworking and 39 non-teleworking employees in two departments within one company before, during, and after the intervention of a part-time home-based telework policy (i.e., fixed 2 days-a-week arrangement). We conducted a pretest survey before (T1) and a posttest survey after (T2) a period of 13 consecutive workdays, during which we administered daily surveys (D1–D13). Pretest-posttest
differences are tested using paired samples t-tests and analysis of variance, and longitudinal within-subject hypotheses using mixed coefficient modeling. Outcome measures are employee wellbeing (psychological distress, work-to-home conflict) and employee performance (job performance, work engagement).

Findings: In the within-subject assessment before and after the telework intervention, employee wellbeing showed pretest-posttest differences for both work-to-home conflict and psychological distress in the experimental group in the expected direction (i.e., lower during posttest measurement occasion), but not in the control group. We found no pretest-posttest differences in job performance or work engagement in the experimental or the control group. In the daily within-subject assessment during the intervention of the telework practice, daily effects showed teleworking days to be related with lower psychological distress, but not with work-to-home conflict, and with higher job performance and higher work engagement.

Research/Practical implications: Our results confirm pretest-posttest and day-specific effects of part-time telework and suggest that telework increases employee wellbeing and performance. Given the growing number of individuals with caring responsibilities in our labour market, offering work-life practices, i.e. organisational HR initiatives designed to help employees balance their work with other life roles, may help organisations to attract and retain the best-qualified employees.

Originality/Value: This study analyses the relationship between teleworking adoption and employee wellbeing and performance before, during, and after policy implementation within one company, therefore narrowing down the definition of the specific teleworking practice and keeping confounding factors related to between-company differences stable.

O47: Enhancing Adaptive Hybrid Management in Public Hospitals
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Relative autonomy to adapt proactively to change at operational levels is vital for effective change management and employee wellbeing. Some of the main recent criticisms of New Public Management (NPM) in health systems (Osborne, Radnor, Kinder, and Vidal 2015) have been that it is inflexible in terms of demanding standardised performance criteria (Wellman, 2017; Guest, 2017; Grote and Guest, 2017) with little regard for the variable needs of doctors and nurses as hybrid managers (Oliveira, Raposo, Holland & Lira de Carvalho, 2017) of different clinical specialisations. Another is that the hierarchical command-and-constraint NPM paradigm concerns explicit criteria whereas adaptability, and the skill to adapt (Polanyi, 1962, 1968) is tacit in learning from work and life experience and implies commitment based management.

In addressing such issues, the comprehensive case study over time reported in this paper draws on the methodology of the ADAPT and later HUMAN programmes of the EU which were inspired by the principles of Michal Polanyi on surfacing tacit knowledge and implicit learning (Polanyi, 1958, 1962, 1968). The study, over a five year period, was of 28 doctors and 13 nurses (interviews n = 64) as hybrid managers in a European university hospital undergoing NPM styled reorganisation followed by mergers with two other hospitals on assumed gains from economies of scale. Analysis of the full transcripts of their audio-taped and semi-structured interviews covered four domains of practice - clinical, scientific, technical and operational management - in different services and units. Content analysis used MAXQDA software.

The findings illustrate the need for hybrid managers to have sufficient relative autonomy to adapt proactively rather than reactively to change. Perceptions of scope for autonomy in clinical domains of practice fell by two thirds over the period of the study. Earlier buffering practices,
informally protecting the autonomy of doctors and nurses by operational managers either by disregarding command-and-constraint higher level demands, or defending them explicitly if challenged from above, were eclipsed entirely. The mergers between the hospitals were counter-productive in not gaining efficiency gains, intensifying demands on human resource management which could not readily be resolved and alienating health professionals.

The findings suggest that doctors and nurses as clinical and operational managers in hospitals and health centres should be encouraged through group reflective practice and discourse to identify the tacit knowledge, latent abilities and implicit skills of health professionals to enable them to gain more eudemonic purposeful fulfilment (Robertson & Cooper, 2010) in adapting to change at operational levels and thereby enhance their own wellbeing and the welfare of patients.

O48: Occupational Safety Climate Improves Safety Behaviours: What are the Mechanisms? A Longitudinal and Multilevel Study
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The main aim of the present study was to test a model for accidents’ prediction, exploring the influence of the social context, more specifically safety climate, on safety behaviours and accidents. In doing that, we also consider the psychological processes (safety motivation and safety knowledge) that influence safety outcomes. We study the social context at the group level and psychological processes, behaviours and accidents at the individual level, using a cross-level design. The group-level context considers the supervisor’s and co-workers’ safety climate. Safety climates, psychological variables and safety behaviours have been assessed at Time 1, and two years later safety behaviours and accidents has been evaluated on the same sample. 1089 workers belonging to 143 work units across the seven companies completed the survey. Results showed that supervisor’s safety climate positively affects safety motivation through the mediation of co-workers’ safety climate. Safety motivation positively affects changes in safety behaviours (participation and compliance) through the mediation of safety knowledge. Finally, safety compliance is negatively related to accidents. No relationship was found between safety participation and accidents. Our study shows that the direct effect of supervisor safety climate on psychological processes disappears when safety climate generated by coworkers is considered. When these shared perceptions concerning the work unit colleagues give a picture of a good climate about safety, each worker shows high level of motivation toward safety issues, which in turn improve safety behaviours and decrease accidents. The importance of the work team in building a safety culture should be emphasized.

O49: Safety Knowledge Sharing
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Research Objectives: The objectives of this research project were: (1) to investigate how more experienced workers (culinary instructors) share their safety-related knowledge with less experienced workers (apprentices), and vice versa; and (2) to investigate how less experienced workers share safety-related knowledge with one another as a part of becoming more experienced.
**Background:** Work safety research has moved away from an individualistic way of understanding occupational safety and safe work behaviours to one that considers the collective (Turner & Gray, 2009; Zohar, 2010). The social context is especially important for understanding safety because safety comprises “intersubjective products of social construction, collective agreement, and socialization” (Simpson, 1996: 550). Gherardi (2006) and others have written extensively on the social construction of safety for novice learners, arguing that people “do not learn ‘safety’… rather they learn safe working practices” as a participating member of a community of practice (Gherardi et al., 1998, p. 202). Learning through participation is a complicated process although it appears automatic and simple (Gherardi & Nicolini, 2002). In this sense, the circulation of knowledge about how to be safe (safety knowledge sharing) may be difficult to capture and quantify, so multiple means of understanding how safety is created and maintained must be employed.

**Methods and Example Findings:** Study 1 comprised 22 interviews with apprentices enrolled in the culinary programs (baking, meat cutting), work placement chefs, and culinary instructors at one Canadian polytechnic college. We found that apprentices are rarely ‘blank slates’ and their experiences within industry, often prior to entering culinary training, affect how they learn about safety in school. Apprentices with industry experience are able to draw on safety knowledge obtained from their experiences and share those experiences with their peers. Additionally, we found that safety is often understood as “common sense” attributed to the individual, comprised of three overarching characteristics: it is shared and social, it is a practical accomplishment, and the presence or absence of an understanding of “common sense” separates less experienced practitioners from experienced ones. Based on these findings, Study 2 was a 6-wave longitudinal study conducted over one academic term at the same Canadian polytechnic; the sample was 94 apprentices and 13 culinary instructors. We examined the relationship among instructors’ observations of apprentices’ safety knowledge sharing with a range of correlates including apprentices’ traits, safety knowledge seeking, safety attitudes, and subsequent injury frequency. For example, we found the relationship between safety knowledge sharing and apprentices’ mindfulness is initially negative, but weaker and even non-significant at later waves, highlighting that once apprentices’ safety knowledge becomes more embedded, there is more capacity to focus on both the “the here and now” and the broader social context, including sharing knowledge with others and anticipating safety obstacles that have not yet occurred. Great safety knowledge sharing was in turn related to fewer subsequent work injuries.

**O50:** High-Flying Risks: Variations in Working Conditions, Health, and Safety Behaviours among Commercial Airline Pilots in Relation to Safety Climate Perceptions
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Since the deregulation of the European air transport market in the mid-1990s, the airline industry has gone through fundamental changes. This has resulted in airlines having developed business models that include new employment forms and new ways of organizing their operations. For commercial pilots, these changes seem to have involved poorer employment conditions and worsened their working conditions. Additionally, this development has been paralleled by changes relating to regulations regarding pilots’ flight time and rest. Taken together, the past decades have seen radical changes regarding airlines’ organization as well as pilots’ working conditions. Yet, the knowledge of how these new conditions of airlines and their pilots are linked to flight-safety and health-related outcomes remains limited. This study aimed at investigating perceptions of the safety climate among commercial airline pilots and how such safety climate perceptions were related to self-reported working conditions, health and flight safety experiences. Data came from a survey targeting the full population of pilots having a Swedish pilot license registered with the Swedish Transport Agency. In total, 46 per cent of the invited pilots volunteered participation and provided self-ratings of organizational safety, psychosocial working
conditions, health-related measures such as recovery, subjective health complaints, anxiety and symptoms of depression, along with demographics through an online-questionnaire. An initial cluster analysis showed three different safety climate clusters, which were labelled: 1) High-risk climate, 2) Medium-risk climate, and 3) Low-risk climate. The High-risk climate cluster was characterized by an inadequate reporting and learning climate, poor communication and safety commitment, insufficient resources for adequate safety work, and faults in the systematic safety work, and thus had to be considered a risk for flight safety. The results also showed consistent and mostly statistically significant differences in psychosocial working conditions, health-related measures and safety behaviours between pilots in the three clusters. As compared to the Low-risk and Medium-risk climate clusters, the High-risk climate cluster had consistently poorer working conditions, health and recovery as well as higher levels of anxiety and depression, more incidents and mistakes as well as more dangerous safety behaviours. While such differences may be associated with for instance health behaviours and other factors at the individual level, taking such factors into account showed consistent differences between the three clusters. This clearly suggests that the differences go beyond the individual and seem to be strongly related to the safety climate. However, the data came from a cross-sectional study, which obviously limits conclusions regarding causality. Nonetheless, the cross-sectional findings provide a first and clear look into the linkages between perceptions of safety climate and self-reported working conditions, health, and flight safety among commercial airline pilots. Finally, from a practical safety and occupational health perspective, this study points up possible ways of improving the conditions of commercial airline pilots.

O51: Fit for Flight? Inappropriate Presenteeism Among Swedish Commercial Airline Pilots and its Dangers to Flight Safety
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Following the deregulation of the European air transport market in the mid 1990s, the past decades have through fundamental changes both for airlines and their staff. Specifically, airlines have developed business models that include new employment forms and new ways of organizing their operations. For commercial airline pilots, these changes seem to include poorer employment conditions and worsened working conditions. Moreover, this development has been paralleled by changes relating to regulations regarding pilots’ flight time and rest. National statistics from Sweden have shown that 89 per cent of the pilots reported that they had to cope with fatigue in cockpit and about 50 per cent said that them being fatigued impaired the flight ability. These figures are high when considering that pilots, according to the law, must report themselves as unfit for flight when they feel that they themselves constitute potential dangers to flight safety. Despite the threat of legal actions when unfit for work, many still go to work when unwell, which suggests that sickness presenteeism is a threat to occupational health and safety for pilots. This cross-sectional study aimed to investigate the prevalence and covariates of presenteeism, and how presenteeism related to mental health and flight safety among commercial airline pilots. This study aimed at investigating perceptions of the safety climate among commercial airline pilots. Data were collected from a survey targeting the full population of pilots having a Swedish pilot license registered with the Swedish Transport Agency. In total, 46 per cent of the invited pilots volunteered participation and provided self-ratings through an online-questionnaire. In total 63 per cent of the pilots exhibited acts of presenteeism in the past year. Poor mental health, safety culture, job insecurity, and high social support at work were showed statistically significant relationships with presenteeism. Mediation analyses suggested that poor recovery partly accounted for these relationships. Pilots reporting presenteeism and poor recovery were also significantly more likely to having had committed five or more errors when on flight duty in the past 12 months. These findings show a clear a prevalence of presenteeism also in highly regulated occupations. However, the data came from a cross-
sectional study, which makes it unclear whether for instance poor mental health and safety culture are factors that predicts presenteeism or the other way around. But despite the limitations regarding causality, pilots who work despite being unfit potentially jeopardize flight safety. This suggests that current regulations seem insufficient and calls for further actions to ensure occupational health and safety.

O52: The Error Aversion Culture: Do Employees Working in this Culture Experience more Negative Emotions and Make More Errors?
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Literature has recently suggested that organisational cultural orientation toward errors (namely, error culture; Frese & Keith, 2015; van Dyck et al., 2005) is a key factor for reducing the negative consequences of adverse events and their further occurrence. However, despite the theoretical link between error culture and errors, studies have mostly focused on “positive” approaches (i.e., error management culture); while disregarding the “negative” ones (i.e., error aversion culture). Negative aversion culture includes two facets, namely strain from errors and covering up. While the former refers to a culture in which errors are appraised as something that brings negative emotions and additional demands to the erring individuals, the latter refers to a culture in which errors are appraised as something to hide and cover up (van Dyck et al., 2005). To the best of our knowledge there are no studies examining the relationship of both strain and covering up with errors. In this study we aim to fill this gap.

In particular, in line with the literature suggesting that errors’ aversion should enhance a negative emotional climate and feelings of worry (Catino & Patriotta, 2015), and the literature suggesting that negative emotions are detrimental for decision-making processes (Zhao & Olivera, 2006; Zhao, 2011). We aim to examine the role of negative emotions in mediating the relationship of error aversion culture with errors (i.e., mistakes and slips). In addition, drawing on the literature on discrete emotions, we considered two of them: social emotions related to guilt, embarrassment and shame; and anxious emotions related to worry and anxiety.

Results of a structural equation model on a sample of 353 employees (64.9% females, mean age 38.9 years SD = 10.02) working in 81 teams of different organisations, confirmed the association between error aversion culture and errors, also through negative emotions. In particular, strain culture resulted related to both anxious and social emotions while covering up only to social emotions. Furthermore, while anxious emotions were associated with mistakes, social ones were related to slips. Finally, results showed that the relationship between strain and both mistakes and slips was fully mediated by negative emotions, while covering up was associated with mistakes and slips also directly.

Overall, this study further highlights the importance of cultural dimensions in the error handling process, showing the pivotal role of negative emotions in increasing the likelihood of making secondary errors.

O53: Exploring the Cognitive and Affective Correlates of Work-related Rumination
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Objectives: Work-related rumination has been defined as the repetitive thinking about work during free time which take can take either a negative or positive form. Work related affective rumination has been recognised as the repetitive negative thinking about work related issues
such as conflicts with colleagues, unfinished tasks or heavy workload and it is suggested to impair the recovery process of working adults, in other terms the cognitive unwinding from work (Cropley & Zijlstra, 2014). Work-related affective rumination can also have detrimental effects on physical health as it has been found to be a significant predictor of sleep deprivation and chronic fatigue (Querstret & Cropley, 2014). However, to our knowledge there is a lack of studies investigating possible cognitive and emotional correlates of work related affective rumination. Executive functions are cognitive abilities necessary for planning and decision making, skills essential in the workplace. It is of interest therefore to investigate whether employees who are unable to unwind from work demonstrate executive function difficulties. Furthermore, neuroanatomical and behavioural studies indicate that executive functions and emotion regulation share common correlates (Ochsner & Gross, 2005), so emotional regulation difficulties were also examined. This study’s aim was to test the following hypothesis: work-related affective rumination would be associated with executive function difficulties; work-related affective rumination will be associated with difficulties in emotion regulation. Moreover, the mediating effect of emotion regulation difficulties on the relationship between executive functions and work related affective rumination was also tested.

Method: The sample consisted of 300 adults, employed in a wide range of occupations, who completed an online survey. The survey included self-reported measures on: work-related rumination (e.g., ‘I am annoyed by thinking about work related issues when not at work’), executive functions (e.g., ‘I don’t seem to process information as quickly as others’, ‘I procrastinate or put off doing things until last minute’) and difficulties in emotion regulation (e.g., ‘When I am upset, I lose control over my behaviours’). Additional measures where included to control for other factors known to impede successful recovery (job demands).

Results: A multiple hierarchical regression was performed with executive function as predictor of affective rumination whilst controlling for demographic data at step 1 and job demands at step 2. In line with our assumptions, executive function deficits was shown to be a significant predictor of affective rumination even after controlling for demographic data and job demands (R2=23.8%, p=.001). Similarly, in a separate regression analysis, difficulties in emotion regulation predicted affective rumination after controlling for the same variables (R2=25.4%, p=.001). Also, as expected, emotion regulation difficulties seemed to mediate the relationship between executive functioning and affective rumination (95% CI, .044, .147).

Conclusion: Our findings indicate that individual differences in cognitive and affective level, such as executive function and emotion regulation tendencies are associated with repetitive thinking about work, which is known to hinder successful recovery from work during leisure time. This study’s findings underscore the importance of integrating cognitive and emotion regulation skills training when designing recovery interventions.

O54: A Conceptual Framework of Personally and Socially Identified Strengths at Work
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Purpose: Helping people identify and use their personal strengths at work promotes work engagement and its associated benefits (van Woerkom, Oerlemans, & Bakker, 2016). The difficulty with strength-based approaches is that a strength often comes so naturally to the beholder that its use occurs unconsciously and is difficult to identify. This has encouraged construction of formal psychometric strengths assessment tools such as the Values in Action Inventory (VIA-IS; Peterson & Seligman, 2004) and the Clifton StrengthsFinder 2.0 (CSF; Rath, 2007). Though researchers show their applications generate positive outcomes, they rarely validate whether these instruments assign strengths that participants identify with at work and
that are recognized in their socio-organizational environments. By investigating strengths as they are presented by the employee; not translated, configured, or derived from other literature, the objective of the current research is to develop a framework more representative of strengths people identify with in organizational contexts.

**Design:** In Study 1, 231 Dutch employees and 87 of their colleagues from a wide range of occupations were prompted to openly name their top three strengths. Using the Critical Incident Technique (Flanagan, 1954) and ATLAS.ti software, 954 open responses were analyzed and coded into new categories, as well as assigned to the existing inventories. The categories that did not reach a certain degree of agreement between independent raters were eliminated due to ambiguity and the surviving categories comprised the definite list. In Studies 2 and 3, which are currently in progress, the novel framework is undergoing international validity tests using an additional 378 responses from employees from English speaking countries (Canada, the U.K., and the United States), and a factor analysis will be conducted.

**Results:** Preliminary results indicate that the strengths mentioned most often in work contexts – different types of intelligence and specific social skills – are not explicitly represented by the existing inventories. This suggests that the novel framework of strengths at work may offer a helpful tool for researchers and practitioners taking a strength-based approach to occupational health.

**Conclusion:** Because people value different things, shooting from the hip when it comes to defining strengths to employees can create subtle opportunities to either impose personal values on them or miss strengths that they themselves would otherwise report. The CIT provides a way of conceptualizing strengths people identify with at work while staying close to the language of the employee, resulting in a representative framework of personally and socially identified strengths at work.

**O55: The Impact of Emotional Intelligence and Emotional Labour on Organisational Citizenship Behaviour: Findings from the Hotel Industry**

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In the hotel industry, customer satisfaction and perceptions of service quality are contingent on positive employee interactions with customers (Jung and Yoon, 2012; Ramachandran et al., 2011). Employee-customer interactions are emotionally laden processes which involve two interrelated constructs of emotion regulation, emotional intelligence and emotional labour. Emotional intelligence refers to specific abilities in the recognition and management of emotive information while emotional labour concerns the display of appropriate emotions. The latter has two basic components, surface acting, which involves ‘faking’ one’s emotions through the staging verbal and nonverbal cues, and deep acting, which involves genuinely experiencing or feeling the emotions that are required (Brotheridge and Grandey, 2002). Organisational citizenship behaviour, on the other hand, are voluntary behaviours that are not part of an employee’s formal job duties but can enhance organisational performance (Organ, 1988). Organisational citizenship behaviour is especially relevant to the hotel industry because it has been related to outcomes such as superior service quality (Yoon and Suh, 2003), customer satisfaction and customers’ future behavioural intentions (Castro et al., 2004).

The present study examines the role of emotional intelligence and emotional labour strategies on organisational citizenship behaviour in 179 hotel employees from Mexico. Results from a path analysis showed that emotional intelligence was related to organisational citizenship behaviour and that differential effects on organisational citizenship behaviour were exhibited for the various
dimensions of emotional intelligence. Emotional intelligence was also positively related to deep acting but unrelated to surface acting. Significant indirect effects for emotional intelligence on organisational citizenship behaviour through deep acting were also found. Findings are discussed in light of practical implications for the hotel industry.

O56: Work Values and Affective Organizational Commitment: A Study on Gen X and Gen Y Blue-collar Workers
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The purpose of the study is twofold. First, we aim to find out the differences in work values between Gen X and Y. Moreover, the study also seeks to examine how work values determine the affective organizational commitment of blue collar workers.

Work values can be defined as underlying desirability criteria determining the individual’s preference for various work aspects such as job attributes, working conditions and work outcomes. Work values were assessed by using 32-item format of Lyons et al.’s (2010) Work Values Survey. There are four factors including Instrumental, Cognitive, Social/Altruistic and Prestige. Instrumental values include fairness, supportive supervision, recognition, salary, job insecurity, etc. Cognitive values are composed of values such as creativity, using abilities, interesting work, freedom, etc. Social/Altruistic values are composed of contribution to society, helping people, moral values, etc. And last of all, prestige values include impact, influence, authority, etc. Affective organizational commitment was measured by using Meyer et al. (1993)’s 6-item scale.

Data were collected from a total of 846 blue collar workers (women 11.9%, men 88.1%) who work at a large food production company in Turkey. 324 workers (38.8%) were born between 1965-1979 and were coded as “Gen X” and 522 workers were born between 1980-2000 and were coded as “Gen Y” (61.7%).

Results of the study reveal that there is not any significant difference between X and Y generations in terms of affective organizational commitment. However, Gen X and Gen Y generations differ in the four factors of work values. The four factors of work values (Instrumental, Cognitive, Social/Altruistic and Prestige) were found to be higher among Gen Y than that of Gen X. The results of regression analysis reveal that, in the case of Gen X instrumental values predict affective organizational commitment. On the other hand, for Gen Y, prestige values have a positive effect on affective organizational commitment. The findings of the study suggest that, affective organizational commitment of blue collar Gen X can be achieved by providing instrumental work aspects such as job insecurity, pay, fairness, etc. On the other hand, blue collar Gen Y’s affective commitment to the organization can be maintained with the use of prestigious work aspects of high impact and influence of job. The results of the study will be discussed with the implications to the organizational setting.

O57: How are Intensified Job Demands Associated with Managers’ Worries about Leadership?
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According to many scholars, current working life is characterised by acceleration and intensification (Kubicek et al., 2015). These phenomena arise from social, and particularly from technological acceleration societies. Work-related implications of this development include, for example: increased work pace and intensified cognitive and mental job demands due to a wider use of digitalization, artificial intelligence and robotization in production and services. In this
study, we use the concept of *intensified job demands* (IJDs) to capture these work-related changes. The aim of the present study was two-fold: first, to investigate the factorial validity of the IJDs scale among managers; and second, to investigate how managers’ perceptions of IJDs are associated with their worries about leadership (WAL). WAL is a new concept defined as the fears managers’ feel and hesitations they harbor about possible negative consequences of their leadership roles and responsibilities (Aycan & Shelia, 2017).

Altogether 1219 Finnish upper white-collar managers participated in the study by responding to an electronic survey in 2017. The participants’ mean age was 52.6 years (SD = 8.7, range 27–69 years) and half of them (51%) were male. The participants represented different sectors and educational backgrounds: professors (37%), business sector managers (18%), researchers, university teachers and other academic experts (9%), MScs in engineering, architecture or a corresponding degree in mathematics or natural sciences (10%) and other upper white-collar managers (16%). IJDs were measured using a recently developed Intensification of Job Demands Scale (Kubicek et al., 2015) that measures five components of IJDs: 1) work intensification, 2) intensified job-related planning and decision-making demands, 3) intensified career-related planning and decision-making demands, 4) intensified knowledge-related learning demands, and 5) intensified skill-related learning demands. WAL was measured with the Worries about Leadership scale (Aycan & Shelia, 2018) covering worries about 1) failure, 2) work-life imbalance, and 3) harm.

The results of confirmatory factor analysis indicated that the IJDs-scale showed a relatively good factorial validity in the managerial data. The results further revealed that the managers’ perceptions of the IJDs were associated with their worries about the consequences of being in a leadership role. The more IJDs the managers reported, the higher were their scores of the three WAL dimensions. The strongest connection was found between the perceptions of work intensification and worries about work-life imbalance.

Based on our results, it seems that IJDs play a significant role in managers’ worries about their leadership role. However, it must be noted that the present study was cross-sectional and focused solely on direct associations between IJDs and WAL. Therefore, further research should investigate longitudinal and possible curvilinear associations between them. In addition, exploring moderating effects in future studies could reveal potential buffering or enhancing factors in this relationship.

**O58: Towards more Sustainable Social Services? A Case Study of Work Environment and Management Control Integration in a Municipal Organisation**

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Previous studies show that social workers experience many problems in the organisational and social work environment. In particular, they experience high workloads and role conflict in their work. Several studies also indicate a low degree of perceived human resource orientation and a lack of openness and dialogue in Swedish social services. These problems in the work environment are also related to stress-related ill health, sickness absence and high staff turnover among social workers, as well as the ability of social services to provide high service quality. The imbalance between job demands and job resources in social services is often argued to be related to the way in which these human service organisations are managed. However, there is a need for more empirical studies within this line of research. Therefore, the present study aims to investigate the relationship between management control systems and work environment, focusing on how management better can integrate work environment issues in the management of the organisation.
A qualitative case study of the social services in one medium-sized Swedish municipality was conducted. The case was selected based on the research project’s intention to identify good examples of municipal social services that work extensively to create good working conditions and a sustainable work environment for the employees. In total 18 semi-structured interviews were conducted with politicians, managers at various levels, social workers, union representatives and staff working with human resources and organisational development. Policy and strategy documents were used as supplementary data. The interview data were analysed using a thematic analysis. The findings show that the Swedish Social Services Act is clearly reflected in the management control system in the organisation, which according to the interviewees means a clear focus on social work and the clients’ needs. The latter is also put forward by the interviewees as crucial for the social workers being able to do a professional and good social work, as well as the organisation's ability to deliver good service quality. Overall, the case demonstrates the close link between service quality and work environment. The interviewees describe service quality as being related to a good organisational and social work environment. The findings indicate the need for awareness among strategic and operational levels in the organisation that improvements of service quality require adequate prerequisites in work such as reasonable workload, support, scope of action and a sense of shared professional ethics adopted by all levels in the organisation. The findings also demonstrate that improvement of both service quality and work environment for social workers and managers require openness and dialogue within the organisation. A conclusion is the importance of openness and dialogue as approaches to improve both service quality and contributing to a sustainable work environment. Openness and dialogue also reflect what political theory labels as important democratic values, which public officials are supposed to balance against economic values and efficacy thinking.

O59: Engaging Leadership and Work Engagement in Public Servants: The Indirect Role of Job-related Affect
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Background: The aim of the study is to extend the Job Demands–Resources model of work engagement by including indirect effect of engaging leadership via two parallel mediators: positive and negative job-related affect. Thus, the current study has two important features: first, it conceptualises mediation of job-related affect as possible explanatory mechanism; and second, it tests a multiple-mediation model, in which the effect of one mediator is controlled for the effect of the other mediator. It was hypothesised that positive and negative affect are mediators in relationship between engaging leadership and the work engagement of public servants.

Methods: A cross-sectional study was conducted in a sample of 238 public servants (74% were women) aged between 21 and 68 years (M = 38; SD = 9.7) and with work tenures between 1 and 43 years (M = 15.3; SD = 10.4). The variables were measured with the Engaging Leadership Scale (ELS, Schaufeli, 2015), the Job-related Wellbeing Scale (JAWS-12, Basińska et al., 2014; Schaufeli & van Rhenen, 2006) and the ultra-shortened version of the Utrecht Work Engagement Scale (UWES-3, Schaufeli et al., 2017). Internal consistency of these methods were from satisfactory (UWES-3 = .68) to high (ELS = .95).

Results: To verify the model structural equation modelling was applied. The total, direct and indirect effects, including the affect-specific indirect effects, were tested. All analyses were performed with Mplus 8.0. The hypothesised model fit the data very well (CFI = 1.00; TLI = 1.01; RMSEA = 0.00; 90% CI [0.00; 0.11]; SMRM = 0.02). The indirect effect of job-related affect was
significant and positive (.14; \( p < .001; 95\% \text{ CI} [.07; .21])
). Further, the analysis of specific indirect effects indicated that the
mediating effect of positive job-related affect was statistically
significant (.16; \( p < .001; 95\% \text{ CI} [.07; .20])
) but this was not the case for negative affect (-.02; \( p = .31; 95\%
\text{ CI }[-.04; .01])
). In addition, the direct effect of engaging leadership on work engagement appeared to be insignificant (\( B = .05; p = .41 \)). Also, a competitive model with work engagement as a mediator between engaging leadership and job-related affect was tested. It turned out to be poorly fitted to the data (CFI = 0.95; TLI = 0.71; RMSEA = 0.12; 90\% CI [0.05; 0.21]; SMRM = 0.04).

**Discussion:** The results partially confirmed the hypothesised model. Specifically, in the studied sample of public servants job-related positive affect, but not negative affect, mediated the relationship between perceived engaging leadership and work engagement. The study contributed to the occupational health psychology by introducing engaging leadership as a resource for work engagement and by empirical verification of job-related affect as an intermediate explanatory mechanism of the motivational process in the Job Demands–Resources model. Particularly, the results add to understanding on how some organisational resources, just like engaging leadership, may be related to more frequent positive feelings that motivate public servants to be vigorous, dedicated and focussed, i.e., engaged in their work.

**O60: Implications/Recommendations for Future Workplace Mental Health Interventions in a Policing Context: A Qualitative Study**

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**Introduction:** A gold standard approach to workplace mental health intervention in the workplace ensures that employees are supported across all states of mental health. This means that both employees who are ‘ill’ and ‘healthy, are considered in the organisation’s strategic approach to employee wellbeing (LaMontagne et al., 2007). Workplace interventions often take place in complex environments and whilst a number of studies have determined that an integrated approach to workplace mental health is effective in reducing prevalence of adverse mental health events (Joyce et al., 2016; LaMontagne et al., 2007), evidence is still lacking on what surrounding contextual factors are necessary to enhance success.

**The current study:** The aim of this research, therefore, was to address this gap in our understanding of how mental health interventions influence behaviour and mental health outcomes in the workplace by conducting a process evaluation of a cluster randomised trial in a large state-based policing organisation.

**Methods:** The research design and study protocol is outlined in (Removed for Blind Review) and was implemented following the CONSORT guidelines. Given that many of the stressors experienced by police officers stem from both individual and organisational sources, it is appropriate to utilise intervention approaches that address both of these levels. The intervention therefore combined the following activities: A leadership development and coaching program for middle and senior managers and mental health awareness training for all members.

Process evaluation methods were used to provide narrative insight into how the intervention worked in practice. This included a qualitative assessment as well as quantitative data collection on intervention activities to assess the extent to which planned activities were carried out, and the extent to which they positively or negatively affected the effectiveness of the intervention. There were a total of 60 interviews conducted over the course of the project with intervention field staff, project participants, and key informants from the host organisation.
Results: Of the 24 stations enrolled in the trial at baseline, 23 completed the trial. One intervention station dropped out early, leaving a total of 11 intervention and 12 control stations completing the trial. The main finding of the quantitative process evaluation was that we were not able to fully implement the intervention as planned, despite extending the project timeline and intensifying efforts to achieve full implementation as the project progressed. Both general (e.g., mobility of staff) and specific (e.g., long lead time to schedule activities) barriers were identified. Overwhelmingly there were positive perceptions and experiences reported by program participants. A few interviewees noted the high cost or feasibility associated with implementing such a program organisation-wide. Nonetheless, a need for the program across the organisation was identified. There were also a number of more specific recommendations, such as, extending the program to upper management (e.g., Inspectors, Superintendents) and delivering training on a group level (multiple stations) so as to economise on delivery.


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Self-actualisation was preached by Greek philosophers as a way to strive for an ethical and successful, eudaimonic life conduct. Within the work context, potentials for personality development have emphasized by the human relations movement, humanistic management, action regulation theory, and self-determination theory.

Today, workplaces feature high demands for learning, self-regulation and flexibility. If matched with domain-specific job resources, these aspects might offer enhanced possibilities for self-actualisation at work. Corresponding with the needs, expectations and abilities of a new generation of employees, patterns of new job demands matched with adequate job resources may enable workers to better adapt to rapid changes in today’s workplaces. Extending conventional models of work characteristics, this study examines time-lagged effects of new job demands and their interactions with matched job resources on indicators of self-actualisation at work.

Two waves of an online survey (time lag: 1 month) provided data of N=732 employees (57.9% women; mean age: 38.9 years; 49.7% highly educated; 30.9% supervisors). Established scales assessed new job demands (perceived employer expectations with regard to learning, self-regulation, and flexibility) as well as three job resources (learning opportunities at work, job control, and boundary control) selected to match these job demands in a domain-specific way. Self-actualisation was assessed by three indicators – intrinsic work motivation, meaning in work, and occupational self-efficacy – reflecting motivational, cognitive and behavioural facets of self-actualisation at work. Reliabilities were satisfactory (t1: a=.70-.89; t2: a=.77-.91). CFA results indicated structural validity of the hypothesised measurement model.

Regressions were integrated into a path model, controlling for gender, age, education, and position. All examined job demands and resources had meaningful associations with indicators of self-actualisation. Cross-sectional results supported the notion that requirements for learning and self-regulation as well as learning opportunities at work, job control, and boundary control) selected to match these job demands in a domain-specific way. Self-actualisation was assessed by three indicators – intrinsic work motivation, meaning in work, and occupational self-efficacy – reflecting motivational, cognitive and behavioural facets of self-actualisation at work. Reliabilities were satisfactory (t1: a=.70-.89; t2: a=.77-.91). CFA results indicated structural validity of the hypothesised measurement model.

Regressions were integrated into a path model, controlling for gender, age, education, and position. All examined job demands and resources had meaningful associations with indicators of self-actualisation. Cross-sectional results supported the notion that requirements for learning and self-regulation as well as learning opportunities and job control, but not demands for temporal flexibility, are associated with self-actualisation. Longitudinal results were more mixed, confirming at least some positive dynamics. Notably, a time-lagged interactive effect of requirements and resources for learning underscored the importance of matching domain-specific demands and supplies for personal development at work.
This study suggests an eudaimonic model of domain-specific new job demands and matched resources in modern workplaces, providing longitudinal evidence on their main and interactive effects on motivational, cognitive and behavioural indicators of self-actualisation at work. Due to the short measurement interval and associated high autocorrelations of outcomes, conceivably only the strongest effects attained significance. Future studies should experiment with longer time-lags and alternative sets of work characteristics, possibly including job stressors as well as social aspects. To promote self-actualisation at work, more attention should be paid to the specific configurations of job demands and job resources in different domains. Work design needs to integrate theory-based approaches to new psychosocial working conditions, balancing requirements and supplies for learning, self-regulation and flexibility.

O62: Cross-lagged Associations between Psychosocial Work characteristics and Depressive Symptoms: Dpanel Models with Fixed Effects

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Background: Depression is a common, burdensome and heterogeneous mental disorder and a major public health concern. Identifying modifiable predictors within the work environment is of importance for prevention. A large number of studies investigating psychosocial work characteristics have found prospective associations with depressive symptoms. Among the most studied psychosocial working conditions are job demands, job control, social support, efforts, rewards, and organisational justice. However, methodological limitations in previous studies such as reporting bias, reverse causation and confounding raises some doubt as to whether the associations are causal. It is still unclear if, or to what extent depressive symptoms also affect the perception of psychosocial working conditions. In addition, personality traits, family history and other pre-employment factors may be predisposition factors associated both with working conditions and depressive symptoms and thus explain the associations. The aim of this study was to examine bi-directional relationships between psychosocial working conditions and depressive symptoms, and simultaneously control for time-stable individual characteristics.

Methods: We included 3947 subjects in the Swedish Longitudinal Occupational Survey of Health (SLOSH), who completed biennial questionnaires on perceived job demands, control, social support, effort, rewards and procedural justice, as well as depressive symptoms in four waves during 2010 to 2016. We applied dynamic panel models with fixed effects, using Structural Equation Modelling (SEM) including both the psychosocial working conditions and depressive symptoms as observed variables. These types of models allow to assess the influence of lagged predictors and simultaneously adjust for time-stable characteristics of the individual such as personality and pre-employment factors, by using variation within individuals. The panel models included lagged, bi-directional paths between independent and dependent variables as well as contemporaneous associations between independent and dependent variables.

Results: The results regarding the contemporaneous effects showed that an increase in job demands (standardised β coefficient 0.021, 95% CI 0.013 to 0.029) and in efforts (standardised β coefficient 0.025, 95% CI 0.014 to 0.035) were contemporaneously associated with an increase in depressive symptoms. In addition, an increase in social support (standardised β coefficient -0.021, 95% CI -0.029 to -0.013), in rewards (standardised β coefficient -0.020, 95% CI -0.027 to -0.013) and in procedural justice (standardised β coefficient -0.022, 95% CI -0.039 to -0.006) were contemporaneously associated with a decrease in depressive symptoms. The results regarding the lagged, bi-directional effects (psychosocial working conditions to depressive symptoms and vice versa) showed no statistically significant associations between changes in these working conditions and changes in depressive symptoms, and vice versa, two years later.
Conclusion: Our results suggest that the associations between these psychosocial work stressors and depressive symptoms, adjusted for time-stable characteristics, may mainly be contemporaneous. A two-year time lag may be too long to detect effects of psychosocial working conditions on depressive symptoms, which might be more short-term. We propose that future research examine temporal bi-directional associations over shorter time lags, which could contribute further to the understanding of causality and temporal aspects of work stress-depressive symptoms relationships.

O63: Does Self-Compassion Works at Work? A Diary Study
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External and internal personal resources take an important role in the stress processes that enable highly resourceful individuals to deal more effectively with stressful situations. Over the long-term this can not only contribute substantially to the protection of mental health but also encourage higher motivation and performance. Self-evaluative traits as self-efficacy and core-self-evaluation are well known in protective personal resources in work stress research. In this study, we would introduce, self-compassion, an alternative way of evaluating oneself and situations when facing difficulties and explore its potential benefits for employees mental health and accomplishments.

The presented research investigates whether state self-compassion reduces daily exhaustion from work, improves motivation (work engagement), and effects work performance (productivity and procrastination). An analysis of whether self-compassion buffers the negative effects of daily job demands, compensates for the lack of the external social support, and facilitates the benefits of job autonomy is presented as well. Results from a one-week daily diary study with 158 employees show that on days that employees are more self-compassionate they are also less exhausted, more engaged and productive and that they procrastinate less. Additionally, self-compassion acted as a moderator in the relationships of job demands and resources with work-related outcomes, where state self-compassion buffered the relationship between daily time pressure and exhaustion as well as between daily social stressors and work engagement. Further, state self-compassion compensated for the lack of daily social support regarding exhaustion and productivity and facilitated the benefits of daily job autonomy on work engagement. There are three primary implications of these findings to work psychology and organizational behavior. First, it would seem that state self-compassion is an important predictor of both daily mental health and performance, even when accounting for the base level of particular outcome, job stressor and resources, and for negative affectivity. Second, as the beneficial effects of having more job control were enhanced when people had higher levels of self-compassion, it would appear that any program that attempts to increase employee control should also increase their self-compassion levels. Finally, it may be helpful to assess and enhance self-compassion when trying to find ways to facilitates coping with work stressors and improve mental health and productivity at work.

O64: Can Mindfulness Increase Emotional Resilience in Social Workers?
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Mindfulness refers to the ability to focus one’s awareness on the present moment, while acknowledging and accepting feelings, thoughts and bodily sensations (Kabat-Zinn 2004). Evidence is accumulating its wide-ranging benefits for health and personal functioning in clinical, community and occupational settings. Mindfulness can also help people adapt positively to unfavourable and challenging working conditions, so has potential to build resilience in complex and emotionally demanding and potentially stressful professions such as social work.
This mixed-method study evaluated whether an eight-week training course in mindfulness practice impacted on several resources and aspects of wellbeing previously linked to emotional resilience in social workers: emotional self-efficacy; reflective ability; compassion (self-compassion, compassion fatigue and satisfaction) and mental health. It also explored participants’ experiences of the training and its effectiveness. An online survey using a range of validated measures obtained data from 26 social workers (85% female) two weeks before the first training session, with follow-up data obtained one week and eight weeks after completion of the course. The intervention was experiential in nature, covering a range of meditation practices and reflective exercises designed to help participants learn ways to reduce the impact of worry and rumination and increase wellbeing. At times 2 and 3, participants were also asked how frequently they were practicing mindfulness and to evaluate the extent to which they considered the training to be useful.

Emotional self-efficacy and compassion satisfaction increased between Times 1 and 2 and compassion fatigue and mental health symptoms decreased. Benefits tended to diminish slightly over time, but some improvement was maintained post intervention. No changes were found in levels of reflective ability and self compassion between the three time points. One week after the training finished, most participants reported that they were using the techniques on a regular basis, but mindfulness practice generally reduced over time. In general, participants evaluated the training sessions positively at both time periods. The findings will be discussed with a view to developing interventions based on mindfulness principles to enhance resilience and wellbeing in social workers.

O65: Investigating the Relationship Between Resilience and Proactive Coping During Job Displacement
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This study explores the under researched reciprocal relationship between proactive coping and psychological resilience for a group of employees experiencing job displacement. Individuals who utilise proactive coping may maintain resilience during job displacement while individuals who have developed higher levels of resilience may utilise proactive coping strategies during time of adversity. In a two-way lagged design pharmaceutical employees (n =99) facing imminent redundancy completed online surveys at two time points, four months apart. Findings show that proactive coping is a significant predictor of resilience during job displacement. Finding also showed that resilience made no significant impact on proactive coping during job displacement. Therefore, employees who engage in proactive coping are able to deal with the stress of a looming redundancy leading to the maintenance of positive adaptation in the form of resilience. By examining proactive coping and resilience within a challenging context, this study expands traditional approaches to coping as an adaptive response to stress but one that also includes proactive strategies.

O66: Toward the Psychologically Healthy Workplace: National Trends as Measured by the American Psychological Association’s Surveys of the U.S. Workforce
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Although the importance of a healthy workforce has come to be generally accepted in the United States, many employers remain frustrated that their health promotion and disease prevention efforts are falling short in terms of both employee and organisational outcomes. Too often, organisations apply a fragmented assortment of programmes or rely on off-the-shelf solutions from vendors and fail to customise their practices to meet the unique needs of their workforce.
Additionally, employers, researchers and consultants typically take a narrow view of health and fail to consider other programs and policies that contribute to employee wellbeing (e.g., employee involvement efforts, flexible work arrangements, opportunities for growth and development, reward and recognition mechanisms). Similarly, with regard to organisational outcomes, even when employers look beyond health risk reduction and health care cost savings, their focus remains on productivity, rather than a more comprehensive view of performance.

Yet, research conducted as a part of the American Psychological Association's Psychologically Healthy Workplace Program suggests that a healthy workplace is not created through health promotion and disease management programs alone. Instead, data consistently indicate that a commitment to such a workplace involves the development of a comprehensive set of programmes and policies that allow employees to optimise their workplace wellbeing. Such optimisation occurs when the organisational system is aligned with the philosophy that employee wellbeing is an important antecedent to overall organisational effectiveness. For example, on average, at the four companies that received APA's 2018 Psychologically Healthy Workplace Awards, 83% of employees say the organisation values training and development, and 88% say their organisation regularly communicates with employees. Wellbeing plays a central role in these organisations, with 87% of employees reporting that their organisation promotes and supports a healthy lifestyle. Nearly 9 in 10 say they recommend their organisation as a good place to work (86%) and feel motivated to do their best (89%).

While it is critical that workplace practices are designed well, based on good scientific evidence, and implemented effectively, equally important is how these programmes and policies are perceived by employees. Psychological factors such as autonomy, control and feeling valued also come into play, as well as issues of trust, fairness, and beliefs about the organisation's underlying motivations. This session will incorporate data from APA’s recent surveys of the U.S. workforce to examine the state of psychologically healthy workplace efforts in the U.S. and explore the impact of psychological factors on employee and organisational outcomes.

O67: Women Underrepresentation on the Job: A Case Study in the Chinese Pharmaceutical Industry
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This paper examines how the phenomenon of women’s numerical underrepresentation is perceived in the pharmaceutical sales industry in China. Previous studies have suggested that sex-differentiated perceptions and organisational factors may contribute to gender underrepresentation. Yet it is not well understood how these elements are connected to foster women underrepresentation in everyday workplaces in the Chinese context. Drawing on identity construction and on-going sense-making, this research attempts to shed light on the job characteristics and people's attitudes at the workplace, by answering the following questions: What are the meanings different actors ascribed to the sales occupation? To what extent are different actors able to (re)construct the male-dominated culture in the sales context? What are the implications of existing reproduction processes of the male-dominated culture for the way people experience their lives in the workplace?

The research methodology is based on a case study at a joint-venture pharmaceutical sales company and discourse analysis was conducted on 18 open-ended interviews. The research finds that the job requirements in the pharmaceutical sales occupation bring pressure on work-family balance, while male colleagues and even female salespeople themselves are (un)consciously reproducing the sales occupation's masculine cultures through three processes:
1) through females' adoption of males' traits (androgyne), 2) by reinforcing gender homophily in informal networks, 3) through males' resistance towards building meritocracy above gender. The findings suggest that initiatives sponsored at different organisational ladders, and by both genders, contribute to the persistence of gender differences in pharmaceutical sales industry.

O68: Integrating Variable- and Person-Oriented Approaches to the Study of Psychosocial Risks Factors for Work-Related Stress: A Gender Perspective
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Gender differences in psychosocial risk factors for work-related stress have been rarely considered as a research focus (Baruch, Biener, & Barnett, 1987). Moreover, when included in research designs, gender generally plays the role of control variable (Nelson & Burke, 2002), as a potential confound that may jeopardise the overall interpretation of research findings. Consistent with the social cognitive perspective of gender differences and their development (Bussey & Bandura, 1999), the present research aims to fill this gap. Using data from over 60,000 Italian workers nested within more than 700 organizations who completed the in-depth psychosocial risk assessment provided by INAIL (Italian Workers' Compensation Authority), the aims of this study are threefold: 1) testing the measurement invariance of the Management Standards Indicator Tool items across gender (Edwards, Webster, Van Laar, & Easton, 2008); 2) examining gender differences in the psychosocial risk factors for work-related stress posited by this instrument; 3) identifying and evaluating different risk profiles for work-related stress within a gender perspective. Results showed that the most stringent levels (e.g., scalar invariance) of measurement invariance of the Management Standards Indicator Tool across males and females holds on the present sample. At the same time, after controlling for age, gender differences in latent scores were trivial although significant for most of psychosocial risk factors for work-related stress, while configurations of psychosocial risk factors for work-related stress derived with latent profile analysis (LPA) showed that gender shapes substantial differences in profiles' membership. Overall, these results highlight the importance of studying psychosocial risk factors for work-related stress within a gender perspective by integrating variable- and person-centered approaches. Theoretical and practical implications will be further discussed in the course of the presentation.

O69: Occupational Psychocardiology: Why There Is a Need for a Gender-perspective
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Substantial evidence is accumulated on the link between psychological variables like depression and cardiovascular disease (CVD). However, recent findings strongly suggest that this risk is gender specific (Langvik, 2016), and there is reason to believe that also occupational factors represent gender specific CVD risk markers. Women in high control-high demand jobs, in typically male-dominated occupations, and combined work-family demands, are at a higher risk of having CVD (Møller-Leimkühler, 2007). In addition, women tend to report more stress and experience more work-family demands (Wieger, Hange, Björkelund & Ahlborg, 2015). However, men but not women, in occupations characterised by high levels of work-demands and little perceived control, have an increased risk of CHD (Lee et al., 2002; Xu et al., 2015). For women, stress related family issues are more critical, and a combination of work-family stress increases the risk of CVD among women (Orth-Gomér & Leineweber, 2005).
In Norway, eight out of ten shift workers are female (Andersen, Køber, & Rønning, 2008). Several studies have confirmed that shift work is associated with risk of CVD (e.g. Ha & Park, 2005). Most studies find that females have less shift-work tolerance than males do, although some studies report the opposite (Saksvig et al., 2011). The link between disorders of sleep and CVD (Naughton, 2016), and higher risk of CVD among individuals who have short sleep duration (e.g. Carroll, Irwin, Stein Merkin, & Seeman, 2015) suggest that an examination of the gender-specific risk of CHD associated with working shift should be further explored.

**Method:** The Nord-Trøndelag Health Study (The HUNT Study) is a collaboration between HUNT Research Centre (Faculty of Medicine, Norwegian University of Science and Technology NTNU), Nord-Trøndelag County Council, Central Norway Health Authority, and the Norwegian Institute of Public Health. HUNT is one of the largest health studies ever performed and is thoroughly described by Holmen and colleagues (2003). It is a unique database of personal and family medical histories collected from 1984 and is still ongoing. 48,289 people participated in HUNT 3. The data was collected by means of questionnaires, interviews, clinical examinations and collection of blood and urine samples. Main outcome variables are fatal MI, Stroke and heart failure. The mortality data will be obtained from the National Mortality Register by combining the mortality database and the HUNT data by means of an 11-digit personal identity number.

All established risk-factors will be controlled for (SBP, cholesterol, WHR, age, smoking, diabetes), and analysis will be run separately for men and women. Psychosocial predictors include Sleep quality, insomnia, Shift work, and Work-family stress. The Swedish Demand-Control-Support Questionnaire (DCSQ) measures the amount of perceived work demands, support from co-workers and leaders and autonomy. Analysis is scheduled for May, and preliminary result will be presented at the conference.

The Regional Committee for Ethics in Medical Research will consider and approve this project. The protocols for HUNT are approved by REK. A specific request for approval will be made for linkage to the mortality register.

**O70: Diversity and Inclusion from a JD-R Model Perspective**
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**State of the Art:** Over the last years, the diversity literature acknowledges the importance of inclusion activities to effectively manage the rising diversity in the work place. However, relatively little is known about the underlying antecedents of this inclusion climate and thus, about what aspects influence the work environment. This influences how jobs need to be designed to increase employees’ perceptions of belongingness and value of uniqueness to reach beneficial outcomes.

**Purpose:** Looking from a Job Demand-Resource Model perspective we offer a theoretical framework which is able to explain how an inclusive climate can be fostered. We expect that job-related demands such as discrimination and harassment, as well as organisational demands like unfair organisational procedures will lower employees’ perceptions of an inclusive work climate. Whereby providing job resources (e.g. autonomy or possibility to participate in decision-making) as well as an inclusive leadership style and organisational resources (e.g. access to information) will help employees to cope with job demands and lead to higher perceptions of inclusion climate in work teams. Moreover, employees’ beliefs about diversity and the degree to which the organisation is diverse may moderate these relationships.
Research/Practical Implications: Previous work on inclusion climate failed to integrate specific job and organisational characteristics as predictors for creating such a desired climate. Organisations which need to manage effectively their diverse workforce can use these conceptual insights to design jobs which foster equality and inclusion among employees. Providing job and organisational resources, while limiting job and organisational demands will foster a work environment where employees feel included which in return leads to improved employee wellbeing, as well as higher behavioural and performance outcomes.

Originality/Value: This theoretical paper is the first to look at specific demands and resources which influence an inclusive work climate. Moreover, it provides insight into how organisations can shape the work environment in regards to offering inclusion and increases the perceptions of employees that they belong, and that their unique contribution is valued.

We are additionally working on testing the model. This involves distributing a survey to employees from the Technical University Eindhoven, and we might be able to present some preliminary results in September.

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Although much research has been conducted to investigate the antecedents of job crafting and how it impacts both inter and intrapersonal work-related outcomes, an integrative theory about the dynamics underlying job crafting behavior and a model that can explain its predictors are still missing. Based on the Theory of Planned Behaviour and on the Job Demands-Resources approach to job crafting, we hypothesised that social norms, attitudes and perceived behavioural control build behavioural intention to craft over time, which in turn fosters actual job crafting behaviors. We conducted a two-wave study with a three-month time interval among a sample of employees (N = 243).

Results of a latent change score analysis showed that injunctive norms predicted a positive change in employees' behavioural intention to craft over time, which in turn positively predicted actual behavior during the study period.

Even though this is the first study that deepens our understanding of the underlying dynamic processes linking cognitive personal and social factors to job crafting behaviours, all measures were self-reports. Also, a time series approach with at least three-time waves could provide more insights on mutual influences, fluctuations and co-variations of the measured constructs over time.

This study provides new empirical insights on the key role of social norms for job crafting behaviors to arise in the workplace. Findings suggest that, among all the antecedents considered, injunctive social norms were the only significant predictors of changes in behavioral intention to craft. This suggests that organisations aiming at fostering their employees’ proactive behaviors in terms of job crafting may be aware of the importance of the creation and communication of a supportive organisational culture to translate their visions into actual employees’ behaviours over time.
O72: The Work-home Interface: Lowering Conflict and Fostering Enrichment via a Job Crafting Micro-intervention
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This study examined the impact of a micro-intervention based on multi-perspective approach on job crafting combining the different current theoretical perspectives (Tims & Bakker, 2010; Vanbelle, 2017; Van Vuuren & Dorenbosch, 2011; Wrzesniewski & Dutton, 2001). We hypothesise that a micro-intervention (i.e. a reasonably short-term intervention characterised by self-guidance via mobile communication technology without intensive contact with a coach or trainer) would increase participants’ job crafting behaviours (self-initiated changes employees make in their jobs in order to optimise their functioning in terms of wellbeing, work-related attitudes and behaviour), as well as their psychological meaning of work (i.e. the amount of significance people perceive in their work). Further, we hypothesised a positive impact on participants experience of work-home enrichment and a negative impact on participants experience of work-home conflict. In addition to the proposed intervention effects, we expected that job crafting would have a positive relationship with work engagement, through work-related psychological meaningfullness. The study uses an experimental design with 100 female working mothers (a purposive sample of employees that is assumed to have high prevalence of conflict and high opportunities for enrichment) ad random distributed between an experimental and a control group. Respondents completed measures pre- and post-intervention. Posttest data are currently being gathered. Preliminary results confirm the ad random division (no difference in education, number of children and home demands between both groups), show good scale reliabilities (all measured on a 7 point scale) and a baseline level of 4.79 (SD = 1.18) for general job crafting behaviour (Vanbelle, 2017), 5.58 (SD = 1.25) for psychological meaningfullness (May, Gilson, & Harter, 2004), 3.59 (SD = 1.38) for work-home conflict (Carlson, Kacmar & Williams, 2000) and 4.34 (SD = 1.09) for work-home enrichment (Carlson, Kacmar, Wayne, & Grzywacz, 2006). No initial significant differences on dependent, independent or mediator variables were found between the experimental and control group. In the pretest job crafting shows a significant positive correlation with enrichment (r = .41, p >.001) and with psychological meaningfullness (r = .369, p > .0001) but not with conflict (r = .029, ns) which partially aligns with our hypotheses. Data will further be analysed and the implications of the findings for work-home interface literature and practice will be discussed.

O73: Job Crafting in Contexts of Autonomy and Dependence
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In the rapid change of today’s workplaces, proactive employees are perceived to be important to organisations, as they anticipate and prepare for changing needs and demands of the job (Grant & Ashford, 2008). Job crafting refers to specific type of proactive behaviour, which employees initiate to better match their jobs with their needs, abilities and interests (Tims & Bakker, 2010). Studies on job crafting have accumulated over the recent years, generally positioning it as idiosyncratic activity, which can be carried out in any type of job (Wrzesniewski & Dutton, 2001). While it is acknowledged that the level of autonomy employees perceive in their jobs determines their perceived opportunities to craft their jobs, the ways individuals initiate job crafting in diverse context of autonomy and dependence remains scarcely studied. Hence, this study set out to explore how jobs are crafted in four organisational contexts, characterised by different levels of autonomy and interdependence. The data consisted of focus-group interviews of 45 employees across four organisations, including an organisation in early childhood education, a medical center, a bank and a software organisation.
The preliminary findings suggest that whereas employees with more autonomy over how they organise their work employed existing processes to initiate job crafting, employees with less discretion created job crafting opportunities for themselves within the boundaries of the social context of work. While job crafting in low autonomy contexts often required coordination with co-workers, others not only limited but also enabled job crafting behaviours in these contexts. Task interdependence, in turn, not only constrained job crafting but also motivated employees to initiate specific behaviours, which aligned with both individual and group goals. Taken together, this study informs managers and practitioners on the social conditions of job crafting behaviours. Theoretical implications will be discussed in the presentation.

O74: Job Crafting Towards Your True Self? The Associations Between Job Crafting, Authenticity, and Employee Wellbeing
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Introduction: We examined the mediating role of authenticity in the associations between job crafting, work engagement and emotional exhaustion. Authenticity refers to individuals' awareness of their deep inner experiences and the degree to which they act in concordance with these inner experiences (Barrett-Lennard, 1998;). Job crafting is a form of a proactive behaviour, whereby individuals optimise job characteristics to align work with personal preferences and abilities. We expected that job crafting would generally contribute to higher levels of authenticity.

Method: Data were collected in a cross-sectional study among 436 candidates from a HR consultancy company that mainly operates within the life sciences branch. The measure for authenticity encompassed the subdimensions of authentic living, self-alienation and acceptance of external influence (Van den Bosch & Taris, 2014). The measure for job crafting included crafting of structural and social resources, challenges, and hindering demands (Tims et al., 2012).

Results: Data were analysed using structural equation modelling using Mplus. Overall, crafting structural resources and challenges tended to contribute positively to the experience of authenticity, whereas crafting social resources and hindering demands tended to contribute negatively to the experience of authenticity. Associations between job crafting and authenticity depended on the specific sub dimension in question, however. The mediation analyses indicated that the experience of self-alienation and acceptance of external influence were important mediators in the associations between the various forms of job crafting, work engagement and emotional exhaustion.

Implications: The results suggest that job crafting may foster the experience of authenticity, with implications for employee wellbeing. Unlike expected, however, some forms of job crafting seem to hinder the experience of authenticity. As such, our study may have provided insight into the underlying mechanisms through which job crafting may help (or hinder) employees to experience higher wellbeing at work.

O75: Poor Quality and Quantity of Sleep: The Role of Managerial Level and Impact on Wellbeing
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Whilst there is now a body of research documenting the effect of poor sleep on cognition, mood and physical health, the role of managerial level as a potential antecedent of poor sleep, and as a factor in determining the self-reported consequences of poor sleep is yet to be fully understood.
This study sought to examine (a) the reported sleep quantity and quality of employees across four organisational managerial levels and (b) the subsequent reported impact on work, social and emotional and physical wellbeing of these four groups. 945 participants, allocated to one of four groups determined by self-reported managerial level in their organisation, completed a questionnaire measuring sleep duration (sleep quantity) and sleep quality (time to fall asleep, and the PSQI) along with completing a new self-report measure of sleep impact across three domains; work (cognition), physical health and social and emotional behaviours (AISE; Ashridge Index of Sleep Effects). Analysis revealed that whilst both sleep quantity and quality were poor regardless of managerial level, sleep quantity did not differ across managerial level, whereas the most senior managers reported significantly better sleep quality (PSQI) than middle managers and those without managerial responsibility. The results also revealed a similar trend in relation to the impact of poor sleep, with the most senior group of managers reporting less impact across all three wellbeing domains. This is the first study, using a working population to examine the role of managerial level as a potential antecedent of poor sleep, and as a factor in determining the self-reported consequences of poor sleep.

O76: Resilience Training for Medical Students: The ‘Resilience Challenge’ Serious Videogame
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Objectives: Our aim was to test a novel organisational resilience training intervention for medical students. The serious videogame, the ‘Resilience Challenge’ (RC) was developed by subject experts and designed for healthcare professionals. The game aims to raise awareness of organisational resilience, and facilitate reflective thinking about adaptive and safe on-the-job decision making. This study explored whether the game may be appropriate for medical students, who are expected to develop resilience as a part of their degree programmes. Specifically, the study investigated whether raising awareness of organisational resilience was related to individual resilience to stress.

Methods: A within-subject experimental paradigm explored whether playing the RC improves resilience scores, as measured by the CD-RISC 10 (Campbell-Sills & Stein, 2007). Thirty-one medical students (Year 3+) from 4 countries completed a two-session online study. In the first session (T1), participants completed pre-test measures and engaged with the RC. In the second session (T2), 7-15 days later, participants completed post-measurement assessments. In both sessions, participants were asked explorative Likert scale questions about acceptability and could provide open-text feedback.

Results: A repeated measures ANOVA did not reveal a significant difference in individual resilience scores between the two sessions, as measured by the CD-RISC, suggesting that engaging with the game did not result in a change in individual resilience to stress. However, valuable feedback was obtained in terms of game utility for the medical student population. For example, 26 participants (83.9%) ‘agreed’ or ‘somewhat agreed’ that the game helped them think through the impact of actions on patient safety, as assessed at T1. Additionally, 17 participants (54.8%) indicated that playing the game had a lasting impact on patient safety decisions, as assessed at T2. However, only 8 participants (25.8%) ‘agreed’ or ‘somewhat agreed’ that they applied game principles in their clinical practice. Open-text comments were also provided by some participants. Whilst some participants noted the game was helpful and engaging, others commented that it would be beneficial to play the game on multiple occasions, with more varied scenarios.
Conclusion: Although this small-scale study did not reveal significant difference in scores, it provided insight into how the game might be developed. Most importantly, the RC should be tailored to different audiences. As the game was originally intended for qualified healthcare professionals, the student population may have found it challenging to apply principles learned. Therefore, investigating the effect of more sustained game engagement using a longer follow-up period may be beneficial. Increasing the number of game sessions, including a wider variety of scenarios/difficulties, may be useful to facilitate learning. This may help medical students better transfer and consolidate learned strategies, as they may not yet have the real-life opportunities to apply their skills. Finally, it may be worthwhile to explore use of the game for newly qualified healthcare professionals, coupled with further longitudinal evaluation.

O77: Work Ability in Employees with Migraine: The Role of Illness Perceptions and Coping
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Previous research has indicated that migraine has a negative impact on employees’ functioning, and is associated with increased absenteeism and presenteeism. Based on the Common Sense Model, the current study examines associations between illness perceptions, coping, and various indicators of work ability in employees with migraine. A self-report questionnaire, including the Migraine Disability Assessment (MIDAS), the Work Role Functioning Questionnaire, the brief Illness Perception Questionnaire (brief IPQ-R), and the Cognitive Emotion Regulation Questionnaire, were completed by 261 employees with migraine.

On average, employees reported 1.9 absenteeism days due to headache in the previous 3 months, and 6.0 presenteeism days (> 50% reduction in productivity due to headache). Controlling for the number of days with headache and pain intensity, illness perceptions and coping significantly predicted an additional 9-12% of the variance in absenteeism, presenteeism, and work role functioning. More specifically, higher concern was associated with higher absenteeism, whereas lower treatment control, lower understanding of the disease, lower positive coping (e.g., putting in perspective), and higher negative coping (e.g., catastrophizing) was associated with higher presenteeism. Furthermore, perceiving migraine as more chronic was predictive of better functioning at work, whereas using more negative coping (e.g., ruminating) was predictive of lower functioning at work. The way employees perceive their illness and cope with it contributes to their work ability. Reducing negative illness perceptions and coping strategies, and strengthening positive coping strategies may help employees augment their work ability.

O78: Career Characteristics and Career Resilience
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Career resilience can be defined as the willingness and ability to adapt to new situations, to overcome adverse career impacts, and to bounce back after the career change (e.g., Luthans, Vogelgesang, & Lester, 2006; Seibert, Kraimer, & Heslin, 2016; Vough & Barker Caza, 2017). Resilience is assumed to be a set of constructive behaviours, scripts of responses and an ability to cope with a setback, a transition, or adversity (1), to be a catalyst or translate this stock of behaviours and attitudes into a strategy and to reobtain equilibrium (2), and to grow through an adaptive process (3) (Britt et al., 2016; Mishra & McDonald, 2017). Resilience for employees grows from the characteristics of adversities: frequency, intensity, and duration (Britt et al., 2016), this builds into a process of resilience which results in functional adaptation of employees.
Consequently, we present an empirical longitudinal study on the process of growth and development of career resilience: the impact of the career characteristics (frequency of transitions, intensity of transition, and duration of employment) on career resilience and the effect of career resilience on career self-management over time.

We tested our hypotheses with a sample of 1238 employees through structural equation modelling with the Lavaan package in R (Rosseel, 2012). We found that the number of (previous) employers and the intensity of the last transition had a positive effect on career resilience, and duration of employment had a negative effect on career resilience. Career resilience had a positive effect on individual career self-management in terms of networking, practical things, and drawing attention, over time. No causal effect was found of career resilience on mobility oriented behavior, however, we found a negative effect of frequency of transitions and duration of employment and a positive effect of magnitude of change on mobility oriented behaviour.

The results showed support for the positive process related to career resilience which can imply that resilience can grow as a result of career characteristics, but that long term tenure can imply a ‘locked-in’ phenomenon which hampers career resilience.

O79: Examining the Mediating Role of Heavy Work Investment Between Work Environment and Work-to-Family Conflict: A Longitudinal Study
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In the interests of both organisational effectiveness and employees’ wellbeing, it is important to identify the work-related variables that influence perceptions of work-to-family conflict (WFC). Moreover, in order to manage human resources effectively in companies, it is important to understand the mechanisms by which the work environment influences WFC. Through the present research, we considered that one possible mechanism refers to two types of heavy work investment, i.e., workaholism and work engagement (Schaufeli, Taris, & Bakker, 2006). Considering workaholism and work engagement together is relevant to shed light on the differences between these concepts. Indeed, even if behaviours of workaholics and engaged workers appear to be similar (i.e., in both cases they often work harder and longer than other people), research suggests key differences between workaholism and work engagement notably concerning the motivations underlying these behaviors (e.g., van Beek, Hu, Schaufeli, Taris, & Schreurs, 2012; van Beek, Taris, Schaufeli, & Brenninkmeijer, 2014).

Therefore, following recent recommendations (i.e., Andreassen, Hetland, & Pallesen, 2013; Molino, Bakker, & Ghislieri, 2016), this research examined the relationships between work environment (i.e., workload and development opportunities), two different types of work investment (i.e., work engagement and workaholism) and work-to-family conflict (WFC) over time. We postulated that, work environment may lead workers to invest heavily in work and that this heavy work investment has an impact on their family life.

Data were collected in a Belgian public administration by means of a three-wave longitudinal survey. Our final sample consisted of 464 employees. Workload and opportunities for development at Time 1 were found to be respectively negatively and positively associated to work engagement at Time 2, which in turn was negatively associated to WFC at Time 3. Only workload at Time 1 was positively associated to workaholism at Time 2 which, in turn, was positively associated to WFC at Time 3. The present study is not without limitations. Even if we
have included some covariates, other factors could have influenced the investigated association. Another limitation is the use of self-reported data which may lead to common-method bias.

Considering the results, two axes of intervention appear to indirectly reduce WFC. On one hand, interventions aimed at decreasing workload will reduce workaholism and increase work engagement. Such interventions could take different forms such as providing workers adequate opportunities to gain control of the amount of time available to spend on various job requirements (e.g., providing training programs focusing on time and stress management skills) or ensuring that tasks are fairly distributed among workers (e.g., ask workers periodically if the current workload is well balanced). On the other hand, interventions aimed at providing opportunities for development will increase work engagement. According to Schaufeli and Salanova (2010), work training programs should be directed particularly at personal growth and development instead of being exclusively content-directed. The key issue for employees to remain engaged in their job is to keep developing themselves throughout their career.

O80: When Mailing Means Failing: Studying the Effect of Workplace Telepressure on Family Role Performance
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ICT-mediated communications facilitate flexible working in many organisations. It is estimated that, on average, 124 business emails are daily sent and received per user (Radicati Group, 2015); and 50% to 70% of the employees handle work-related emails outside their standard work hours (SERV, 2017). Email, as an asynchronous form of communication, allows the receiver flexibility in choosing when and where to handle received mails. Yet, not everyone may make use of such response-flexibility, for instance as employees differ in term of their fixation with being highly responsive to work-related mails. This fixation was recently conceptualised by Barber and Santuzzi (2015) as workplace telepressure, i.e. “the preoccupation with fast response times and the strong urge to respond to asynchronous work-related messages” (p. 174).

Research on workplace telepressure is scare (Barber & Santuzzi, 2015; Grawitch, Werth, Palmer, Erb & Lavigne, 2017). Barber and Santuzzi (2015) found workplace telepressure to be positively correlated with boundary crossings, i.e. using ICT’s to perform work tasks and responding to work mails in the evening. Yet, Grawitch et al. (2017) recently found that workplace telepressure does not have a domain-crossing effect as it was only related to work-related email response behaviours during work hours, and not during nonwork hours. They also illustrated that workplace telepressure is a distinct concept even though it shows conceptual overlap with individual predispositions regarding workaholism, self-control and neuroticism; and with the perceptions of work factors, specifically ICT-responsiveness expectations and work demands/hours. Therefore, it should be noted that when these other variables are considered, the ‘up and above’-effect of workplace telepressure on general wellbeing outcomes remains questionable (Grawitch et al., 2017). The results of this paper help to shed a light on this ambiguity. Moreover, we aim to study the potential boundary-crossing effects of telepressure by not only studying email behaviour outside working hours, but also work-to-family conflict and family role performance. This way, we study if workplace telepressure may be a reason why perceptions of “flexible work access” are shifted to “inescapable work” (Barber & Santuzzi, 2015).

Based on border/boundary theory, recovery theories and theories of self-regulation, we argue that workplace telepressure has a negative domain-crossing effect on family role performance as it may cause work-related email response behaviour during nonwork hours, which may trigger both behavioural and psychological work-to-family conflict (Carlson & Frone, 2003). Also, regardless of e-mail behaviour outside work hours, telepressure may also directly cause
psychological work-to-family conflict. This way, we propose three paths through which workplace telepressure may decrease family role performance. Lastly, we also aim to study how the potential effect of workplace telepressure on family role performance may differ for work-centric, family-centric and dual-centric (Kossek, 2016).

Through convenience sampling, a survey was launched in February 19th, 2018. At the moment of writing, 513 respondents have fully completed the survey. Moreover, 77% indicated we could contact them again for a follow-up survey. This will be launched during the summer and will allow us to make cross-lagged claims about the expected relations.

O81: How Leisure Crafting Influences Family-work Enrichment and Individuals’ Wellbeing and Job Performance: A Moderated Mediation Model
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Introduction: This study aims to expand the Work-Home Resources (W-HR) model (ten Brummelhuis and Bakker, 2012) by analysing the gain spiral process of non-work to work enrichment (NWWE). In doing so, we analyse leisure crafting (LC) as a personal resource and its impact on employees’ wellbeing and job performance through NWWE. Furthermore, we hypothesised that this mediation will be moderated by prevention regulatory focus (PRF) and family supportive partner behaviors (FSPB).

Design and methods: A cross-sectional study using questionnaires was conducted with 130 participants. PROCESS, a macro for SPSS was used to test simple mediation and moderated mediation. This is a suitable macro for small samples sizes.

Results: Results provided empirical support for the mediation and moderated mediation model. We found that NWWE fully mediates the relationship between LC and employees’ wellbeing and job performance and partially mediates the relationship between LC and anxiety. Additionally, results confirm the moderated mediation hypotheses. First, the negative indirect effect of LC on anxiety via NWWE is higher when PRF is low. Second, the positive indirect effect of LC on employees’ wellbeing and job performance via NWWE is higher when FSPB is high.

Conclusions: This study demonstrates that NWWE is a powerful explaining mechanism in the gain spiral process of resources to increase employees’ wellbeing and job performance. Second, leisure crafting provides with resources to enhance NWWE experiences which in turn, improve employees’ wellbeing and job performance. Third, resources -LC, PRF and FSPB- interact to promote the positive mediating effect of NWWE.

O82: Ageing Workers: Health and Wellbeing in Professional Drivers
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In the UK the transport and logistics sector is experiencing a rise in the average age of the workforce. The work of professional drivers can be detrimental to health with the health and safety performance of the sector worse than average. This research project, conducted in the UK by the University of Manchester and the Health and Safety Executive, addresses a gap in the evidence base and provides knowledge of the changing world of work and associated health impacts, as drivers work into older age.
Two phases of data collection involving professional drivers and their managers investigate the impact of working to an older age on driver health and wellbeing. Phase one of data collection is complete, phase two is ongoing. Detailed below, findings include identification of the reported physical and mental demands on older professional drivers, and the associated health consequences. The research project will build and develop a network of transport sector firms, unions and industry representatives. This network will produce and disseminate industry led best practice guidelines relating to age and wellbeing using study findings, and industry knowledge and expertise.

**Phase One:** Qualitative interviews in five medium to large logistics companies were conducted with male HGV drivers over the age of fifty (n=14), and their managers (n=7). Structured interviews explored how professional drivers' working environment could impact on their health over an extended working life. Data was analysed thematically. Drivers reported facing high mental and physical demands, working long and unsociable hours, having difficulty accessing healthy food and experiencing long periods of sedentary work. Negative health consequences include stress, musculoskeletal disorders, tiredness and fatigue and weight related health issues. Drivers reported finding the physical elements of work more difficult as they got older, although they also believed they were able to cope better with mental job demands. Older drivers typically reported having a calmer work attitude and a desire to work fewer hours. Participants believe there are some things that could be done with the aim of improving drivers' health and facilitating good health in an ageing workforce (e.g. access to healthy hot food, understanding managers, good working equipment, information on health and exercise).

**Phase Two:** Phase two will extend the research from HGV to light goods van drivers. Structured interviews will explore the experiences and viewpoints of light goods van drivers and their employers.

Similarities and differences in the health and wellbeing needs of ageing HGV drivers and ageing light goods van drivers will be identified and incorporated into network-led best practice guidelines.

**O83: Experiences of Working after Retirement: A Qualitative Study in the Swedish Health Care Sector**

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Older people represent an increasing share of the population in many countries. While higher life expectancy is a remarkable social achievement, accelerated demographic ageing poses several challenges, particularly to health care, labour market and pensions systems. A greater awareness of the importance to increase the participation of older workers in the labour market and to delay the transition to full retirement has turned retirement into an issue of global significance and an important research topic.

Notwithstanding the increasing flexibility and heterogeneity in the exit pathways from employment to retirement, most research have focused on the decision regarding when to retire; while fewer studies have investigated the dynamics of engagement in post-retirement work, or bridge employment. This form of employment is becoming more common in several countries, including Sweden, where between 2010 and 2015, the number of employed people aged 66–74 has increased by 36 percent. Furthermore, qualitative studies, allowing for an in-depth understanding of the complexity of the topic, remain scarce.
This study aimed to explore the transition to retirement, the motivation to engage in bridge employment and experiences of working after retirement among assistant nurses. The study used Interpretative Phenomenological Analysis to analyze data from semi-structured interviews with seven retired assistant nurses working at a Swedish hospital. The interviews focused on retirement decision-making, experiences of working after retirement and ageing issues. The following super-ordinate themes were identified: the retirement process, meaning of retirement, functions and meaning of work, drivers to continue working after retirement, working as an assistant nurse after retirement and the experience of ageing.

In this group of assistant nurses, bridge employment seemed to allow for a gradual adjustment to retirement, which in turn contributed to their wellbeing. Interviewees did not plan for their retirement while some would have preferred to do so. Full-retirement was regarded as stagnation and “the end of the road”, while work was valued positively. Work defined one’s existence and identity, provided a sense of purpose and belonging to the society, was a source of social contact and nurturing, a physical and mental health booster and postponed ageing. Interviewees reflected much on their reasons to continue working: Feeling able to work and the absence of major health problems was, not surprisingly, a major driver, but other factors were of equal importance, such as being intrinsically motivated to work and feeling appreciated and needed at work. Interviewees regarded their job as challenging, varied and not particularly demanding. Their contacts with the patients and being able to help others was perceived as highly rewarding and a prominent reason for continuing to work. Having control over working time and opportunities for recovery were also much valued. Interviewees reported some improvements that came with ageing, but also felt some limitations, which they tried to compensate for at work. These results may contribute to a further understanding of issues motivating people to continue working as assistant nurses, an occupation that plays an important role within the health care sector.

O84: Workplace Practices Predict Retirement Intentions via Three Critical States
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Developing ways to extend working lives in meaningful ways can benefit individuals as they remain active at work and also organizations as they retain necessary skills and knowledge. Predictors of retirement decisions reside at the individual, job, organizational, and broader socioeconomic levels. Of those, workplace policies and job design are amenable to organizational interventions and change and therefore most important to understand how they impact on retirement decisions. We carried out a comprehensive review of the literature which identified three mechanisms by which workplace policies and job design exert their effects: work engagement, workability, and future time perspective. Hierarchical linear modelling on survey data from c.1300 individuals in three organizations and 12 workplaces provided evidence for such mediation. Specifically, work engagement, workability, and future perspective had indirect effects on retirement intentions after controlling for demographics. These findings have important implications for developing jobs and workplaces that can encourage decisions to delay retirement. Understanding the causal processes and drivers for retirement intentions can inform feasible initiatives to enable individuals to remain actively involved in the labour force.

This work is supported by the European Union Programme for Employment and Social Solidarity - PROGRESS (2007-2013)
Ageing is often associated with changes in the physical and mental resources as well as work demands. The extension of working lives and the ageing-related changes can adversely impact on employees’ work ability. This study is one of the first to provide qualitative evidence on the conditions and workplace practices relevant to older workers’ work ability as experienced by managers and employees.

The aim of the study was to identify the workplace practices that are supportive of older employees’ work ability. It was based on a thorough examination and review of the relevant literature on older workers’ participation at work and work ability, as well as the development of a multilevel model. To address the aim of this study qualitative data was collected via semi-structured individual interviews with HR and senior/line managers as well as focus groups with employees from two organisations in the UK. Thematic analysis was used to analyse the data. The first analysis indicated the workplaces practices as implemented and perceived by managers and employees respectively, that could be relevant to older workers’ work ability and employees’ participation at work as they age. Additionally, the initial findings showed the conditions and contextual factors that could affect how workplace practices are implemented and perceived. Finally, this study contributes to the development of a sound and practical understanding of the workplace practices that could support and harness employees’ potential at work as they get older.

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O86: Generational Differences in the Workplace: Myth or Reality?  
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Introduction: The existence of up to five generations within the work environment, i.e. the Silent Generation/Traditionals, Baby Boomers, Generation X/Gen Xers, Generation Y/Millennials and Generation Z/iGeneration, has raised queries on the differences, if any, that exist between these groups. There are hypotheses that they differ in work values, expectations and entitlements. However, the research to date does not provide definitive evidence on how these groups perceive and respond to work-related outcomes. This present study seeks to add to the evidence by exploring attitudes of the Traditionals, Baby Boomers, Generation X, and Generation Y on various work-related outcomes, i.e., work-life conflict, job satisfaction, organisational commitment, and turnover intentions. Previous discussions on differences between these groups have postulated that these are areas on which the groups could differ. Method: The study used a cross-sectional design, which included collecting the data using an online survey. The participants completed measures of work-life conflict, job satisfaction, organisational commitment, turnover intentions, busyness, positive and negative affect (PANAS, satisfaction with life, self-efficacy, psychological job demands, co-worker social support, job autonomy, and demographic information.

Analysis: The data were subjected to various analyses. These included psychometric testing to assess the robustness of the variables, correlation analyses and multivariate analysis of covariance (MANCOVA). These analyses provided insight into the nature of the relationships and the interdependence of the factors in the present study.
Results: The participants \((N = 462)\) were between 17 and 76 years old \((M = 31.23; SD = 14.27)\) and consisted of more women than men \((M = 1.79; SD = 0.41)\). The MANCOVA consisted of the four dependent variables of work-life conflict, job satisfaction, organisational commitment, and turnover intentions; age recorded into three groups of Traditionals/Baby Boomers, Generation X, and Generation Y, which was entered as a fixed factor; busyness, social support, PANAS, satisfaction with life, self-efficacy, psychological job demands, co-worker social support, and job autonomy were entered as covariates. The overall model was not significant indicating that the fixed factor of age, as categorised into the three groups, did not affect the dependent variables. However, the univariate tests showed that age did affect organisational commitment, with the group of Traditionals/Baby Boomers more likely to be committed to their organisations. The factors that affected on or more of the dependent variables were busyness, satisfaction with life, self-efficacy, demands, social support and autonomy.

Discussion: Diversity in the workforce is a reality, whether this is in respect of age, gender, disability or ethnicity, and which supports the need for an inclusive work environment. This present research provides insight into the perceptions of three generations of workers. It showed that the three generations did not differ in their ratings of work-related outcomes and as such these differences might not be relevant on which to focus extensively. The work characteristics that affected this sample were those that have been shown previously to impact, such as having too much to do and not enough control to manage the work day. These issues will be discussed.

O87: Rumination As a Mediator Between Work-stress and Sleep Disturbances Among British School-teachers
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Work-related stress among school teacher has been commonly reported in the literature. Several studies have also shown that sleep disturbances associated stress are frequent among teachers. Besides the direct impact of exposure to stressors, the role of cognitive reactivity has come to gain increased attention in the analyses of work-related stress and its consequences. Several studies have demonstrated that perseverative thinking and ruminating about work-related stressors prolongs the stress reactivity, even when the actual exposure has ended.

Purpose of the study: To analyze the possible role of work-related rumination as a mediator between in the relationship between job stress and sleep quality.

Method: The study had a cross-sectional design, and the sample consisted of 1344 British school-teachers from all over UK (80% females; Mean age 39 years), working in all educational levels – from primarily to secondary school level. Teacher stress was assessed using the Teacher Stress Inventory (Borg et al., 1991). This is a 20-item questionnaire scored on a 5-point Likert scale, with responses ranging from no stress (scoring 0), mild, moderate, much and extreme stress (scoring 4). Ratings were averaged to produce a total job stress score ranging from 0–4. The Cronbach alpha for this scale was .85. Rumination was assessed using the Affective Rumination factor of the Work-Related Rumination Questionnaire (Cropley et al., 2012). Response options are on a five-point scale (1 = rarely or never, to 5=very often or always). The Cronbach alpha for this scale .87.

Results: A path analysis showed that work-stress had a significant direct main effect on sleep quality \((r_{xy}=0.30; P<.01)\), as well as on work-related rumination \((r_{xy}=0.26; P<.01)\). Work-related rumination was shown to be significantly related to sleep quality \((r_{xy}=0.31; P<.01)\), and thus contributed to the relation between teachers stress and sleep quality, as a mediator. The highly significant Sobel test indicated the presence of a true mediating effect.
Conclusion: Besides direct exposure to the stressors, the results thus indicated that perseverative work-related cognition also served as an important component of the stress process, as it amplified the negative outcomes of stress exposure. Besides improving the actual working conditions in the educational sector, techniques supporting the individual teacher to mental detach from work during non-work time may be advantageous to reduce the negative impact on wellbeing of the working conditions in the school system. A previous meta-analysis has shown cognitive-behavioral interventions to be most effective strategy for work-related stress management.

O88: Antecedents of Stress and Wellbeing: A Comparison Between Migrant and Native Workers in Spain
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We live in more multicultural and ethnically diverse societies and all countries experience emigrant and immigrant flows. Spain has been a quite paradigmatic example as it was a country that mainly received immigrant workers at the beginning of 2000 (due to its fast economic growth and the demand of low-skilled workers) and has become a country of emigrant workers since 2009 as a result of the economic recession, which made the labour market contract and damage the employment and working conditions.

It is clear that flows of migrants, in general, bring benefits for countries and the production system but, in many cases, those benefits are at the expense of the wellbeing and working conditions of migrant workers. It is known that migrant workers represent one of the most vulnerable social groups of workers as they are exposed to worse employment conditions than natives, which get even worse in periods of financial crisis, suffering from higher levels of stress that affect their personal wellbeing.

In this sense, we decided to conduct a study based on information from self-reports compiled in the last Spanish Survey on Working Conditions (n=8,508), comparing the answers obtained between sub-samples of migrant workers and native workers. From these answers, we performed a confirmatory factor analysis that yielded 4 main psychosocial factors (workload, social support at work, autonomy and insecurity). We then carried out a multivariate analysis in which we considered as independent latent variables the four aforementioned factors and as dependent variable the absence of psychological discomfort, expressed as stress, anxiety or fatigue. The resulting model had good fit indices (RMSEA = .052 ; p-value = .000; CFI = .913; GFI = .936). The comparison of the model in both sub-samples showed that only workload was significantly related with wellbeing in the case of migrant workers, whereas social support and insecurity had a non-significant relation.

To sum up, our study results prove that there is lower prevalence of wellbeing and absence of symptoms of stress as well as fewer antecedents among migrant workers. There may be several explanations to this phenomenon. On the one hand, migrant workers may develop better coping strategies and resilience against adverse working conditions than native workers. This fact is in line with the findings of other authors. But, on the other hand, we must take into account that psychological wellbeing perceptions are culturally subjective so cultural differences might play a role in these findings.
O89: Multiple Bosses, Incivility and Health: The Positive Effect of Role Clarity
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Nowadays, the complexity of organisational settings increases the demands workers need to cope with. An example of this complexity is showed by Arlington and Baker (2000) who introduced the concept of multiple accountabilities (MA) which refers to having to report to several individuals at the same or/and at higher levels of the hierarchy. MA might generate conflicting expectations between supervisors, being a stressor for people involved and a prejudicial factor for workers’ wellbeing. When such stressor is experienced during a long time, it might be a source of burnout.

Moreover, drawing from the Social Power Theory (French & Raven, 1959), MA might be a source of Workplace Incivility (WI; Andersson and Pearson, 1999), which refers to low-intensity deviant behaviors characterised by perpetrators’ ambiguous intent to harm the victim. WI might act as an instrument to reaffirm power (Cortina, 2001) and people who have MA might be more exposed to such negative dynamics, with a detrimental effect for their wellbeing. However, and according to the Job Demands-Resources model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001), some resources, such as role clarity (RC), might moderate the negative effect of MA. Clarify roles might empower workers helping them to manage with multiple reports.

The goal of this research is to analyse the effect of MA on burnout through WI. Moreover, we are going to assess if RC moderates the effect of MA on both WI and burnout. A total of 249 people employed at a multinational organisation completed an online questionnaire. 52.6% of the sample were women; the age of 44.2% of workers ranges between 40 and 49 years old. Controlling for age, sex and education, the macro PROCESS, model 8, was used to test the moderated mediation of MA on burnout mediated by WI, with the paths between MA and WI, and MA and burnout moderated by RC.

Results showed a significant interaction between MA and RC (b= -.25, t(242)= -2.87, p<.01) predicting WI. The relationship between MA and WI is significant at all levels of the moderator but its magnitude diminishes at higher levels of RC. Moreover, a significant interaction between MA and RC exists predicting burnout (b= .18, t(241)= 2.52, p<.05). Results show that higher levels of MA always predict higher levels of burnout, but when MA is low, lower levels of RC enhance burnout. Data for the index of moderated mediation demonstrated that the bootstrapped 95% confidence interval for burnout ranges from -.109 to -.016, indicating a conditional significant indirect effect. The confidence interval for mediation through WI excluded zero at any level of the moderator.

This study has several implications. At a theoretical level, we extend the current knowledge about MA; moreover, we demonstrate that MA is an antecedent of WI and burnout. We also demonstrated the positive effect of RC. At practical level, organisations should be aware of RC positive effect when demands, such as MA, are present. Organisations should improve such resources, clarifying expectations and fostering open communication between people involved.

O90: From 8-h Shifts to 12h-Shifts: What Advantages for Occupational Health? A Longitudinal Study in an Intensive Care Unit
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The aim of this research is to study the impact of a change from 8-h shifts to 12-h shifts for health care providers (HCPs). In hospital, the proportion of HCPs who work in 12-h shifts is increasing. This change is desired as much as by the hospital authorities who expect to save money by it as
from HCPs who wish to go to work less often and improve their work life balance (Harris et al., 2015; Schoenenberger Gilibert & Banovic, 2015). However, despite the advantages, the impact of 12-h shifts is being questioned for two reasons.

First, the field of occupational health psychology sheds light on the issue of shift work. If researchers agree about the advantages for work-life balance, there is no consensus about the impact on wellbeing and occupational health (Harris, Sims, Parr & Davies, 2015; Ferguson & Dawson, 2012). HCPs feel that they can organise their tasks more easily in a 12-h shift than in an 8-h shift (Schoenenberger, et al., 2015). The Job Demand Control model (Karasek, 1979) and J-DR model (Demerouti, Bakker, Nachriener, Schaufeli, 2001) show that good job control prevents stress (Thompson & Prottas, 2006) and burnout (Leiter & Maslach, 2009).

H1: We shall compare changes in job control and the rate of burnout of works in both types of shift (8h-shifts vs 12-h shifts). The hypothesis is that job control is better when the HCPs work in 12-h shifts than in 8-h shifts.

Secondly, change from 8-h shifts to 12-h shifts can be studied in the context of resistance to change. Indeed, organisational change is known to increase employees’ stress (Cherkaoui, Jahmane & Montargot, 2017; Gibbons, 1998; Tavakoli,). Affective commitment to the change affects the result of the change for employees. People who have a positive attitude to the change will have more support for and less resistance to it (Meuniers, 2010). Then, affective commitment and support for the change may lead to other positive effects such as less stress and less burnout.

H2: We shall study the link between the perception of change and the difference of perceived stress before and after the change. Our hypothesis is that HCPs who actively support the change will feel less stress in 12-h shifts than in 8-h shifts.

This longitudinal research takes place in a French intensive care unit, which is changing from an 8-h shift to a 12-h shift. The methodology is based on questionnaires and interviews one month before the change in shift-length and one month after the change (Time 1 February - March 2018; Time 2 April - May 2018). The questionnaire contains Karasek and Theorell’s scale. The section on Emotional Exhaustion is from the MBI and the scale of resistance-support to change from Meuniers (2010).

The population is composed of HCPs: nurses and nursing auxiliaries in an intensive care unit. The collection of data is in progress.

O91: How Mindfulness Influences the Relationship Between Affective Daily Events and Wellbeing at Work
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Purpose: Mindfulness is characterised by an active mindset determined by novel-distinction drawing resulting in being more situated in the present moment, more sensitive to the context and to the different experiences, and also guided by rules and routines. Research on mindfulness has generally shown that its causes relate to characteristics of both the individual and the work experiences. Diverse studies have also demonstrated that mindfulness has beneficial effects regarding health and wellbeing. Despite its importance, empirical studies exploring mindfulness at work are scarce. Plus, the role that mindfulness plays on the relationship between work-related daily events and wellbeing is unknown. Thus, we aim to explore the relationship between work-related daily events, mindfulness and wellbeing. We propose a model suggesting that work-
related daily events induce immediate affect, and that those affective states enhance or decrease wellbeing. We further propose that mindfulness can mitigate negative affect and its negative outcomes, and that it can broad the positive effects of positive affect on wellbeing.

**Design:** A diary study with workers (N = 52) from diverse job sectors. Individuals reported daily events, immediate affect and wellbeing for four consecutive working days.

**Results:** Results support our model and suggest that diverse work-related daily events increase the likelihood to experience affective states at work which, in turn, will influence workers’ wellbeing. Plus, mindfulness buffers the negative effects that daily hassles have on employees’ wellbeing, and enhances the positive effects that daily uplifts have on wellbeing.

**Limitations:** The self-reported nature of the data, and the sample size limits the generalisation of our results.

**Practical Implications:** This study extends previous findings on mindfulness at work and its consequences for employees’ wellbeing. In particular, results evidence the relevant role that mindfulness practices may have to mitigate the negative effects of daily hassles in the workplace.

**Originality:** This study is one of the first daily studies on mindfulness applied to organisational settings. Plus, it establishes a link between specific work-related daily events to mindfulness, and wellbeing.

**O92: “Good manners” at Work: The Mediating Role of Civility Between Structural Empowerment and Mental Health**

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Civility consists of behaviours that show respect for others. The concept includes support and cooperation acts, as well as the existence of fair conflict resolution processes at work (Osatuke et al. 2009). Workplace civility can impact burnout, job satisfaction and employee retention (Leiter et al., 2012; Yanchus, Periard, & Osatuke, 2017). It might have a direct or indirect effect on worker’s mental health (Day & Leiter, 2014). Lack of respect at work can diminish performance and emotional wellbeing (Leiter & Patterson, 2014). Social interactions at work are a way to experience the organization (Leiter & Patterson, 2014), and a way to have access to power structures that allow workers to have a high performance (Kanter, 1981; Laschinger, Finegan, Shamian & Wilk, 2001).

**Objective:** To determine civility’s mediator effect between structural empowerment and mental health.

**Method:** A sample of 303 health professionals (including doctors, nurses, operational assistants and technicians) (77% female; Mage = 35 years, SD = 10) working in a Hospital in the Lisbon area filled out civility, structural empowerment and mental health scales. The role of civility as a mediator was analysed using Hayes Process (models 4 and 14, with 5,000 bootstrap samples and a 95% bias-corrected confidence interval). Workplace civility was measured with the CREW Civility Scale (Osatuke et al., 2009); structural empowerment was measured with the CWEQ-II (Laschinger, Finegan, Shamian & Wilk, 2001), comprising four dimensions (opportunities, information, support and resources); mental health was measured with the respective subscale from MOS SF-36V2.
**Results:** The tested model explains 10% \((p = .00)\) of mental health variability. The direct effect of structural empowerment over mental health is .26 \((p = .00)\), and the total effect is .28 \((p = .00)\). A modified model, including years working at the hospital as a moderator between civility and mental health indicate that working years have a negative effect on mental health \((b = -.11, p < .05)\), but its interaction with civility shows a small positive effect on mental health \((b = .002, p < .05)\). Civility’s effect increases as years of service at the hospital increases, but this effect is only significant for high levels of civility.

**Conclusions:** The positive structural working conditions provided by the hospital positively contribute for a better mental health of the workforce. The effect of those structural conditions can be amplified by high levels of civility at work. High levels of civility can counteract the negative effect of increased years of service at the hospital.

**O93: The Relationship Between Workplace Civility, Efficacy Beliefs and Work Engagement in Portuguese Hospitality Workers**

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**Background:** Workplace civility refers to behaviours that display respect, support, cooperation and fair conflict resolution at work (Osatuke et al. 2009). As a key element of the organizational climate, workplace civility has been associated with several important outcomes, such as lower interpersonal mistreatment and burnout, and higher job satisfaction and employee retention (Leiter et al., 2012; Yanchus, Periard, & Osatuke, 2017). However, the extant literature on workplace civility favours healthcare service providers from the US and Canada, and little is known about this phenomenon in non-healthcare workers from other countries.

The hospitality and tourism industry is a key driver of the Portuguese economy. Although employees are expected to provide a high-quality service to ensure customer satisfaction and loyalty, stressful working conditions, poor occupational health and high employee turnover are well-recognized challenges within the hospitality industry (Han et al., 2016; Nitzsche, Ribeiro, & Laneiro, in press). More empirical research has been called for to determine the predictors and mediators of hospitality employees' work engagement (Lee & Ok, 2015).

**Aim:** Drawing on conservation of resources (COR) theory, our aim was to test a model linking workplace civility to work engagement, directly and indirectly through efficacy beliefs.

**Methods:** Data were collected from 356 employees working in the Portuguese hotel industry (56% male; M age = 34 years, SD = 11 years). Workplace civility, efficacy beliefs and work engagement were measured with the 8-item CREW Civility Scale (Osatuke et al., 2009; \(\alpha = .90\)), 6-item Professional Efficacy scale (Schaufeli et al., 1996; \(\alpha = .85\)) and 17-item Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker, 2003; \(\alpha = .94\)), respectively. Our hypothesized model was analysed with the PROCESS macro (version 2) for SPSS (version 23), using 5,000 bootstrap re-samples and a 95% bias-corrected confidence interval.

**Results:** As expected, workplace civility had a positive direct effect on work engagement \((\beta = .34, p < .001)\) and efficacy beliefs \((\beta = .33, p < .001)\), with efficacy beliefs positively predicting work engagement \((\beta = .50, p < .001)\). Furthermore, workplace civility exerted a significant indirect effect on work engagement through efficacy beliefs \((\beta = .16, SE = .03, 95% CI [.11, .22])\), as hypothesized. Overall, our model explained 47% of the variance in work engagement.
Limitations: Due to the cross-sectional nature of our study, causal relationships between the study variables could not be confirmed.

Originality: To the best of our knowledge, this is the first study to examine the relationship between workplace civility, efficacy beliefs and work engagement in employees from the hospitality industry.

Practical Implications: The results of our study provide empirical support for integrating workplace civility in hotel management practices to enhance key personal resources and the psychological wellbeing of hotel employees.

O94: Beyond Differences in Opinions: Towards a Theory of Micro-Coordination Conflict
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Conflict theories focus on disagreements as triggers of conflicts (Paletz, Chan, & Schunn, 2017; Weingart, Behfar, Bendersky, Todorova, & Jehn, 2015), but largely neglect that impaired coordination of task execution may induce conflict in teams characterized by very tight coordination requirements, such as surgical teams (Mitchell et al., 2011). Referring to such coordination problems, we introduce the concept of micro-coordination conflict.

In addition to research by Barki and Hartwick (2001) and Mitchell et al. (2011), our considerations are based on observing instances of irritated behaviours in surgical teams (Keller et al., 2017). Of 340 events observed during 137 abdominal surgeries, 183 were triggered by workflow interruptions after coordination problems (surgeon: “I need a 4.0 NOW! If this were an exam, you would have failed!”); 150 involved feedback / teaching, mostly as a reaction to residents not performing well (e.g. “if you do this, you will cut these vessels”), and none included a classic disagreement. Impairment of coordinated task performance was thus the most important reason for irritated behaviours, or incivility (Andersson & Pearson, 1999).

Micro-coordination conflict: We define micro-coordination conflicts as episodes in which team members express irritation about the quality of coordinated performance within the team. Important elements of micro-coordination conflicts are goal obstruction, additional mental demands, and a disrupted flow experience, but also attribution processes.

Goal obstruction: Even minor coordination problems can be disruptive and impair the precision of fine-coordinated movements and thus jeopardize smooth performance (e.g. cutting too close to a vessel after being distracted by a coordination problem). This threatens performance goals, making irritated behaviours likely (Spector & Fox, 2005).

Mental Demands: Coordination problems enhance cognitive demands (Baethge & Rigotti, 2013); they require additional attention (e.g. focusing on obtaining a surgical instrument), while keeping the initial state in working memory, so that the original task can be resumed. Even if performance impairments are averted, compensatory effort (Meijman & Mulder, 1998) is needed, which may be aversive and also may make incivility more likely by impairing self-regulation (Baumeister, Vohs, & Tice, 2007).

Disrupted Flow: Challenging activities often involve high dedication and absorption (Bakker, Demerouti, & Sanz-Vergel, 2014; Csikszentmihalyi, 2014). Interruptions of such activities due to coordination impairments should be irritating by themselves (Spector & Fox, 2005).
Attribution Processes: Attributing a coordination problem to someone who is not performing as expected adds illegitimacy to the performance constraint involved (Cropanzano, Byrne, Bobocel, & Rupp, 2001). Irritation then is likely to be expressed strongly and to include personal blame.

Implications: Conflict theory should be extended to cover conflicts triggered by impaired coordination of task execution. Such problems are pertinent in teams needing precise coordination of physical activities, for instance surgical teams, construction teams, or restaurant kitchens. Such research requires a careful task analysis. Regarding practice, efforts to prevent team conflict should go beyond interpersonal behaviour (Leiter, Laschinger, Day, & Oore, 2011) to include improving task coordination, and supporting the development of shared mental models of task- and teamwork, which has been shown to improve micro-coordination.

O95: Workplace Bullying and Workplace Violence as Risk Factors for Cardiovascular Disease: a Multi-cohort Study
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Aims: To assess the association of bullying and violence at work with cardiovascular disease in men and women.

Methods: Participants were 80,573 working individuals aged between 18 and 65 years and free of cardiovascular disease in three cohort studies from Sweden and Denmark. Exposure to workplace bullying and violence were measured at baseline using self-reports. Participants were linked to national health and death registers to ascertain incident cardiovascular disease, including coronary heart disease and cerebrovascular disease. Marginal structural Cox regression was used for the analyses and study-specific results were combined using meta-analysis.

Results: Nine percent reported being bullied at work at baseline. In a mean follow-up of 3.8 years, 760 incident cardiovascular disease cases were identified. After adjustment for age, sex, country of birth, marital status and educational level, being bullied at work versus not was associated with a hazard ratio of 1.59 (95%CI 1.28-1.98) for cardiovascular disease. Corresponding population attributable risk for workplace bullying was 5.0%.

We observed 12% reported being exposed to workplace violence or threats of violence within the past year. In a mean follow-up of 12.4 years, 3226 incident cardiovascular disease cases were detected. After adjustment for age, sex, country of birth, marital status and educational level, experiencing workplace violence versus not was associated with a 1.25-fold (95%CI 1.12-1.41) higher risk of cardiovascular disease. Corresponding population attributable risk for workplace violence was 2.9% respectively.

The excess risk remained similar in analyses addressing follow-up length, sex-specific effect and additional adjustments on lifestyle factors and mental illness. Dose-response relation was recoded for both workplace bullying and violence ($P_{\text{trend}}<0.001$). There was little heterogeneity in study-specific estimates.
Conclusion: Bullying and violence at work are common, and the results indicate that being exposed to these adverse behaviours is associated with an increased risk of cardiovascular disease. These findings underscore the importance of preventive strategies aimed at reducing negative social behaviours at work.

O96: Role Clarity, Supervisor Conflict, and Employees’ Job Performance: The Modifying Effect of Transformational Leadership and Shared Mental Model
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Introduction: As major job stressors, relationship supervisor conflict involves interpersonal animosities and incompatibilities; task supervisor conflict happens when there are disagreements about the content and outcomes of work tasks (Jehn, 1995). Since supervisors are responsible for task assignment and clarification, the extent to which employees understand their work-related responsibilities (i.e. role clarity) could be an antecedent of both relationship and task supervisor conflict (H1). In addition, transformational leadership (TFL) is defined as leader behaviours that alter the values and norms of their employees in such a way that motivates employees to perform beyond expectations (Yukl, 1989). Coupled with role clarity, employees experiencing high TFL will be less likely to have relationship and task supervisor conflict than employees experiencing low TFL (H2). Both relationship and task conflict have been associated with poor performance, however, the findings regarding the task conflict-performance relationship have been inconsistent. We propose that shared mental model (SMM), defined as knowledge structures held by supervisors and their employees that help them arrive at common task-related expectations (Bannon-Bowers, Salas, & Converse, 1993), has the potential to promote more constructive discussions when facing task conflict. Therefore, task conflict will be positively related to employee performance when SMM is high. When SMM is low, task conflict may escalate to more intense conflict, and consequently will be negatively related to employee performance (H3). Taken together, we tested two moderated mediation models: 1) the moderating effect of TFL on the mediational relationship of role clarity, relationship supervisor conflict, and employee performance (H4); and 2) the moderating effect of both TFL and SMM on the mediational relationship of role clarity, task supervisor conflict, and performance (H5).

Method: Participants were 227 employees and 162 supervisors. Employees provided data on scales measuring role clarity (Rizzo, House, & Lirtzman, 1970), relationship and task supervisor conflict (Jehn, 1995), TFL (Bass & Avolio, 1990), and SMM (Cannon-Bowers, Salas, & Converse, 1991). Supervisors provided data on scales measuring SMM and employee performance (Podsakoff & MacKenzie, 1989).

Results & Discussion: Supporting H1, role clarity was positively related to relationship and task supervisor conflict. Supporting H2, TFL moderated role clarity in relation to relationship and task supervisor conflict, with stronger relationships when TFL was high rather than low. Supporting H3, SMM moderated task supervisor conflict in relation to employee performance. Task supervisor conflict was positively related to employee performance when SMM was high but the relationship was negative when SMM was low. Using bootstrapping method with the PROCESS macros (Hayes, 2013), we found support for the two moderated mediation models. The indirect effect of role clarity on employee performance through relationship supervisor conflict was dependent upon the levels of TFL, supporting H4. The indirect effect or role clarity on performance via task supervisor conflict was dependent upon the levels of both TFL and SMM, supporting H5. This study adds significant contributions to the research on the antecedents of supervisor conflict, examining the functions of TFL and SMM, and clarifying the inconsistent findings on task supervisor conflict and employees’ performance.
Leaders exert a pervasive effect on safety in organizations (see for example Mullen & Kelloway, 2011; Kelloway, Nielsen & Dimoff, 2017) and we know that the consistency of leaders' support for safety is an important determinant of safety outcomes (Mullen, Kelloway & Teed, 2011). Recently, Mullen, Kelloway and Rheaume-Bruning (2017) drew on behavioural integrity theory and showed that word-deed consistency on the part of leaders predicted safety behavior. In the current study, we expanded on this analysis. We define safety hypocrisy as a misalignment of leaders' speaking about safety and their actual actions. Safety hypocrisy was proposed to predict trust in the leader around issues of safety which, in turn, is hypothesised to predict safety voice, participation and compliance. Data from a sample of 300 employees support these predictions.

First, confirmatory factor analysis support the distinctiveness of scales measuring leaders’ speaking about safety (3 items, a=.96) and acting (3 items, a =.96) safely. Second, controlling for relevant demographics (age, gender, education, tenure, length of time knowing the current supervisor) moderated regression analyses showed that the interaction of leaders’ speaking about and acting safely significantly predicted employees trust in their leaders (3 items, a =.96), F(2,285) =3.97, p < .05. Analysis of simple slopes showed that leaders’ speaking about safety was unrelated to subordinates trust in the leader at low (b=.08, ns) levels of leaders’ safety actions. However, when leaders acted safely, their speaking about safety was positively related to trust in the leader (b=.17 p < .01). Finally, employee trust in their leader was associated with employees’ safety participation (b = .20, p < .01), safety compliance (b=.29) and safety voice (b = .26, p < .01).

Our results support the adage that “talk is cheap”. It is only when leaders demonstrated their own safety behaviors that speaking about safety affected employee outcomes. When leaders demonstrated word-deed consistency (Mullen et al., 2017), employee safety behaviours were enhanced. Implications for research and practice are discussed.

Leadership plays a critical role for health and wellbeing at work. Different leadership behaviours, considered generally healthy or harmful, have so far been investigated separately, implying that these behaviours are exclusive and consistent within leaders. Focusing on health-promoting behaviour, the concept of Health-oriented Leadership (HoL) proposes three factors that contribute to healthy working conditions: 1) leaders' SelfCare, that is, how leaders treat their own health, 2) StaffCare, that is, leaders' role model behaviour and concern for their followers' health, and 3) follower SelfCare. These three components have each been linked to employee health and wellbeing. However, moderate correlations indicate that leaders and their teams may also display inconsistent combinations of both positive and negative health-related behaviours. This study investigated configurations of HoL via latent profile analysis in a sample of N=306 employees and identified four profiles: 1) a “high care” profile (22%), characterized by high leader SelfCare, high StaffCare and moderate follower SelfCare; 2) a “leader sacrifice” profile (22%), characterized by low leader SelfCare, high StaffCare and high follower SelfCare; 3) a “low care” profile (23%), characterized by low leader SelfCare, low StaffCare and low follower SelfCare;
and 4) a “follower sacrifice” (33%) profile, characterized by moderate leader SelfCare, low StaffCare and low follower SelfCare. The leader sacrifice profile reported the lowest strain, fewer psychosomatic complaints and the best overall health, followed by the high care profile, and the follower sacrifice profile. Health outcomes were the least favourable in the low care profile. Leader SelfCare may thus buffer negative outcomes of combinations of low StaffCare with low follower SelfCare. Moreover, some leaders neglect their own SelfCare while supporting the health of their staff. Our findings reveal that both leaders’ and followers’ health behaviors, as well as configurations of health-oriented leadership, need to be considered in order to explain associations between leadership and health.

**O99: The Potential Impact of Leadership Style on Work Engagement through Job Crafting and Job Resources**  
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The presentation will examine the role of leadership style in predicting work engagement in a major Peruvian laboratory and certifications organization with 247 employees. We studied the impact of the perceived leadership styles (transformational, transactional, or laissez-faire) on job crafting and on job resources and analysed their knock on effect on work engagement. Based on the full range leadership model and the job demands–resources model, we hypothesized that employees that perceived their supervisors’ leadership styles as transformational or transactional will be most likely to increase their job crafting behaviours and their perception of job resources, including feedback and opportunities for development. On the other hand, we hypothesized that perceived laissez-faire leadership styles in their supervisors will reduce job crafting behaviours and, thus, the perception of job resources. In all cases, we expected job crafting behaviours and job resources to increase employees’ work engagement. Data was collected via email by sending online questionnaires to the participants which followed a cross-sectional design. To test the hypotheses, we practiced structured equation modelling by analysing direct and indirect effects between the study variables. The results offered support for the proposed hypotheses. Employees who perceived their supervisors’ leadership style as transformational or transactional were more likely to craft their jobs. Both, leadership styles and job crafting behaviours increased their perception of job resources, which, in parallel, impacted positively on their engagement at work, defined as vigour, dedication and absorption. On the contrary, perceived laissez-faire leadership styles were related to less job crafting activities and reduced perception of job resources. These findings suggest that the leadership style plays an important role in the promotion of job crafting activities among subordinates, and that, job crafting behaviours impact work engagement directly as well as indirectly, through the increase in job resources (feedback and opportunities for development).

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Organisations are increasingly aware that a lack of attention to occupational safety issues can have negative impacts on their business, and that a prevention approach is most beneficial for ensuring high standards of organisational safety. Therefore, it is imperative that organisations have access to robust evidence-based advice on the most effective occupational safety interventions. Drawing on accident causation models (e.g., Reason, 1990) and climate theory (e.g., Schneider, Ehrhart, & Macey, 2013), we argue that theory suggests interventions should target managerial and organisational factors, as these act as the point of greatest leverage in
terms of effecting change. There is considerable empirical support that managerial and organisational factors form ‘latent failures’ (Reason, 1997), the underlying antecedents of accidents, and that key components of organisational safety climate, particularly management commitment to safety, are the primary drivers of workplace safety (Christian, Bradley, Wallace, & Burke, 2009). However, while safety climate has become the dominant perspective for research (Hofmann, Burke, & Zohar, 2017), occupational safety interventions have continued to follow ‘tried and tested’ formats, with a focus on changing behaviour at the individual level. We critically evaluate safety interventions, and their relative effectiveness, in order to advance theory and provide new insights for organisational practice.

Using an adapted version of an integrative model of workplace safety (Christian et al., 2009), we identify three types of intervention (behavioural safety, safety training, safety climate interventions), highlighting the psychological mechanisms that underlie their influence on workplace safety. Using a critical review methodology, we review and integrate empirical findings into the model to add feedback loops and consider how relationships in the model unfold over time. At the individual-level, interventions target specific behaviours, either directly or through intermediate psychological states, such as knowledge or motivation. Safety training increases safety-specific knowledge, which promotes safe behaviour (such as understanding how to operate machinery safely). Behavioural-based safety (BBS) approaches use reinforcement techniques, feedback and goal-setting, to extinguish unsafe behaviour and encourage safe behaviour (such as wearing safety gear), and so directly change behaviour. In contrast, safety climate interventions target managerial and organisational factors (including social support, leadership, and communication), which have a ‘trickle-down’ effect on workplace accidents through employees’ psychological states and behaviour. Using meta-analysis, we compare the relative effectiveness of these types of safety interventions, and examine the effects of moderators (including length of intervention and sustainability of effects over time).

Our findings suggest that training and BBS approaches have powerful but short-term effects; in contrast, the ‘trickle down’ mechanism of safety climate interventions leads to more sustainable effects over a longer time period. We argue that safety climate interventions are more beneficial in the long-term due to the development of positive feedback loops in the organisation. The wider effects of improved safety climate, such as improvements to work-related attitudes (Clarke, 2010) and making individual-level interventions more effective (Burke, Chan-Serfin, Salvador, Smith, & Sarpy, 2008), should be taken into account. Finally, we discuss a number of contributions to theory and practice, and identify implications for future research.

O101: The Implementation of Stress Management Interventions (SMIs) in Polish Enterprises
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Introduction: Stress management interventions are a set of organised activities aspiring to eliminate or reduce occupational stress. They are introduced at the organisational level (OLI) or individual level (ILI), where they aim to help individuals to better cope with stress.

Method: The main aim of the study is to investigate the practice of implementation of different kinds of interventions. The primary method used was a survey of HR or H&S managers with a self-completed questionnaire consisting of twelve items (9 on SMIs and 3 on characteristics of respondents and companies). About one-third of the respondents received the questionnaires by e-mail, some of them were invited by e-mail to fill it on a website, while others completed paper questionnaires or were interviewed by phone (ca. 50 % of respondents). The survey was directed at both public and private sector organizations in Poland in 2010 (as a pilot study) and
between 2014 and 2016. Altogether it reached 384 enterprises: small (15%), medium (28%), and large (56%). Most were manufacturing (43%), wholesale trade and retailing (11%), public administration (11%), finance and insurance (5%), education (4%), and healthcare (3%). Other sectors (according to NACE) were represented in less than 2% each. The questionnaires were filled by HR managers/specialists (n=190), H&S managers/specialists (n=122), owners or managing directors (n=72).

**Results:** About 30% enterprises implemented different kinds of interventions – 18% both OLI and ILI, 3.7% only OLI, 7.8% only ILI. The most popular OLI was promoting healthy organisational culture – 30%. The most popular ILI were trainings on coping with stress skills – 30%, and counselling, psychotherapy and coaching focused on work-related stress – 29%. 71% of companies with implemented SMI’s admitted the support was sufficient. Regarding the evaluation of the implementation, 35% of the companies with implemented SMI’s assessed the level of stress before and after the intervention and 27% indicated the sources of stress. 1.8% estimated the financial costs of stress and 5% estimated the psychological costs (e.g. burnout, depression, fatigue). They used surveys, psychological tests, interviews, Preliminary Hazard Analysis or medical check-ups. The reasons why no SMI’s were implemented in 70% of the companies are: no supervisors’ awareness – 42%, no specialists (OHPs, H&S specialists) – 36.5%, no tools – 22%, no funds – 21%, no time and staff – 20%.

**Conclusions:** 70% of the companies do not implement SMI’s even if they know their merits. The main problem is the lack of understanding and participation in implementations by direct supervisors. There is also a shortage of specialists, especially OHPs. Both OLIs and ILIs are implemented in 69 companies which see them as more effective than only one type. However, the implementations are not well prepared and assessed. Only one-third of the enterprises evaluate the sources of stress and compare the level of stress before and after the implementation. The companies hardly ever use any measures of efficiency such as sickness absence rate or productivity norms to estimate the costs of stress.

O102: Psychological Interventions of Insomnia among Shift Workers: An RCT Trial in Occupational Health Services

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**Introduction:** Shift work is a challenge for screening and treatment of chronic insomnia because of an irregular sleep-wake pattern. However, our earlier study showed that modified cognitive behavioural treatment for insomnia (CBT-I) may be effective also for employees with irregular work hours. The aim of the present study was to compare the implementation and effectiveness of group and self-help based CBT-I and sleep hygiene intervention in a randomized and controlled design (RCT) among employees with different types of shift work. The study was carried out in the occupational health services (OHS) of the participating workplaces.

**Methods:** A total of 60 shift workers with insomnia disorder that had lasted at least three months completed after intervention measurements. In addition to clinical insomnia, about half of the participants had features of shift work disorder (insomnia and/or excessive sleepiness when the shifts overlap with the typical sleep period). They were recruited by six OHS centres and participated in a) group-based CBT-I (20 participants), b) computerized self-help CBT-I (19 participants), or c) sleep hygiene intervention (21 participants). The interventions were delivered by trained nurses or psychologists in the OHS centres. The main outcomes were assessed before and after the interventions using a sleep diary, questionnaires and actigraphy. The follow-up measurements will be continued for a period of two years after the interventions.
Results: The results of the questionnaires administered before and after the intervention were analysed. Perceived severity of insomnia, sleep-related dysfunctional beliefs, mood symptoms and the mental component of health-related quality of life improved statistically significantly after the interventions without any significant differences between the three intervention types. Participants who received group or self-help CBT-I reported more positive effects on their life situation and health than those who received merely sleep hygiene intervention.

Discussion: Our preliminary results indicate that not only group-based CBT-I but also self-help based CBT-I and mere sleep hygiene intervention delivered by trained OHS professionals may reduce insomnia symptoms among shift workers. However, the participants preferred the CBT-I compared to sleep hygiene intervention. The features of shift work disorder were common among participants, which may reduce the effectiveness of interventions.

O103: Laugh a Little: Examining the Respite Potential of a Humour Intervention on Daily Self-control, Performance and Wellbeing

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Background: Humour is an umbrella term for all forms of the comic or funny (Ruch & Hofmann, 2017). Past research has demonstrated that humour interventions can enhance happiness and wellbeing and have short-term effects on depression (Crawford & Caltabiano, 2011; Wellenzohn, Proyer, & Ruch, 2016). No research to date has investigated the benefits of a humour intervention in the workplace.

The aim of this research was to examine the effectiveness of a daily workplace humour intervention. We postulated that humour may reduce the self-regulatory depletion effect of daily work. Two theoretical mechanisms are possible explanations for this effect of may occur. Work is effortful and depletes our store of available energy if not replenished (Tice, Baumeister, Shmueli, & Muraven, 2007). Firstly, the strength model of self-control (Baumeister, Bratslavsky, Muraven, & Tice, 1998; Baumeister, Muraven, & Tice, 2000) would suggest that continued acts of self-control deplete our self-regulatory resources which may impact wellbeing. Experimental research has shown that participants who watch comedy videos perform better on self-control tasks than participants who did not. Alternatively, Inzlicht and Schmeichel's (2012) mechanistic revision of this theory would suggest that a humour intervention may prevent the motivational switch for focusing on long-term to short-term goal satisfaction. Thus, our intervention may also maintain work performance across the day.

The daily humour intervention may act as a small respite during the work day (Kim, Park, & Niu, 2016; Steidle, Gonzalez-Morales, Hoppe, Michel, & O’Shea, 2017). We postulate that a humour intervention specifically targets self-regulation and self-control resources, and thus, may not only enhance daily wellbeing, but may also improve daily performance indicators.

Method: We conducted a 10-day randomised controlled intervention to test the efficacy of a daily humour vs. information intervention on self-control, vigour, perceived stress, concentration and self-reported productivity. Employees were randomly assigned to either an experimental group (comedy video; n_people = 75; n_days = 399), or a control group (educational video; n_people = 74; n_days = 396). Data was collected 3 times daily (morning, mid-day intervention, and end of work day).

Results: Using multi-level SEM, we found a significant indirect effect of the daily intervention at the person level (level 2) on evening self-control, concentration, productivity and stress via the intervention experience (funny & enjoyable) and energetic activation (vigor) after the intervention. At the day-level (level 1), vigour after the intervention mediated the effect of the intervention experience on evening self-control, concentration, and productivity, but not on perceived stress.
Discussion: Employees must engage in effortful self-control to attend to work tasks, which consumes resources. A means to counteract this effect would be of particular interest to organisational practitioners. This study highlights the potential of humorous micro-break activities to alleviate the depletion effect of self-regulatory resources at work. Much of the research on self-regulatory depletion to date has been experimental in nature. This study is one of the first to consider and test how daily humour interventions can alleviate self-regulatory depletion effects during daily work. Moreover, the findings suggest that this intervention has positive effects on daily performance as well as on daily self-control.

O104: The Implementation and Evaluation of the JOBS Programme in Two Communities in South Africa
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Content: There is an urgent need to address the problem of unemployment especially considering the consequences of being unemployed. No intervention specifically aimed at addressing the psychosocial aspects of being unemployed have previously been implemented in South Africa.

Objectives: The objective of this study was to adapt, implement and evaluate an international programme, called the JOBS Programme, within South Africa context. This programme is aimed at providing participants with personal resources and skills that promote reemployment. Secondly, we intended to determine whether the programme will affect participant's reemployment status, self-esteem, job-seeking self-efficacy, problem-solving skills, experience of unemployment, and psychological needs satisfaction.

Method: A quasi-experimental design, more specifically the switched replication design was implemented. This design allowed for control group participants to also receive the benefits of the intervention and to also evaluate the impact of the intervention on them. Stratified random sampling was used to include unemployed individuals from two low-income communities. Data was collected at three intervals: prior to the intervention, after the programme, and again after four weeks have passed, to determine if the programme was effective in changing participants' experience of unemployment. The sample consisted of 160 unemployed individuals, with majority female participation. Mplus 8.0 was used to perform the statistical analyses. Multiple regression analyses, Confirmatory Factory Analysis (CFA) and Latent Curve Analysis (LCA) and latent change scores were used to investigate the impact of the programme.

Results: The results provided support for effectiveness of the intervention programme in terms of affecting dimensions of participant's reemployment status, self-esteem, job-seeking self-efficacy, problem-solving skills, experience of unemployment, and psychological needs satisfaction. Not all expected changes were found. Although the intervention seems to be promising, contextual factors should be considered in future research.

O105: A Meta-analysis of Mental Health, Organisational, and Work-specific Psychosocial Factors as Predictors of Sickness Absence Among Nursing Personnel
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Background: The nursing profession is known as a stressful occupation with physical and psychosocial stressors inherent in its practice. Correspondingly, there is a high prevalence rate of sickness absence in this profession compared to others. Objective: This paper is one of two
studies that sought to examine factors that could be predictive of sickness absence among nurses and health care aides (HCAs). In this paper, psychosocial and organisational factors were explored by way of a systematic review and a meta-analysis.

Methods: A meta-analysis was carried out to quantify the association between predictive variables and sickness absence. Using a registered protocol, keyword searches were used on five online databases: CINAHL, PROQuest Allied, PROQuest database theses, PsychINFO, and PubMed as well as references of studies. Further screening and quality testing were conducted to deem eligibility of studies.

Results: Out of 812 studies that were examined following exclusion of duplicates, meeting eligibility, and had sufficient statistical data, in particular Odds Ratios (OR) and Confidence Intervals (CI), 23 studies were included for meta-analytic computations. Poor mental health increased the odds of sickness absence (mostly anxiety: OR = 1.56; CI 95% = 1.07 – 2.28; p = .02; mostly depression: OR = 1.59; CI 95% = 1.02 – 2.04; p = .04). HCAs were also found to have greater odds of experiencing sickness absence compared to registered nurses (OR = 1.20; CI 95% = 1.10 – 1.30; p < .001). Other significantly predictive organisational factors include working night shift (OR = 1.47; CI 95% = 1.23 – 1.77; p < .001), and working in pediatric (OR = 1.79; CI 95% = 1.31 – 2.5; p < .001) and psychiatric units (CI 95% = 1.18 – 2.18; p < .01). On the other hand, surgical units were not found to be associated with sickness absence. For work-specific psychosocial factors, high job strain did not increase the odds of sickness absence; however, increased high demand was indeed predictive (OR = 1.57; CI 95% = 1.04 – 2.36; p < .05). Furthermore, a supportive work environment significantly reduced the odds of time loss (OR = 0.61; CI 95% = 0.4 – 0.04; p < .05).

Conclusion: There are several factors that increase the likelihood of sickness absence among nursing personnel. Future studies should continue examining such predictors using quantitative and qualitative methods.

O106: Caregivers’ Co-Production in Treatment: First Evidences of Relationships Among Co-Executing and Co-Planning and Their Possible Determinants
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One of the challenges of providing healthcare services is to enhance value (for patients, staff and the Service) by integrating the patient into the care process, thus paving the way to many benefits such as reduced cost, improved health care outcomes and staff wellbeing (Hibbard al, 2013; Lee & Lin, 2010). Literature distinguishes among different domains of co-production, mainly related to the patients’ engagement in actively managing their health conditions and treatment, and their involvement in participating in the healthcare process e.g. to treatment planning or to the service design (Gilardi al, 2016; Realpe al, 2016; Voorberg al, 2014). Scholars further wonder which factors support patients in acting their role of co-producers, identifying ability determinants (related to the necessary information knowledge and skills) and willingness determinants (related to motivational factors such as perceived control, risk in participating in decision-making and quality of relationship) (Merz al., 2013).

Drawing on this theoretical framework, and given limited empirical research on the topic, the present research aims to examine the role of staff knowledge sharing and of role social conflict as, respectively, ability and willingness determinants which support or hinder patient’s coproduction (in co-executing and co-planning their treatment). We further hypothesized that co-production was related to higher patient’s satisfaction and reduced staff burnout.
Results of a structural equation model on a sample of 119 informal caregivers of patients with severe Acquired Brain Injury (sABI; Kratz al, 2015, Norup al, 2015), confirmed the positive association of knowledge sharing with co-executing and co-planning; it also confirmed the negative association of role social conflict with co-executing, while surprisingly a positive relationship with co-planning emerged. Further, co-executing was strongly associated to caregivers’ satisfaction, but not with staff burnout; and co-planning wasn’t related to both the considered outcomes. The caregivers’ satisfaction also resulted directly related to knowledge sharing.

Overall, this study provides a first empirical contribution to literature supporting the role of ability determinant in letting the caregivers assume an active role in co-production (in both co-executing and co-planning domains). Role conflict as a willingness determinant showed to be not only, as expected, a hindering factor for co-executing but also a trigger for co-planning. This result should be considered more carefully in future studies.

O107: Does Injustice Reduce Cognitive Performance? An Experimental Test
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In this paper we report two experimental studies showing for the first time that injustice causes a reduction in cognitive performance in complex tasks. The two experiments (Study 1, N = 106, Study 2, N = 90) used two different paradigms. In Study 1 participants were exposed to injustice happening to other people. In Study 2 participants themselves were the targets of injustice. In both studies the dependent variable was cognitive performance in a complex task. Specifically, in Study 1 participants solved anagrams, and in Study 2 they solved several Raven matrices. The dependent measures were the number of anagrams and Raven matrices solved correctly. We found that cognitive performance was worse in the unjust condition compared to the just condition (i.e., fewer items solved correctly). These results imply that unfairness in everyday life may have a deleterious effect on individuals’ capacity to think in a complex way. Possible mediators for this effect are proposed.

O108: Exploring the Role of Psychological Resources in Workplace Goal Striving: A Conservation of Resources Approach
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Goal striving, or the process of directing resources to pursue a goal, has significant value in almost every field of life, including work, family, and sports. Especially at work, it is highly challenging for managers to deal with employees’ unpredictable behaviour while they are working on personal or organisational goals. Striving may vary from person to person, as one way chosen by an employee might be different from the strategy chose by another for the same goal. Similarly, showing one kind of behaviour might be welcomed in one society, while the same behaviour can possibly be considered offensive in other cultures. Furthermore, a strategy to perform a task might be highly fruitful in certain conditions, however may show detrimental results when those conditions are missing.

Based on previous knowledge of goal striving, we suggest this can be affected by individual’s psychological level as well as by one’s surroundings. The study of this process gives insight about different antecedents which can influence one’s level of motivation, as it involves both human functional and dysfunctional behaviour.
Goal striving has been studied from different aspects. Most of the research is based on three main concepts: Self-determination theory, Control theory and Motivated Action theory. Moreover, this process has been analysed in the presence of various factors like nature of goals (Locke & Latham 1990), psychological factors like faith, self-control, mood (Emmons, 2005; Lee, Sheldon & Turban 2003), as well as culture (Oettingen, Sevincer & Gollwitzer, 2008). However, most of the previous research explored this mechanism on a cross-sectional basis which limits the understanding by considering it as static phenomenon. Although, very few recent studies like Wolf, Herrmann and Brandstatter (2018), Luyckx et al. (2017), Bernecker et al. (2017), Margraf and Pinquart (2016) tried to explore goal striving process on longitudinal basis. Unfortunately, all the samples were in non-work settings, which limits the generalisability of their findings to the real workplace environment. Furthermore, few studies like Laguna et al. (2017); Stynen et al., (2017) explored the long-term relationship of resources on longitudinal basis but they considered resources as predictor of work engagement, thus again overlooking the role resources play in goal attainment and wellbeing.

This study presents a two-wave longitudinal research that explores the dynamic relationship between psychological resources like self-efficacy, sense of mastery, tenacious/flexible goal pursuit, supportive organisational climate and goal attainment, and wellbeing, in order to validate the various postulates of Conservation of Resources Theory (Hobfoll 1989; 2001). The study suggests that T1 level psychological resources has a relationship with goal attainment and wellbeing which in turn related to T2 level of resource pool, goal attainment and wellbeing. Furthermore, T2 level resources has a possible significant impact on T1 level psychological resources, goal attainment and wellbeing. Moreover, based on the resource passageways notion the study suggests that values significantly moderates the relationship between resources and goal attainment of the sales executives working on monthly goals in U.S, France and Pakistan.


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Schaufeli et al. (2009) define Workaholism as “the tendency to work excessively hard and being obsessed with work, which manifests itself in working compulsively”. Several researchers have focused on the deleterious effects of workaholism (e.g., Beek et al., 2012; Robinson, 2007) while others view it as involving a pleasurable engagement at work (e.g., Baruch, 2011; Snir & Zohar, 2008). Spence and Robins (1992) argue that workaholism is a three attitudinal dimensional concept involving work involvement, drive and work enjoyment. One of the aims of this study was to clarify and unravel the processes that tie workaholism to positive and negative outcomes.

We propose an integrated model which represents workaholism as explicitly and indirectly connected to burnout and to wellbeing; and through them, mediated by WF-C and WF-E, to work performance. We hypothesised: (a) a positive relationship between workaholism and WF-C and WFE; (b) social support moderates the positive relationship between workaholism and WF-C.; (c) The relationship between workaholism and burnout, wellbeing and performance is partially mediated by WF-C and WF-E; and (d) there is a negative relationship between burnout and job performance and wellbeing and a positive relationship between wellbeing and performance.

We tested our hypotheses with a total of 228 tri-matched survey responses from job incumbents in the high-tech sector, their spouses, and their supervisors. The survey related to workaholism, social support, WF-C, WF-E, burnout, wellbeing, and performance. Data for all measures, was collected from the focal participants, data on WF-C and WF-E was also collected by spouses.
and data on performance was also collected by their supervisors, who completed the questionnaires with reference to the focal participants. Structural equation modeling supported the model. It demonstrated positive relationships between workaholism and both WF-C and WF-E. Furthermore, the relationships between workaholism and wellbeing and burnout were fully mediated by WF-C and WF-E. There were also moderation effects for social support on the relationship between workaholism and WF-C; when social support was high, the relationship between workaholism and WF-C was weaker than when support was low. Burnout was negatively related to wellbeing and both wellbeing and burnout were positively related to performance.

The results suggest that workaholism has negative outcomes including increased burnout and low job performance, mainly through family influences. The results emphasise workaholism’s dual effect on the family domain and show that performance is more influenced by positive effects than by negative ones.

The study makes several theoretical and practical contributions. It develops an innovative model which constitutes a conceptual integration and extension of the literature concerning workaholism and performance. Results highlight the importance of including positive perspective in the study of workaholism and the positive and negative effects generated by workaholism. The model highlights the potential of interventions to minimise the negative consequences of workaholism and increase the positive ones. The study has methodological vigor because of its triangulation. Use of objective measures, a longitudinal design and further validation of the model will benefit further research.

O110: How is Job Insecurity Related to Self-rated and Supervisor-rated Job Performance? A Test of Cross-sectional and Longitudinal Associations

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Purpose: While previous research has shown that job insecurity is linked to job performance, the number of studies exploring this relationship is limited and the results are mixed (Cheng & Chan, 2008; Sverke et al., 2002). This duality is also reflected in theoretical frameworks. For instance, psychological contract theory implicates that job insecurity may result in lower performance (De Cuyper & De Witte, 2006; Vander Elst et al., 2016), whereas impression management theory suggests that performance may increase as a consequence of perceived job insecurity (Huang et al., 2013). Further, the type of performance ratings used in previous studies has been discussed, and the sole use of self-ratings of performance is upheld as potentially problematic (e.g. Probst et al., 2017). In response to previous criticism of studies in this field regarding self-ratings of performance, both self- and supervisor-ratings of job performance are included in this study. Lastly, there have also been calls for more longitudinal studies in job insecurity research, addressing the question of short- and long-term effects of job insecurity (Greenhalgh & Rosenblatt, 2010). Taken together, this study seeks to address the mixed results found in previous research regarding the relationship between job insecurity and job performance. More specifically, the aim is to investigate how job insecurity is related to self- and supervisor-rated performance, both cross-sectionally and over time.

Design: The study is based on survey data collected among white-collar employees in a large industrial enterprise in Sweden. The data collection had a longitudinal design with 2 data waves. The questionnaire data will be supplemented with supervisor ratings of overall performance.
Findings: Questionnaire data from employees have been collected, and preliminary results indicate that job insecurity can result in lower job performance. Supervisor-ratings are currently being collected.

Research limitations: While the study adds to the literature by investigating both cross-sectional and longitudinal associations of job insecurity with self-rated as well as supervisor-rated job performance, it does not unravel the nature of causal associations. In addition, the results need replication in other national and occupational contexts.

Practical implications: The present study links job insecurity with lower performance. The results thus have important implications for organisations navigating high demands for flexibility and tight business margins. Organisations should make efforts to prevent job insecurity from emerging as a concern among employees in order to avoid reduced job performance.

Originality: By combining a longitudinal design with self- and supervisor-ratings of task performance, this study adds to previous research in two different ways: We investigate both (1) short- and long-terms associations between job insecurity and job performance, and (2) test these associations using both self- and supervisor-ratings of job performance.

O111: The Daily Spillover Between Needs Satisfied at Work and Needs Satisfied at Home: The Moderating Role of Job Resources
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For years, self-determination scholars focused on employees’ basic psychological need for autonomy, competence and relatedness. The satisfaction of these three needs are key for many beneficial work-related behaviours as well as for employees’ wellbeing. However, to date, research examining how satisfaction of the need for autonomy, competence and relatedness influence an employee’s private life remains limited. We aim to investigate whether an employee who experiences satisfaction of the need for autonomy, competence and relatedness at work also feels more satisfied at home on a daily basis. In addition, we investigate whether experiencing job resources (i.e., autonomy, skill discretion and supervisor support) influence these spillover effects. We collected daily diary data among 75 employees over a period of five consecutive working days. Multilevel path analyses found support for a daily positive linear spillover from a satisfied need for autonomy in the work domain to the satisfaction of the need for autonomy in the home domain. Moreover, we found that general levels of job autonomy strengthen this daily relation. We found no spillover between the satisfaction of the need for competence at work and at home. Nevertheless, general levels of skill discretion significantly strengthens this relation. Lastly, we found a daily positive curvilinear spillover effect for the need for relatedness satisfied at work and at home. This relation was stronger from employees who in general experience support by their supervisor. This study contributes to the recent work-home literature stream focusing on positive spillover effects.

O112: Can Prosocial Motivation Help Dealing with Exhaustion? A Longitudinal Study
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Purpose: According to Job Demands-Resources theory, job demands will lead to exhaustion, if employees do not have enough resources to cope with these demands. In addition, exhaustion contributes to miscommunication, conflicts, and making mistakes (i.e., self-undermining behaviour), which need to be corrected and then add up to the already high job demands and
may impair performance and employees’ work engagement. In the current longitudinal study, we want to investigate these relationships more closely and especially focus on the role of prosocial motivation.

We first hypothesize that T1 exhaustion will lead to increased self-undermining behaviour at T2 and that this will result in (a) lower T2 job performance, and (b) lower T2 work engagement (mediation hypotheses). In addition, we also hypothesize negative direct relationships between T1 exhaustion and (a) T2 performance and (b) T2 work engagement.

Importantly, we hypothesize that prosocial motivation moderates the relationships between T1 exhaustion and its potential harmful consequences, namely T2 self-undermining behaviour, T2 impaired performance and T2 reduced work engagement. We argue that prosocial motivation can either mitigate or exacerbate these relationships. Prosocial motivation might act as a resource and provide employees with the willingness to continuously do their best for others even when employees are exhausted. Prosocial motivation might also exacerbate the consequences by giving employees a reason to continue working even when they are already exhausted. If employees constantly go beyond their energy level, they end up in having more trouble and start making mistakes (i.e., more self-undermining behavior).

Methods: A total of 129 employees from different occupational settings filled in an online questionnaire about their general level of exhaustion, prosocial motivation, self-undermining behaviour, job performance (in-role behaviour), and work engagement (T1). Six months later, these employees were asked to fill in the same questionnaires one more time (T2).

Results: Preliminary analyses support our hypothesis that T1 exhaustion leads to increased self-undermining behaviour at T2. We also find support for the contention that T1 exhaustion is indirectly related to T2 job performance via self-undermining behaviour. However, we did not find support for the indirect relationship of exhaustion with T2 work engagement through self-undermining. Furthermore, the results support the hypothesis that prosocial motivation exacerbates the unfavourable impact of exhaustion. The relationship between T1 exhaustion and (a) T2 self-undermining, (b) T2 job performance, and (c) T2 work engagement was stronger for employees high (vs. low) in prosocial motivation. These findings suggest that prosocially motivated employees go beyond their strengths when they want to help others, and after six months the undesirable effects of exhaustion appear to be even worse (compared to employees with low prosocial motivation).

Conclusion: These preliminary findings indicate that prosocial motivation cannot buffer the unfavourable effects of exhaustion, but rather exacerbates the effects. Our study adds to the self-undermining literature by showing that this behaviour is negatively related to performance. In addition, our findings suggest that prosocial motivation may come at certain costs for employees.

O113: Sustainable Return to Work (RTW) After Ill-Health: Personal and Social Factors
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Background: Life expectancy and employment rates are higher than ever before in the United Kingdom, yet around 32.1 million working days were lost to ill-health and non-fatal workplace injuries in 2016/17, thus representing a significant cost to both employers and the government. Helping workers return to work (RTW) early has become crucial as evidence from studies suggests that extended absence from work becomes detrimental to physical and mental health, making it difficult for workers to return to work at all, which then increases bespoke costs. Until now, systematic reviews on RTW after ill-health such as musculoskeletal disorders (MSDs) and
common mental health disorders (CMDs) have been focused on the effectiveness of prevention-based interventions. Even though evidence from these studies suggest that workplace-based interventions are effective in aiding fast return to work after ill-health, there is still a significant gap in knowledge regarding the sustainability of RTW. Sustainable RTW in this study refers to employees returning to their job or modified jobs after ill-health on a full-time or part-time basis for at least three months with reduced sickness absence reoccurrence.

Objective: As a result of the shortage of evidence to this regard, the next logical step stands as a systematic review of studies efficiently reporting on the impact of personal and social factors on sustainable RTW after ill-health such as MSDs and CMDs.

Methods: A systematic review was conducted to synthesise empirical evidence on the impacts of personal and social factors such as; support from leaders and co-workers, job crafting and employees' personal characteristics on sustainable RTW. After developing an efficient search strategy and deciding on the relevant database, a thorough search of papers was conducted on 13 databases between October 2016 and March 2017. Of the 224 potential studies identified, 79 studies fulfilled the inclusion criteria. All 79 studies were critically appraised, and data were extracted and synthesised.

Results: Results from 79 studies were reported in two categories (MSDs and CMDs). The narrative synthesis showed: (1) All evaluated personal and social factors showed a general consistent positive effect on sustainable RTW; (2) Studies assessing job crafting and employee's personal characteristics like duration of absence, economic status/income and job contract/security were too few to draw a strong conclusion on, even though they presented interesting areas for future studies; and (3) Findings produced inconsistent evidence surrounding the effects of gender, implying that gender likely interacts with a factor or range of factors to influence RTW.

Conclusion: Sustainable RTW was evident across studies, indicating that although age and education influence the outcome, returning workers are more likely to have a positive attitude towards work and confidence in carrying out their duties on RTW in an environment where the RTW fosters support from both leaders and co-workers. However, it is still unclear how gender interacts with psychosocial factors to facilitate sustainable RTW. Hence, there is a need to research further specific factors that may facilitate sustainable RTW differently for men and women.

O114: Safety Training of Migrant Workers in the Construction Sector: A Systematic Review
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Background: Safety and health at work is a key goal on the EU agenda. In spite of the progress made, there are still areas and target groups were important challenges remain. The construction industry has been identified as being at high risk for injuries and illnesses. This sector is heavily reliant on a migrant workforce, often low skilled and often with important linguistic barriers and limitations. Interventions in this field are critical to prevent accidents and promote safety and health for this rather large group of the construction workforce. Zhou et al. (2015) classified three main groups of construction safety research: the perspective of safety management process (safety assessment and safety programs), the impact of individual and group characteristics in relation to construction safety (worker behaviour, perception, and safety climate) and the analyses of accident/incident data to improve safety performance. None of them analyse, in
depth, safety training interventions aimed at construction migrant workers to prevent injuries, accidents and incidents in different populations and countries. Hence, a systematic review of previous studies on this population is paramount to develop our understanding on how we can improve safety among this group of workers, who have higher accident rates than their native counterparts.

Training can be a powerful tool to increase hazard awareness and enhance safe work practices becoming a primary prevention instrument. However, a number of challenges appear when training has to be delivered to migrant workers in this sector. The present review aims to identify those challenges in design, implementation and/or evaluation of training activities for construction migrant workers.

Methods: Our literature review focused on papers published in scientific journals in the areas of psychology, medicine and engineering between 2000 and 2017. It comprised a search of Web of Science, Current Contents, Scopus, PsycARTICLES, PsycINFO, PubPsych, Psychology Database, MEDLINE, PubMed, Proquest Central, Scifinder Scholar, Connect, Database of CSIC, Psicodoc. 42 papers were identified related to safety in migrant construction workers and out of these 10 papers presented empirical studies on construction migrant workers training its design, implementation and evaluation. Some of the topics we explored included: 1) Focus of the study on the different stages of training (design, implementation, evaluation), 2) content of the training (technical knowledge, skills, soft skills), and 3) evaluation methods.

Results: We found that all 10 studies were conducted in the US and focused on hard skills only. Half of the studies adapted the 10-hour course developed by US Occupational safety and Health Administration. Evaluation was scarce but where knowledge tests had been conducted, they showed that workers remembered little of the course post-training. No studies evaluated whether training had been transferred to the work context post-training.

Conclusion: The results provide rich information, knowledge and guidelines for new developments in training of this high-risk target group in order to improve the effects and impact of safety training among migrant workers in construction. One major implication is the need to focus training on soft skills and to develop rigorous training transfer evaluation frameworks.

O115: Employee Assistance Programs: The Perspectives of Management on How EAPs are Used and What is Expected of These Programs
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In recent years, justifying the use of Employee Assistance Programs (EAPs) has been a top priority for researchers, organisations and EAP providers alike. EAPS are worksite based programs designed to support employees and organisations in managing a range of personal and professional issues that may impact productivity and performance. The growth in this field has been rampant, leading to increased competition for EAP providers to secure organisational contracts. In addition, organisations have increasingly sought assurances of return on investment (ROI) of these programs in the midst of diminishing resources. It follows that much of extant literature relates to offering measurements of specific outcome variables such as productivity, absenteeism and presenteeism, with the aim of quantifying any improvement and projected cost savings. Yet, this approach does not consider the organisational context of implementing and maintaining an EAP and what issues there are which may affect the effectiveness of the program.
This study aimed to clarify the function of EAPs and how EAPs are currently being used in Australian organisations as well as organisational expectations of having an EAP. Together, this information could form the foundation of EAP evaluation studies, leading to more targeted appraisals of EAPs. A qualitative phase of a larger study evaluating the impact of EAPs on employee and organisational outcomes is reported. Participants were 16 middle to executive level managers (13 females, 3 males) across government (5), non-for-profit (5) and private industry (6) sectors in Australia. Semi-structured interviews ranging from 30 to 45 minutes with the participants were audio recorded and transcribed verbatim.

A content analysis was initially conducted and data were coded into two main categories (purpose/function of EAPs and expected outcomes of EAPs) based on the research questions. Following this, thematic analysis was undertaken to identify themes within each of the two main categories. Seven themes were identified and included: EAPs are an important source of support for employees; EAPs are primarily used as a counselling service; EAPs are considered to be an organisation’s corporate responsibility; EAPs are an industry expectation; there is management resistance to EAP implementation; there are difficulties in quantifying the benefits of EAPs; and utilisation of EAP services is typically low.

Findings further highlighted that while the counselling service was the main service used, other services such as critical incident debriefing, management coaching and onsite redundancy support during major organisational change were also mentioned. Participants were unclear about the expected outcomes of an EAP, highlighting the difficulties inherent in quantifying the benefits of EAPs. Finally, only two participants reported a formal mechanism to evaluate EAPs. These findings have important implications for EAP evaluation studies, delineating the need to explore organisational contexts and using these as a firm basis for future evaluation studies.

**O116: Ups and Downs of an Organisational-level Stress Management and Burnout Prevention Program: First Results of a Longitudinal Study**

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**Background:** The research to be presented investigates the effects of a comprehensive, participatory, organisational-level stress management-burnout prevention program in a public primary school in Budapest.

Due to the intensified job demands and at the same time stagnant resources, employees in the educational sector suffer more and more from job stress and burnout. Although the prevalence and popularity of occupational stress management programs is increasing, the majority of those are still applying individual focused interventions (e.g. relaxation, mindfulness meditation, CBT, training; Richardson & Rothstein, 2008). Organisational focused interventions are relatively scarce because of inter alia difficulties in conducting true experiments in organisational interventions. Organisational level interventions on the other hand often have little or no effect. This low effect size might results in part from the setting, the selected outcome measures and the complexity of the organisational processes and changes.

**Methods/Design:** The current study investigates the effects of a one-year comprehensive, participatory, organisational intervention in a school setting. The intervention consists of the following elements:

- Focus groups for all employees of the school. Functioning of the focus groups was in part based on the German Health Circles (Aust and Ducki, 2004). Goal of the focus
groups was to interpret and supplement the results of the baseline stress questionnaire and to work out solutions for the most important job stressors.

- Training sessions offered to voluntary employees based on organisational needs identified by the focus groups. Topic of the training sessions were the following: conflict management in the organisation, positive discipline, and communication with aggressive people.
- An action group was formulated from voluntary employees for working out in details and implementing some selected proposals of the former focus groups.

**Measures:** stress factors at work, perceived stress, burnout, subjective health, wellbeing, self-efficacy and organisational measures (such as, organisational commitment, subjective performance, absenteeism, and job satisfaction). Investigations take place four times during the one-year long study: T1: at the onset; T2: three months later, right after the organizational-level stress management focus groups; T3: another four months later, once the organizational focused training groups and the action groups formulated by school workers have finished; T4: one year after the onset.

**Participants:** School teachers and other school workers (n=34). Longitudinal effects of the organisational intervention are to be compared with four control groups, fours schools receiving other kind of interventions (C1: no intervention, C2: basic organizational intervention, C3: individual skill training, C4: basic organizational intervention and individual skill training).

**Results/Discussion:** At the time of T2 employees of the school felt significantly more accepted by their colleagues compared to T1 (t=3,309, \( p < 0.05 \)). There were no significant changes however between T1 and T2 in the study group’s wellbeing, perceived stress, subjective performance, job satisfaction, self-efficacy and organisational commitment. Results from T3 will be available by the time of the conference. Details of the intervention process, success and fail factors of this kind of organisational intervention will also be discussed in the presentation.


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**Background:** The efficacy of psychosocial workplace interventions conducted on the organisational level is unclear.

**Aim:** To review the existing knowledge about effects of organisational level interventions on psychosocial work environment aspects, health and retention.

**Method:** We conducted a systematic review of systematic reviews (meta-review) about organisational level interventions published in peer reviewed scientific journals between 2000 and 2015. We systematically searched three databases (PubMed, Web of Science and PsycINFO), screened reference lists of the identified reviews and previous meta-reviews and contacted experts resulting in the identification of 16,353 articles. Of those, 46 reviews fulfilled the eligibility criteria. After quality assessment 16 reviews of low quality were excluded, yielding 30 reviews of moderate (n=21) or high (n=9) quality.
Results: The 30 reviews covered 592 organisational level interventions in a variety of job groups. We divided the reviews into two groups: reviews studying the effects of interventions with a specific approach (e.g. interventions to improve employees’ influence at work), and reviews studying the effects of organisational level interventions with regard to a specific health outcome or retention.

Among the 17 reviews studying a specific approach we found that the following three interventions tended to give positive effects with regard to psychosocial work environment aspects (e.g., work life balance), health (e.g., mental health) or retention (turn-over rates): i) interventions giving employees more flexibility in choosing their working hours, ii) interventions giving employees more influence at work in general and iii) interventions that systematically introduce newly educated nurses to their first workplace, e.g., through mentorship programs. The 13 reviews studying the effects of organisational level interventions with regard to a specific outcome came to discordant conclusions. Three reviews concluded that organisational level interventions in general did not improve employees’ health. However, one of these reviews found that changing work schedules reduced stress. Five of the other 10 reviews focusing on a specific outcome concluded that organisational level interventions showed a tendency to lead to positive effects on health or retention.

Almost all of the reviews found that more complex interventions, for example combining individual and organisational level approaches, appeared to yield more positive effects than less complex interventions. The conclusions for most of the 30 reviews were based solely on intervention effects and did not take into account to what extent the interventions were implemented.

Conclusion: Organisational level interventions that give employees more flexible working hours or in general more influence at work and systematic introductions for newly educated nurses tend to give positive effects with regard to psychosocial work environment aspects, health and retention. The conclusions of reviews on other types of organisational level interventions were more mixed and partly contradictory. Most reviews did not integrate data from process evaluation and therefore lacked important information about what it may take for organisational level interventions to yield positive effects. Interventions combining several intervention approaches seem to have a better chance to lead to positive effects than interventions on single components and should be studied more extensively.

O118: The Development of an E-competency Framework to Support Agile Working
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Purpose: With 45% of people now spending over an hour commuting to their jobs, and 70% of people reporting that flexible working options make a job more attractive (powwownow.co.uk, 2017), ‘agile working’ holds significant appeal for today’s workforce (Jeyasingham, 2014). However, there is a dearth of guidance available for organisations that want to facilitate flexible working arrangements. Research into the knowledge, skills, abilities, and behaviours (KSABs) of competent agile workers is absent, meaning that organisations are unable to manage their emerging needs. In this paper, we present an e-competency framework to address these issues. This framework clusters agile worker KSABs into three key themes. These themes represent the psychological needs outlined in Ryan and Deci’s (2008) self-determination theory (SDT), and suggest that if agile workers are able to satisfy competencies related to autonomy, relatedness and competence, they will be able to flourish in their roles. We aim to utilise state-of-the-art theory (SDT) to support the e-competency framework, providing practical insights and guidance to both organisations and agile workers interested in optimising the burgeoning trend of flexible working, to realise performance and wellbeing benefits for a modern workforce.
Design/Methodology: Thirty-four semi-structured interviews were conducted with agile workers in a range of job roles, within a large international private sector company. Agile workers were defined according to whether they: (i) were able to work from home, as well as in the office, on more than one occasion per week; (ii) were primarily involved in knowledge work; (iii) used technology to remain connected to work. Data were analysed thematically by two researchers, and a framework analysis applied to extract the key KSABs associated with e-competence and associated personal wellbeing.

Results: Having coded the interview transcripts, using a two-stage process of decoding and then encoding (Saldana, 2015) agile working KSABs, 20 competencies emerged. These competencies were categorised into 3 broad themes representing the SDT needs for autonomy (7 competencies), relatedness (6 competencies) and competence (7 competencies).

Limitations: Interview data were obtained from a single organisation, meaning that the emerging e-competency framework will need to be cross-referenced in other domains to ensure generalisability.

Practical Implications: The preliminary e-competency framework highlights differences in the KSABs required for healthy and productive agile workers, based on self-determination theory. The framework has strong potential to: (i) inform and develop self-regulatory practices; and (ii) help organisations provide effective guidance and support in managing the wellbeing of agile workers. In our next tranche of research, the e-competence of agile workers will be appraised according to our framework, and this will then be related to daily occupational health markers (engagement, wellbeing, absenteeism, productivity) in an experience sampling study.

Originality: This study is the first to: (i) investigate and propose a comprehensive set of competencies to facilitate effective agile working; and (ii) link e-competencies to a motivational theory of psychological needs. It is intended that this framework can be used as a guide to support the health and wellbeing of those transitioning to this nascent work-form.

O119: Daily Playful Work Design: A Trait Activation Perspective
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Purpose: There is a long-standing tradition of research that acknowledges the beneficial characteristics of play, such as its capacity to generate joy and facilitate immersion. Little is known about play at work, yet we argue that using play at work has great potential to increase employees’ motivation to perform their work on a day-to-day basis. Integrating the literature on play and individual work design, we introduce the concept of playful work design (PWD). We propose that PWD is an individual strategy that promotes daily work enjoyment through transforming core tasks into opportunities for play. The purpose of our study was twofold. First, we validated our PWD questionnaire. Second, we investigated whether the use of PWD contributed to employees’ work engagement and creative performance. Third, using Trait Activation Theory (TAT), we hypothesized that Playful and Open individuals benefit more from the use of PWD, i.e., become more engaged on the days that they use PWD, compared to their counterparts low in Playfulness and Openness.

Methodology: Our daily diary study included of a total of 88 employees who filled out an average of 4.44 daily questionnaires.

Results: In line with our expectations, results of multilevel confirmatory factor analysis showed that daily PWD is best described by a two-factor structure (i.e., competition and fun). In addition, multilevel moderated-mediation analyses revealed that employees (especially those high on Playfulness and Openness) were more engaged in their work and consequently, were more creative, on the days that they used PWD.
**Originality/Value:** The current study makes three major contributions. First, it proposes and validates a new approach to individual work design. Second, it shows that PWD is a promising strategy for individuals to become more engaged in their work on a day-to-day basis. Third, confirming TAT, our findings show that individual work strategies may be more beneficial to some employees than to others.

**O120: Organisational and Job Engagement as Buffers of Job Stress in Psychological Wellbeing Practitioners**

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Engagement has been proposed as instrumental to the experience of better health and wellbeing at work (e.g., lower anxiety, depression, and stress) (Saks, 2017). Engagement is role specific and therefore distinct job characteristics may influence an employee’s experience. Mental health professionals have been found to be particularly vulnerable to stress and burnout (Morse, Salyers, Rollins, Monroe-DeVita, & Pfahler, 2012) as their work is characterized by a lack of autonomy, repetitive tasks, vicarious traumatisation, and inadequate supervision, (Skovholt, Grier, & Hanson, 2001), high volume caseload, and high rates of service users (Norcross, 2000). These characteristics are common within the Psychological Wellbeing Practitioner (PWP) workforce tasked with offering low-intensity CBT support to individuals with mild-to-moderate anxiety and depression (Golden, 2011). The job of PWPs in the national healthcare services in the UK is characterised by a high volume of caseloads requiring the management of common mental health difficulties in the general population but often ending up supporting complex clients (Binnie, 2015). These specific high job demands can be experienced by PWPs as stressful working conditions. The present study explored if job engagement mediated the relationship between job characteristics and Effort-Reward Imbalance (ERI; Siegrist, 1996) in PWPs.

As a PWP may work within the IAPT services in the UK national health services or in distinct charities, the specific organisational characteristic also needs to be considered. The challenges currently faced by the national healthcare services in the UK with increased demands and limited resources create a specific organisational context that may influence the role played by PWPs. Therefore, in addition to the mediating role of job engagement, the study also explored the mediating role of organisational engagement.

A total of 92 qualified PWPs participated in a three-wave longitudinal survey that included the Job content questionnaire by Karasek (Ostry et al, 2001), the Effort-Reward Imbalance questionnaire by Siegrist et al. (2004) and the Job and Organisational Engagement questionnaire by Saks (2006). Participants were recruited via an online advert published in social media platforms as the PWP online forum and provided with a direct link to the online survey.

Results suggested that job characteristics (high job demands and low control) were negatively associated with higher levels of ERI (stress) but positively associated to both job and organisational engagement. Further studies are needed to support recommendations for the PWP population as well as to understand key resources for social support in managing the effects of job characteristics on stress. Results also suggest that only organisational engagement is a mediator of the relationship between job characteristics and ERI. This result supports the adoption of a multi-foci engagement framework as proposed by Saks (2006) and highlights the importance of work as a social experience and of organisational membership in managing stress at work.
O121: The Synergistic Influence of Work Engagement and Psychological Wellbeing on Employees’ Turnover Intention
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The influence of human resource management and HR practices on organizational performance is a central research question capturing the interest of academics and practitioners for the last decades. One important trend in the literature is the notion that employees’ reactions to the way they are managed are critical to understand the links between HRM and individual and organizational key outcomes (Nishii, Lepak & Schneider, 2008). Among these reactions there are a range of diverse organizational attitudes, such as organizational commitment, work satisfaction, psychological wellbeing, and more recently engagement (Alfes et al, 2013; Shuck et al, 2011). In a complementary perspective, some scholars have argued in favour of integrated HRM frameworks, one of the pioneers was the Harvard Model (Beer, Boselie & Brewster, 2015), which includes both individual wellbeing and organizational effectiveness as desirable outcomes of an effective human resource management system.

Further, a key issue driven by the contemporary highly competitive environment is the capacity of organizations to retain their employees. The importance of turnover for organizational effectiveness has been largely acknowledged in the literature (Allen, Bryant, & Vardaman, 2010; Hancock et al, 2013). Studies have listed many variables as possible antecedents of quit decisions. Despite of being far from a determinant predictor, rarely exceeds 10-15%, turnover intention is still the strongest antecedent of voluntary turnover decisions, sometimes referred to as the most influential proximal variable of actual turnover in organizations (Allen, Weeks & Moffitt, 2005; Griffeth, Hom & Gaertner, 2000; Zhang et al, 2015).

The purpose of this study is to deepen extant theoretical and empirical knowledge on the mechanisms by which organizations can influence employees’ retention through the effective use of two mechanisms, one motivational based on work engagement and psychological wellbeing (Arrowsmith & Parker, 2013; Jie et al., 2014; Mackay et al., 2016), and another through the strategic use of extrinsic factors, i.e., the salary (De Gieter & Hofman, 2015).

The data for this study were collected from a sample of 447 employees of a quite diverse range of ages and salaries. The research model and hypotheses were tested using structured equation modelling (SEM). The results indicate that work engagement has a strong negative influence (-.52) on turnover intention. Moreover, there is a partial mediation effect of work engagement through psychological wellbeing on turnover intention, which in combination explained 45% of its variance. Further, the salary level did not influence turnover intention, on the other hand, it has a small positive significant influence on psychological wellbeing (.12). Finally, our conclusions underline the importance of considering both short term focus, work engagement, as well as long term focus, psychological wellbeing, to get a synergistic effect in reducing the intentions to leave organizations. Moreover, the study adds new insights on the role of financial rewards in thinking about quitting.

O122: Crossover of Work Engagement: Investigating the Potential Moderating Role of Agreeableness
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This study examines the crossover of work engagement among pairs of nurses working together and the potential moderating role of agreeableness in this process. A plethora of studies have focused on the crossover of work engagement, and more specifically on the factors that
moderate the crossover of this organizational aspect in different situations and environments. The transmission of this positive state is expected to occur in an indirect manner, due to interpersonal and behavioral interactions between the employees (Westman and Vinokur, 1998). Moreover, agreeable individuals are characterized as kind, sympathetic, considerate and cooperative (Thompson, 2008), and thus, are more likely to transmit or receive positive emotions or states during their daily interactions with others.

We thus hypothesized that a partner’s work engagement at time 1, will influence one’s engagement at time 2 – when controlling for one’s engagement at time 1 - (Hypothesis 1); also, that agreeableness (both partner’s and one’s own agreeableness) influences work engagement (Hypothesis 2); finally, that agreeableness moderated the effect of a partner’s work engagement at time 1, on one’s own engagement at time 2 (Hypothesis 3).

Data was collected from 74 nurses, on two different occasions: before (time 1) and after (time 2) an intervention. The intervention involved changes in working schedules so that nurses that would not typically work together, were paired to collaborate in dyads after these particular changes. Work engagement, at time 1 and time 2, was measured with UWES-17 and agreeableness with the TPQue questionnaire. Results of multilevel regression analysis supported H1 and H3, but the effect of agreeableness (either partner’s or one’s own) on work engagement was not statistically significant. Taken together, the results indicate that there is a crossover effect where engagement of a partner can be transferred to his/her colleague after a two week intervention and this effect is further intensified if either one or both members in the dyad are characterized by high levels of agreeableness. However, when both members within a dyad are agreeable, the effect is additive rather than multiplicative (i.e. there was no three-way interaction).

The results of this quasi-experiment add to the crossover literature by decoding the mechanisms related to the crossover process. From a practical point of view, the particular findings could be of significant assistance to the managers or CEOs of various organizations, who have a vested interest in increasing their employees’ work engagement. Future research should focus on the investigation of other potential moderators of the crossover of work engagement, as well as whether this particular process can further trigger other desirable organizational outcomes, such as job satisfaction (Alarcon & Lyons, 2011) and job performance (Bakker & Xanthopoulou, 2009).

O123: Why do SMEs so Widely Neglect HRM?
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It may be understandable that the managers of many small and medium firms are not concerned with literature on Human Resource Management. They see their roles as hand-on and doing rather than standing back and reading. Founders as managers, and managers of successful SMEs also tend to assume that they know all they need to know, not least if their enterprise both has survived and is flourishing. Yet, to what extent the lack of concern of managers of SMEs with issues central to HRM practices, such those relating to mentoring and career support, providing engaging work, and organizational support can result in high rates of turnover and their losing especially the tacit knowledge and implicit learning vital for sustained competitiveness that employees have gained when with them, and then are taking elsewhere. In Japan, from the early 20th century, this gave rise to annual seniority pay increases, profit sharing and the psychological contract for core workers of a commitment to lifetime employment. Our paper addresses this omission by exploring the link between employee’s attribution of the human resources practices in place and the quality of employment relationship with immediate supervisor. It also explores inhibitory and facilitating characteristics of the career model to enhance the organizational commitment in shaping this relationship.
The present study conducted with one thousand two hundred and sixty nine (n=1,269) employer-supervisor dyads from thirty one (n=31) small and medium firms operating in a southern European member state of the EU, nine of which were social economy, nine in robotics, four in the food industry, three in electronics, two in environmental management, one in pharmaceuticals distributions, one in industrial ovens, one in bicycle parts, one in transport, one in automobile components, one in education, one in telecommunications engineering, and one in fruit and vegetables. Data was collected late 2016 early 2017.

The findings suggest that the high rates of labour turnover amongst the qualified employees in such firms were because of lack of perceived organisational support and of any clear promotion prospects, including also a sense of insecurity in relation to future employment prospects. This indicates that such turnover less indicated a self-directed concern with boundaryless careers than a failure of the managers of SMEs to assure organization-fit rather than only demand job-fit. The findings also suggest that SME employers’ associations should be concerned to illustrate such factors to at least those younger generation managers of SMEs who may be open to appreciating the degree to which retaining already experienced employees not only can enhance sustained competitive advantage but be of mutual advantage for both them and the enterprise, and to organize national and regional conferences and workshops on this potential.

O124: Stressful Work Environment and Burnout: What is the Role of Self-Directedness?
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Background: Rapid changes in workplaces may be stressful and challenge the wellbeing of employees. It is evident that a stressful work environment is a risk for burnout, and there might be individual factors that play a role in the association. Self-directedness (i.e. the experienced ability to regulate and adapt behaviour to the demands of environment) may attenuate the association between stressful environment and burnout. We examined whether self-directedness or its subscales play a role in the association between stressful work environment and burnout.

Methods: The participants were 76 teachers. We assessed burnout using the Maslach Burnout inventory (MBI-GS) and self-directedness using a self-directedness scale from the Temperament and Character Inventory (Cloninger, 1993). Stressful work environment was defined as high job strain (a combination of high job demands and low job control) (Karasek & Theorell, 1990) and as an experienced effort-reward imbalance (ERI) (Siegrist et al., 2004). Analyses were conducted using linear and bootstrapped regression.

Findings: Job strain (b=0.57, p<.001) and ERI (b=0.46, p<.001) were related to burnout. Self-directedness explained 32/39% of the association between job strain/ERI and burnout, respectively. Responsibility 17/27%, purposefulness 30/38% and self-acceptance 16/21% explained a part of the association between job strain/ERI and burnout, respectively.

Discussion: Self-directedness, responsibility, purposefulness and self-acceptance seem to attenuate the association between stressful work environment and burnout in teachers. These characteristics may be useful in stressful work environments and should be taken into account when developing occupational health interventions aimed at preventing and decreasing burnout in teachers.
O125: Perceived Return-to-Work Obstacles and Self-Efficacy for Overcoming Barriers in Workers Suffering from a Common Mental Disorder or Musculoskeletal Disorder.
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Common mental disorders (CMDs, e.g., depression) and musculoskeletal disorders (MSDs, e.g., chronic pain) lead the list of causes for work absence in several countries. Current research is starting to look at workers on sick leave as a single population, regardless of the nature of the disease or accident. The purpose of this study is to report the validation of the Return to Work Obstacles and Self-Efficacy Scale (ROSES) for people with MSDs and CMDs, based on the disability paradigm.

Methods: From a prospective design, the ROSES’ reliability and validity were investigated in a Canadian sample of workers on sick leave due to MSDs (n = 206) and CMDs (n = 157).

Results: Exploratory and confirmatory factor analyses revealed that 46 items spread out on 10 conceptual dimensions (e.g., Fears of a relapse, Job demands, Difficult relation with the immediate supervisor), with satisfactory alpha coefficients and test–retest reliability for all subscales. Finally, several dimensions of ROSES also predict the participant’s RTW within 6 months for MSDs (e.g., job demands), and CMDs (e.g., difficult relation with the immediate supervisor), even when adjusted by several variables (e.g., age, severity of symptoms). Apart from the job demands dimension, when the ROSES dimension is more external to the individual, only the perception of obstacles remains significant to predict RTW whereas it is the opposite result when the dimension is more internal (e.g., fears of a relapse).

Conclusion: The ROSES demonstrated satisfactory results regarding its validity and reliability with people having MSDs or CMDs, at the time of the return-to-work process. Clinically speaking, ROSES is pertinent because it systematically measures both the worker’s perception of obstacles and his or her self-efficacy beliefs about overcoming them. As the ten dimensions of this instrument cross-cut both study populations (CMD and MSD), health professionals should find it easy to use.

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Staff shortage in the social sector is a serious problem in several European countries and the high turnover rate of professional social workers presents a major challenge to the professional field. The advent of New Public Management in Sweden has clearly affected the social services in terms of increased workload, a reduction in professional autonomy and more conflicting demands. Another possible consequence of New Public Management that is addressed in this study, is that fundamental democratic values often are displaced in public management in favour of economic values, which creates a climate that is not conducive to an open dialogue between different organizational levels. Without open critical reflection, it is not only essential democratic values that are at stake but also professionalism and the service quality provided to clients which could result in high turnover rates. In order to ensure the continuity, quality and stability of the social services provided to Swedish citizens, the retention of social workers is of acute matter.
The purpose of the present longitudinal study is, therefore, to investigate which work conditions, in terms of different demands and resources, predict the decision to actually stay in the organization amongst social workers in the Swedish social services. Data was gathered from statutory social workers (n=3522) who responded to two national web questionnaires over a one-year period. In order to refine and identify social workers who wanted to stay and actually did stay, the group “stayers” (n=1368) consisted of participants that reported high intentions to stay during T1. The group “leavers” (n=1442), were those who actually had quit their jobs during T2.

A multivariate logistic regression analysis showed that the work conditions that predicted the highest likelihood to stay in the organization were a high degree of perceived openness in the organization followed by a low degree of role conflicts, a high degree of perceived service quality, a low degree of quantitative demands and a high degree of perceived human resource orientation in the organization. The construct of openness was used to capture the social workers’ perceived possibilities to express critique and concerns about service quality as well as working conditions deficiencies and also to discern whether or not their criticism had been heard or addressed. In order to decrease undesirable turnover and improve retention among social workers, the results point towards the necessity of developing management strategies and organizational structures that enable a continuous and open dialogue between strategic and operational levels within the organization. Further, a reduction of conflicting demands, as well as reasonable prerequisites for conducting a qualitative work, appear to be essential for social workers’ willingness and choice to stay.

O127: A Review of Reviews Supporting a Cross-disease Approach to Return to Work after Common Mental Disorders, Cardiovascular Diseases, and Cancers

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Purpose: The study aimed at identifying the common psychosocial factors that facilitate or hinder the return to work (RTW) after a sick leave due to common mental disorders (CMDs), cardiovascular diseases (CVDs), or cancers (CAs).

Methods: We conducted a systematic review of reviews analysing peer-reviewed, quantitative, cohort studies investigating psychosocial factors influencing RTW after a CMD, CVD, or CA. We searched 13 databases from 1994 to 2016. For each disease we identified additional cohort studies published after the date of the latest review included. Data extraction followed a three steps best-evidence synthesis method: 1) the extraction of results about each predictor from studies within each single review and in the additional papers; 2) the synthesis of results across the reviews and additional papers investigating the same disease; and 3) the synthesis of results across the diseases.

Results: The search strategy resulted in 1,029 unique records from which 27 reviews and 75 additional studies underwent comprehensive review. Fourteen reviews and 32 additional cohort studies met eligibility criteria. Specific predictors of RTW with different levels of evidence are provided for each disease. We found four common facilitators of RTW (job control, work ability, perceived good health and high socioeconomic status), and six barriers of RTW (job strain, anxiety, depression, comorbidity, older age and low education). Moreover, the review highlighted 20 potentially common factors, that is factors with evidence reported for two out of the three diseases.

Conclusion: This is the first review to systematically analyse commonalities in RTW after CMDs, CVDs, or CAs. The common factors identified indicate that the RTW process presents many
similarities across various diseases, thus supporting the validity of a cross-disease approach. Cross-diseases and disease-specific approaches should not be seen as opposed perspectives. Recognition of the commonalities does not reduce the need for and importance of studying the specifics of each disease that caused the work disability.

O128: Job Satisfaction and Wellbeing of Teachers in Socially Disadvantaged Schools: Results from a National Survey of French Teachers
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Introduction: Teachers in socially disadvantaged schools may face stressful situations and multiple challenges in their daily practice (i.e. learning difficulties, disciplinary issues). However, few studies investigated the impact of this specific work environment on teachers’ job satisfaction and wellbeing. The aim of the present study was to examine whether teaching in socially disadvantaged schools had an impact on teachers’ job satisfaction and wellbeing.

Methods: Cross-sectional analyses were performed using the “Teachers’ Quality of Life” national survey (MGEN Foundation for Public Health/French Ministry of Education; 2013) among 1,507 in-service teachers of primary schools (PS) and lower secondary schools (LSS) throughout France. To categorize schools, we used the “Priority education areas (PEA)” classification which considers, among other indicators, the proportion of pupils from underprivileged social backgrounds. Different aspects of wellbeing were considered, including a single-item measure of overall job satisfaction, sick leave (at least one during school year) and quality of life evaluated through the short version of the World Health Organization Quality of Life questionnaire (WHOQOL-Bref) that includes 4 domains: physical and psychological health, social relationships, and living environment. Associations between teaching in PEA schools and indicators of wellbeing were evaluated by binary logistic regression models for categorical outcomes (job satisfaction) and linear regression models for continuous outcomes (score of quality of life domains). Analyses were stratified by education degree and adjusted for sociodemographic (age, sex, marital status), health-related (presence of chronic diseases) and work-related characteristics (job strain, number of pupils by class, quality of relationships with pupils).

Results: The study population was composed of 942 PS teachers (including 145 in PEA schools) and 565 LSS teachers (including 113 in PEA schools), aged 42 years old on average and 76% were women. In the univariate model, EPA-school teachers were significantly younger compared to non-EPA school teachers (≤35 years old: 37% vs. 20%, p=0.01, respectively) and less satisfied with their job (Not very satisfied or not satisfied at all: 20% vs. 17%, p=0.008). In the adjusted models, significant differences of wellbeing were observed between PEA and non-PEA school teachers in PS but not in LSS. In PS, PEA school teachers had more sick leave than non-PEA school teachers (odds ratio [95% confidence interval] = 1.76 [1.23, 2.52]) and reported poorer quality of life in three domains: physical health (Beta coefficient [95% confidence interval] = -4.05 [-6.85, -1.25]), psychological health (-2.80 [-5.48, -0.12]) and living environment (-4.10 [-6.48, -1.71]). There was no difference in job satisfaction between PEA and non-PEA school teachers.

Conclusion: Based on a representative sample of French teachers, we did not observe differences in job satisfaction between teachers in PEA and non-PEA schools. However, our results suggest that teaching in socially disadvantaged schools had a negative impact on the general wellbeing of primary school teachers but not of lower secondary school teachers. Further analyses will be conducted to understand these differences.
O129: A Dynamic Dual-path Model of Affective Wellbeing Trajectories: The Effects of Workload Stress and Social Support
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Introduction: Affective wellbeing in the workplace has attracted increased scientific interest in the past decades (Ilies, Aw & Pluut, 2015) due to its important implications for individuals and organisations (e.g. Diener & Chan, 2011; Ilies, Fulmer & Spitzmuller, 2009). From research in the context of adaptation theory (Brickman & Campbell, 1971), we know that AWB can show short and long-term fluctuations (e.g. Mancini, Bonanno & Clark, 2011). However, workplace-specific studies of changes in AWB are scarce. In particular, it is not clear yet which external factors lead to changes in AWB at work. In the dynamic job demands-resources model (JD-R), Bakker (2015) specifies that as dynamic factors in the workplace, job demands foster other detrimental workplace processes (“loss cycle”), while job resources foster other beneficial workplace processes (“gain cycle”). In analogy with this, we propose a dual-path model for predicting changes in workplace AWB. Specifically, we examine whether the change pattern in a dynamic demand (workload stress) predicts the change pattern in negative affect, while the change pattern in a dynamic resource (social support) predicts the change pattern in positive affect. We oppose this dual-path model to a comprehensive-path model, which assumes that changes in both workload stress and social support predict changes in both affect qualities.

Method: Data on workload stress, social support, positive affect and negative affect was collected weekly during a period of 12 weeks by means of an online survey. 126 participants responded at every measurement point. We confirmed factorial invariance for all scales across all measurement points. Latent growth analysis was conducted to model change patterns for all variables. Subsequently, we used Bayesian estimation for modeling both the dual-path model as well as the simultaneous-effects model with multiple regression.

Results: Latent growth analysis showed that the change patterns for workload stress, social support, and both affect qualities could all best be represented by a quadratic change trajectory. All variables showed inter-individual variability in the latent change parameters (intercept, linear slope, and quadratic slope). Bayesian model fit indices favoured the dual-path model of affective change as opposed to the comprehensive-path model. Regression results indicated that change parameters in social support positively predicted change parameters in positive affect, while change parameters in workload stress positively predicted change parameters in negative affect.

Conclusions: The present study gives insight into the dynamic development of AWB in the workplace depending on job demands and resources. Specifically, our results supported a dual-path model; with a loss path connecting change in workload stress with change in negative affect, and a gain path connecting change in social support with change in positive affect. These results underline the possibility of directly influencing the development of employee’s AWB over time by adjusting workplace demands and resources. Future studies should investigate whether other workplace demands and resources follow the same dual-path model for predicting AWB and other wellbeing facets.

O130: Wellbeing at Work, Quality of Work Life, and General Wellbeing as Social Representations: What Makes the Difference?
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Our research relies on two statements on Wellbeing at work (WBW). First, conceptualization of Wellbeing (WB) has begun with General wellbeing (GWB), differentiating hedonic and eudemonic dimensions (David & al, 2013). Considering the hedonic approach, researchers...
observed that context may influence WB evaluations (Diener, Lucas & Scollon, 2004, 2006; Schimmack & Oishi, 2005). It led to conceptualize life-domain WB, especially WBW, following the two-dimensional structure of GWB (Fisher, 2014). It is then assumed that WB is stable across domains. The second statement relies on a field observation: organizational practitioners tend to assimilate WBW with Quality of work life (QWL).

In order to clarify how much work-related quality of life and WBW overlap, we conducted our research, relying on the framework of social representation. This approach considers that reality is represented and given sense through a mental system of values, ideas and practices at individual and group levels: social representations reflect common and subjective thinking about complex objects (Moscovici, 1961). Using Central Core Theory (Abric, 1994), our study is based on one of the most robust theoretical and methodological framework in this field.

Participants were Top Managers from a French financial group. The initial sample of 3792 employees was randomly divided into three equally-sized sub-samples, one for each social object: (1) WBW, (2) QWL, (3) GWB. The final sample consisted of 597 individuals (Mean age = 51.54 years, SD = 6.68, 43.20% female), with 213 for WBW, 193 for QWL and 191 for GWB. Each participant completed a free association task, with the following instruction (for the WBW population): “Give the first four words (or expressions) that come to your mind when it comes to wellbeing at work”. They also assessed affectivity and independence to context for their four words, their satisfaction at work and answered socio-demographic questions.

The global corpus shows the use of 2361 words. After lemmatization, 315 distinct categories were created and were then gathered into more synthetic categories: each evocation was classified into four embedded levels of categories to remain as close as possible to the participants’ production. Only four categories over the nine most synthetic categories match the Abric’s criterium of being proposed by at least 10% of the sample (Abric, 1994).

The first finding relates to the categories themselves: only few evocations refer to the traditional dimensions of hedonic and eudemonic WB, such as satisfaction and emotions. We then compared social representations, using a prototypical analysis: the three objects share the same central core, “Relationships”. This result confirms our field observation but also questions the two-factorial structure of WB: it draws attention to the social dimension of WB, highlighted by Fisher (2014) as a neglected dimension of WB so far.

To go further into comparison, we used Ellegard index to assess the similarity of corpus: QWL and WBW overlap highly (0.78), compared to GWB and WBW (0.40), discarding independence hypothesis between QWL and WBW. Additional results will be presented during the conference.

O131: Relationship between Bullying, Resilience and Job satisfaction among Pakistani University Employees
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It may seem that bullying takes place when at a young age, but it has been amply demonstrated in the West that bullying is a common practice in the workplace. Workplace bullying also holds a similar definition. It means a constant act of negative or hostile behavior with a colleague by another colleague or by some authority figure which may result in upsetting the victim (Yahaya et al, 2012). This may also lead to absence from work, health issues, and frustration and unable to manage deadlines (Beswick, Gore, Palferman, 2006). In spite of bullying some people are not effected adversely. Some researchers point out that such outcomes are because of resilience.
Resilience is such a phenomenon in which a person exhibits positive characteristics even in an adverse situation. According to researchers situations where individuals have greater “control” over situations help them in reacting to that situation in a much more relaxed way (Cazan & Dumitrescu, 2015). It has also been seen that workers who are more resilient are more satisfied at work. Job satisfaction could be defined as how good a person feels about his job. At the same time if an individual associates negative feelings for a job that means that person is highly dissatisfied. There is a positive correlation between positive environment at workplace and employee satisfaction (Çelik, 2011).

Pakistan is a developing country and the rules, policies, human rights and boundaries in professional relationships are not clearly defined or if defined then people are not made aware of such. However, many a times workers may not even know that they are being bullied. This leads to silent yet consistent agony that leads to job dissatisfaction. There is a serious dearth of such studies in Pakistan that leads to misinformation or lack of information and in turn policies and procedures for identification and report stand unclear if they exist at all. The aim of the study was to ascertain relationship between workplace bullying, resilience and job satisfaction in Pakistan. For this purpose three measures were used along with demographic questionnaire. These measures were "The Negative Acts Questionnaire," "Brief Resilience Scale," and "Work and Meaning Inventory."

The sample consisted of (50% ) university faculty and (50%) university’s academic staff with a total sample population of 50% men and 50% women (n=400). The data was collected from administrative staff and faculty of a private university in a cosmopolitan city of Pakistan. The proposal was vetted by the IRB of the University for Ethical Soundness. The results indicated a significant relationship between bullying, resilience and job satisfaction.

The implications of the study were to make people in workplace setting aware of workplace bullies and to make laws to control this unpleasant behavior so that the workers can enjoy a healthy and positive work environment that would lead to personal satisfaction and enhanced quality of life. Moreover, enhanced productivity in the workplace. Such researches would be very helpful especially for the developing countries like Pakistan for the personal and industrial growth.

**O132: Workplace Learning and Leadership Within the Service Sector**

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**Background:** Workplace learning is gaining importance for organisations due to increasing operational speed of change. In addition, digitisation and a growing share of older employees emphasise learning as a basic condition for innovation and productivity. Theoretical approaches postulate the relevance of learning-oriented activities for competence development integrated in the process of work, as well as the preservation and promotion of work-ability and occupational wellbeing. The current research project of the German Federal Institute of Occupational Safety and Health examines the extent to which supervisors in the administrative service sector are competent, motivated and able to support informal learning of their employees. Multi-level analyses estimate effects at company, team and individual level.

**Methodology:** The cross-lagged panel design reviews (1) which individual and organisational factors moderate the impact of learning-enhancing work design on competences, health, and work ability, (2) how leadership modifies these effects, and (3) how stable the developed model in in terms of time, companies and teams is.
Results: Data from 551 service workers of different organisations and their associated executives underline the importance of workplace learning in respect to skill development, health and work ability. Learning-oriented leadership and its facets are reflected as a differentiated model variable, as well as a corporate learning culture.

Discussion: Results of the employee and supervisor surveys are interpreted in the context of expert interviews. Implications for operational practice and future research needs are presented.

O133: Claiming leader identity via Motivation to Lead – motivational profiles and their associations with managers’ wellbeing among Finnish managers
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To become a leader is not only about having personal leadership qualities, it is also a matter of choice whether to pursue the role or not. We examined whether different latent profiles can be identified based on managers’ motivation to lead (MTL) and if these profiles are associated with managers’ work engagement and burnout. MTL is a construct that captures differences between individuals regarding their willingness to pursue and/or to accept leadership roles. It consists of three subdimensions: Affective-Identity MTL, Social-Normative MTL and Non-Calculative MTL. We propose that MTL is a relevant conceptualization of claiming leader identity.

In total, 1001 Finnish upper white-collar managers participated in this study. They represented different sectors and educational backgrounds: professors (38 %), business sector managers (17%), eMBA programme graduates (15%), social and health care sector (10%), MSc’s in engineering, architecture or had a corresponding degree in mathematics or natural sciences (10 %) and researchers, university teachers and other academic experts (9 %). Of the respondents, 48 % were women. The mean age was 51.5 years (SD = 8.8, range: 25 – 69 years) and the mean of past leadership experience was 12.9 years (SD = 8.4, range = 0 – 43 years). The respondents filled in an electronic questionnaire in March-August 2017.

MTL was measured with nine items from the MTL questionnaire covering three abovementioned subdimensions. Wellbeing was measured with the 9-item version of the Utrecht Work Engagement Scale and with the 9-item version of the Bergen Burnout Indicator. Latent Profile Analysis (LPA) was performed using the Mplus program to identify latent profiles of MTL. Fit statistics supported the solution of four latent groups: 1) Average Positive Leader Identity (LI) (43%, all three MTL subdimensions above the mean) 2) Average Negative LI (41%, all MTL subdimensions below the mean), 3) Low LI (12%, very low Affective-Identity MTL and highest Non-Calculative MTL) and 4) High LI (5%, highest Affective-Identity MTL and Social-Normative MTL). Leaders with Average Negative LI -profile were oldest. Occupational background had an association with certain MTL-profile.

Results of analysis of covariance (ANCOVA) showed that, after controlling for age and occupational background, leaders with Low LI and Average Negative LI –profile reported highest amount of all burnout symptoms, respectively. High LI –leaders reported less inadequacy compared to other profiles. They also experienced work engagement most frequently on each dimension. Average Positive LI –leaders had also frequent experiences of work engagement. Low LI –leaders experienced least vigor.

Based on our results, the highest level of wellbeing was experienced by leaders who have a positive valence towards leadership and who value the position. These findings may emphasize the role of person-vocation or person-job fit for wellbeing and raises a concern about artificial
career progression for experts towards leadership roles. Further research using a longitudinal
design would enable causal inferring about the relation of MTL and wellbeing and track possible
changes in MTL profiles. Further research should also concentrate on reducing common method
bias and investigating also other managers beyond upper-white collar population.

O134: Leadership in the Operating Room: How Surgeon Involvement and Elevation Relate
to Surgical Team and Patient Outcomes
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We examine the relationship between types of leadership behaviour of surgeons during surgeries
on surgical team outcomes and patient outcomes. Surgeon involvement with and elevation of
surgical team members are two types of leadership behaviour that interact to predict surgical
team and patient outcomes. In particular, surgeons who are involved and provide clear guidance
to surgical team members while also expressing behaviours that elevate surgical team members
were hypothesized to promote surgical team psychological safety, particularly during complex
surgeries. In turn, surgical team psychological safety was proposed to be related to fewer
surgical errors and better patient outcomes (i.e., fewer post-surgery complications and fewer
follow-up visits to medical professionals). Multisource data were gathered from a large teaching
hospital in Ontario, Canada. Research assistants with medical training observed and rated
surgeon leader behaviours and surgical errors during surgery and gathered patient information
before and after surgery. In addition, surgeons completed complexity ratings of the surgery prior
to surgery, while surgical team members rated psychological safety after each surgery. Results
from three-way moderated-mediation analyses controlling for multilevel effects largely supported
the hypotheses. In particular, high-involvement behaviours and high-elevation behaviours were
related to the highest level of surgical team psychological safety under conditions of high surgical
complexity. In turn, surgical team psychological safety was related to fewer post-surgery patient
complications and fewer visits to medical professionals, but also more surgical errors. Finally,
the indirect effects were only significant for follow-up complications and errors at high levels of
the moderators, while no significant indirect effects were found for follow-up visits to medical
professionals. Overall, the results largely supported the hypotheses that leader involvement and
elevating behaviours combined contributed to higher surgical team psychological safety
especially under complex surgical conditions, and that higher surgical team psychological safety
was largely related to better patient outcomes. The findings have implications for identifying and
training effective leadership behaviours and improving important team and patient outcomes in
complex circumstances.

O135: Does Work-Personal Life Interference Predict Turnover Among Male and Female
Managers, and do Depressive Symptoms Mediate the Association?
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Background: To increase possibilities for women and men to remain in leadership positions a
better understanding of turnover processes among female and male managers appears
important. Although the interface between work and personal life has been recognised as a key
issue for managers, it has seldom been empirically investigated in relation to turnover. In the
present study we used a longitudinal multi-group design to examine associations between work-
personal life interference, managerial turnover and depressive symptoms, and their differences
with respect to gender. We hypothesised that 1) work-personal life interference predict
managerial turnover, 2) depressive symptoms mediate the association, which 3) differ by gender.
Methods: Data were drawn from four waves (2010, 2012, 2014 and 2016) of the Swedish Longitudinal Occupational Survey of Health (SLOSH), a cohort of the Swedish working population. Participants who in any wave reported to have a managerial or other leading position were included (n=717 men and 741 women). Mediation models within a multilevel SEM framework, in which repeated measures were nested within individuals, were fitted. First, bivariate autoregressive and cross-lagged paths between the variables (t and t-1) were fitted in gender stratified models. Secondly, a full longitudinal gender stratified mediation model was built to estimate if the association between work-personal life interference (t-2) and turnover (t) was mediated through depressive symptoms (t-1). Gender differences in cross-lagged paths were estimated with multiple-group analysis. All analyses were adjusted for age, education, labour market sector, civil status and children living at home, and conducted in MPLUS 7.

Results: In accordance with our first hypothesis, significant prospective paths between work-personal life interference and turnover were found among both male and female managers. In line with our second hypothesis, there were furthermore significant prospective associations between work-personal life interference and depressive symptoms as well as between depressive symptoms and turnover in both genders. However, no significant intermediate effect of depressive symptoms in the longitudinal association between work-personal life interference and turnover was found in any gender, and therefore our second hypothesis was not supported. We found gender differences in several of the estimated associations, lending partial support for our third hypothesis.

Conclusions: Establishing organisational prerequisites for good work-personal life balance among managers may be a means to retain male and female managerial talent.

O136: Why Do I Retaliate My Supervisor's Incivility Towards My Partner at Home? A Dyadic Diary Study
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Prior research stressed the importance of supervisor behaviour for an employees’ functioning both at work and outside work. Even when the relationship with the supervisor is quite good, an employee can be confronted with incivility by his/her supervisor, being low intensity deviant behaviors with the intent to harm you (e.g., making demeaning or derogatory remarks, being condescending). Dealing with this experienced incivility consumes the employee’s limited self-control resources. The aim of this study is to examine whether the effect of experiencing supervisor incivility spills over into the home domain—with the employee behaving in a negative way towards his/her partner after work—through the lack of self-control. Moreover, we examine whether the effect of supervisor incivility on self-control is strengthened by experiencing coworker incivility.

In order to test our hypothesis, we collected dyadic daily dairy data from 130 Belgian employees. The participants first completed a general questionnaire examining socio-demographic variables. Subsequently, they were invited to complete five daily questionnaires (one week from Monday until Friday) before going to bed, measuring experienced supervisor incivility, coworker incivility, self-control and negative behavior enacted towards their partner. On the same days, their partners were invited to complete a questionnaire examining the level of enacted negative behaviour by the employee towards them.
The results from our multilevel path analyses indicate that employees who are confronted with supervisor incivility during a working day are more likely to behave in a negative way towards their partner (both self-rated and partner-rated behavior) at home in the evening. Dealing with the incivility of your supervisor consumes your limited amount of daily self-control, which subsequently translates into behaving negatively at home. We only found support for this mediation effect based on employees’ self-rated negative behavior. Experiencing coworker incivility strengthens the negative effect of supervisor incivility on self-control. Our study contributes to a better understanding of the daily negative spillover effect from demanding work situations (i.e., experiencing with supervisor/coworker incivility) to behavior at home through reduced levels of self-control.

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Working parents make up a significant percentage of the Australian workforce (ABS, 2017). As seen through the work-family conflict research it can be difficult for employees and especially working parents to balance both work and family (Allen & Martin, 2017). Having one or both parents’ employed in a household typically helps to lessen financial burden but how are children impacted by their parents’ work?

This study aimed to understand some of the ways children might be impacted by their parents’ employment, including how children’s career aspirations are influenced over a six-year period. It was hypothesized that parents’ views of their own work (measured using Marshall and Barnett’s Work and Family Strains and Gains Scale), high levels of parental psychological distress (Kessler K6 depression scale), as well as children’s emotional symptoms (Strengths and Difficulties Questionnaire; SDQ) and externalising behaviour (conduct and hyperactivity; SDQ), would each influence children’s views of their parents’ work (Sallinen, Kinnunen and Ronka’s Job Motivation Scale); which, in turn, would negatively impact children’s career aspirations by age 14-15 (Bigler and Liben’s Occupational Value Scale for Children). The study employed data from the Longitudinal Study of Australian Children (LSAC) conducted by the Department of Social Services (Further information about the study can be found at http://www.growingupinaustralia.gov.au).

The LSAC participants included 2712 children (2092 male, 2077 female) aged 10-11 in the first wave and 14-15 by the third wave and their parent(s) in matched pairs. The children’s families ranged in socioeconomic status, annual income, and ethnicity. The questionnaires that participants completed were sourced from a number of different measures and some scales were shortened or adjusted to be age appropriate for use in the LSAC. Structural Equation Modelling (SEM) in AMOS was used to assess the hypothesised model fit through the maximum likelihood method of estimation. The latent variables were assessed in the measurement model and found to have good fit indices before fitting the structural model. The results found that the model fit the data well at each of the three waves. The indirect effects showed that when parents' believed their work positively impacted themselves, their psychological distress was lower, resulting in children thinking their parent ‘likes their work’. Significant correlations were also observed between children’s views of their parents’ work and their own career aspirations. Children with positive views of their parents' work believe it to be important that their career helps others and allows time for family. This research makes good use of a longitudinal dataset and helps to understand some of the ways in which a parents’ work can impact their children. Further findings and research directions will be discussed.
O138: Effects of Actual and Preferred Working Time Arrangements on Work-life Balance: A Person-environment Fit Approach
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*Background:* Correspondence between working time arrangements and personal preferences has been proposed as a determinant of employees’ wellbeing. This assumption is rooted in person-environment (P-E) fit theory which proposes that a misfit between person and environment results in impaired wellbeing and lower satisfaction. The aim of this study is to investigate the role of fit and misfit between actual and preferred working time arrangements for employees’ satisfaction with the work-life balance. To this end, we examine the joint and interactive effects of three dimensions of actual and preferred working time arrangements (length of working hours, control over work time and work-home segmentation vs. integration) from a P-E fit perspective.

*Methods:* Data from 8207 dependent employees aged 16 to 65 from a diverse range of occupations and branches was analysed. This sample is part of the BAuA working time survey – a representative study conducted by the Federal Institute for Occupational Safety and Health in Germany. We used polynomial regression to examine the effects of actual and preferred working time arrangements as well as their interplay on work-life balance. Further, to get a more nuanced understanding of the effects of fit or misfit, we inspected response surface plots and conducted slope and curvature analyses.

*Results:* Polynomial regression analyses and response surface methodology indicated significant main and interaction effects of actual and preferred working time arrangements on work-life balance. Shorter actual and longer preferred working hours were related to higher work-life balance. Further, as actual working hours exceeded preferred working hours, work-life balance decreased substantially. Congruence at lower (vs. higher) levels of working hours was associated with higher work-life balance. Work-life balance was also higher in case of higher actual and lower preferred work-home segmentation. Moreover, as actual work-home segmentation increased towards preferences, work-life balance increased substantially. Higher actual and lower preferred control over work time were related to higher work-life balance. However, congruence between actual and preferred work time control showed no effect.

*Discussion:* This study sheds light on the role of fit and misfit between actual and preferred working time arrangements for employees’ work-life balance. Adverse effects on work-life balance appeared if employees worked longer than they preferred or if actual work-home segmentation fell behind employees’ preferences. Results implicate that employees’ preferences should be taken into consideration in the organisation of working time.

O139: The Primer Workshops as a Tool of Co-Developing and Health Promotion at Workplaces
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*Background and Aim:* The aim of this study was to examine and compare empirical materials from Primer-workshops to the work ability concept illustrated by the Work Ability House-model. Primer-workshops were developed and organised during 2015-2016 by the Finnish Institute of Occupational Health. The purpose is to analyse how work ability and wellbeing experienced by workers are consisted and how the materials from workshops fit to the framework of Work Ability House-model. One goal is also to increase knowledge of Primer-workshops and pilot how the workshops are suited as a tool of co-developing work communities and health promotion at workplaces.
Methods: The unit of analysis was the drawings that were made at the workshops (n=54) and the expressions that participants used to describe a worker with good wellbeing (n=786). Both deductive and inductive content analysis was used to analyse the data of the drawings and compare it to the theoretical model of the Work Ability House. First, deductive content analysis was used to see what contents fit to the framework and after this the leftovers were analysed inductively and organised and coded to new categories.

Findings: The deductive data supports the theory, more specifically, the layers of health and performance, management, work community, and working conditions. The new categories identified from the data did not fit to the theoretical framework of Work Ability House model. These new categories include contents that describe individual, communal and environmental resources that support work ability. The quantitative data also supports the individual psychological resources, mental tools and importance of communality and humanity between individuals. This tells us that in addition to the lifestyle and health we need to focus to the psychological and social wellbeing of the individuals and work communities. In addition, the work ability means also ways of acting for promoting health and work ability at workplaces.

Discussion and conclusion: The Primer is a suitable tool for identifying experienced work ability and wellbeing experienced by workers. The Work Ability House-model includes many factors of the experiences but also new ones occur. The work ability means also ways of acting for promoting health and work ability at workplaces and it emphasises mental and social resources of individuals, work communities and work environments.

O140: SMArT Work: Intervention Results on the Effect of Height Adjustable Desks on Sitting Time and Work Outcomes in NHS Staff
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High levels of sitting at work are associated with an increased risk of poor health and work outcomes. It has specifically been associated with an increased risk of diabetes and mortality (Uffelen et al., 2010) as well as being harmful to important work-related outcomes such as work engagement (Munir et al., 2015) and presenteeism (Brown et al., 2013). Poor health and wellbeing not only presents a significant cost burden on the healthcare system but also on employers due to lower work engagement and performance and higher presenteeism and absenteeism.

In response to this evidence, interventions to reduce sitting in the workplace have received increasing attention in recent years (Shrestha et al., 2016). However, most workplace interventions for reducing sitting are limited by small samples, short follow up and a lack of randomised controlled trials (RCTs). In response, the SMArT Work intervention was developed using the Behaviour Change Wheel and tested in a cluster RCT. Office workers were recruited, and their office group randomised to either intervention or control. Data were collected at baseline, 3, 6 and 12 months. The primary outcome was the reduction in objectively measured sitting at work. Secondary outcomes included objectively measured physical activity, self-reported job performance, job satisfaction, work engagement, working conditions, sickness presenteeism and sickness absence (self-report and from organisational records).
37 office clusters (19 intervention (77 participants) and 18 control (69 participants)) were recruited. Significant differences between groups were found in occupational sitting and daily sitting time at all time points in favour of the intervention group, with a difference of -83.28 minutes/day observed at 12 months between the two groups. Significant differences were also observed in daily sitting time at all time points in favour of the intervention group, with a difference of -81.65 minutes/day observed at 12 months between the two groups. For work-related health outcomes, significant differences were observed in self-rated job performance, occupational fatigue, work vitality (vigour), work dedication and overall work engagement all in favour of the intervention group. Significant differences were also observed in sickness presenteeism (time management and mental-interpersonal demands) and in overall work limitations due to sickness presenteeism. However, there were no significant differences between the groups on sickness absence, either self-report or from organisational records.

Cost-effectiveness analyses showed no difference between the groups on either self-report or organisational sickness absence records. For work productivity, the results found that whilst the control group means show slight increases from baseline productivity loss, the intervention group means show reduction in productivity loss. Furthermore, when costing these gains in productivity (using wage rates), these outweighed the intervention costs.

Overall, sitting time was successfully reduced and the reduction maintained over the longer term. Improvements in several important work-related outcomes were seen and the intervention was cost-effective. NHS Trusts may benefit from incorporating this type of intervention within their Health and Wellbeing Strategy.

**O141: Silent Killers: Working with Dangerous Substances**

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*Background:* Dangerous substances like asbestos, dust and industrial fumes pose a profound hazard to workers across industries. In the Netherlands, annually 4100 deaths in workers can be attributed to occupational diseases, of which 2700 cases are caused by work-related cancer. However, until now, data was missing on risk-perception among companies, employers and managers; and the (lack of) use of preventive and risk-reducing measures in the workplace. In this study, answers and insights into dangerous substances as an occupational hazard across Dutch workplaces were identified. These quantitative data are combined with more qualitative data to promote health in the workplace by inspiring a national campaign on the prevention of occupational diseases resulting from exposure to hazardous substances at work.

*Methods:* In this cross-sectional study, a survey was conducted among 2288 employers/managers in companies across 17 industries in the Netherlands. Participants were stratified based on sector and company size. Participant scores were weighed to create a representative sample of the Dutch working population in these industries. Statistical analyses included descriptive analyses, t-tests and chi-square tests for statistical significance ($p<0.05$).

*Results:* The study demonstrated great variety in the type of dangerous substances used across sectors. Overall, allergenic substances were most frequently used (38%), and 18% of all respondents reported to work with carcinogens. The risk perception of exposure was low: 10% of the respondents estimated that their workers were regularly exposed to dangerous substances. Furthermore, only 30% of the companies actually measured the level of exposure of workers. About 80% of the companies reported to take some form of measures to reduce the...
risk of exposure, however these measures were mostly aimed at the individual worker (e.g., providing protective equipment like gloves and masks; 85%). Organisational or technical measures, including rotating schedules for workers and mechanical ventilation, were far less often made available (about 50%). Furthermore, three out of four participants thought that their workers are capable (and responsible) to provide for their own occupational safety. However, whether this is true often goes unchecked. The study also showed several significant differences in risk perception and risk management between small and large companies, for example: large companies took more radical measures to prevent exposure and educate workers, compared to small companies (p<0.05).

Conclusions: The risk perception of exposure to dangerous substances across Dutch workplaces seems low, and exposure risks are likely to be underestimated. Furthermore, there is lack of ownership when it comes to preventing occupational hazards. Companies rather seem to rely on the workers’ own initiative and knowledge with regard to occupational safety, and take the most simple measures to promote health in the workplace. These might not be the most effective measures in practice. In the field of occupational health and safety it is commonly known that elimination of the hazard (Substitution), Technical and Organisational measures are more effective than Personal protection (the STOP-principle). The results of this study serve as critical input to promote a new integrated approach on the prevention of occupational diseases resulting from exposure to hazardous substances.

O142: Supporting Caregiver and Grieving Employees
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Research on wellbeing in the workplace has grown exponentially and work-family interface has generated considerable scholarship. Yet, relatively few studies have been conducted on caregiver and grieving employees. Coping with the death of a loved one, working when a loved one is terminally ill, or caring for someone with Alzheimer are some examples of particular distressing situations that leave individuals unable to work effectively. In addition to cope with their personal feelings, employees have to comply with their professional duties and maintain their ‘professional facade’. Available literature shows that this can have a negative impact on their physical and mental health. Performance can be badly affected as a result and thus, the adverse effects are not limited to the employees.

This study addresses the above gap in the literature, and aims to explore existing organisational policies and practices towards assisting caregiver and grieving employees. The main goal is to develop intervention programs that assist them. It is part of a larger investigation and draws on the findings from an empirical study in Portuguese companies. The sample comprised a mixture of various organisational settings in different sectors of activity. Findings will be discussed in our presentation.

O143: The Stress Experience of University Teachers in Spain
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The working requirements, demands and conditions of university teachers in Spain have changed significantly over the last few years to adapt to the teaching quality demands, research competitiveness and management efficiency that arise from society. This was a prestigious and socially-and-economically-recognized profession, which offered great and reasonable...
possibilities of career development and was healthy from a psychosocial point of view. However, in a short period of time, it has become a highly-competitive profession that has lost certain social status, its working conditions have clearly worsened (precariousness, instability, insecurity, etc.) and the academic, teaching, scientific and management demands have increased quantitatively and qualitatively contributing to high level of work stress.

Thus, using the the transactional, mediational and interactional model of stress by Lazarus and Folkman (1984, 1986) as a theoretical framework, the stress experience of university teachers in Spain were analyzed. For this purpose semi-structured interviews have been conducted with a sample of 30 teachers from a Spanish public university. An Interpretative Phenomenological Analysis (IPA) (Smith & Osborn, 2008) was performed with the information collected from what people expressed orally and spontaneously, which is considered an expression of their thoughts, feelings and behaviors, and therefore a reflection of their experiences and subjective perception.

The main stressors experienced by university teachers in Spain are bureaucratic fatigue; being constantly subject to external evaluation as a method of control; suffering career stabilization or development processes that are increasingly demanding and competitive: the tensions rising between teaching, management and research demands; increased psycho-pedagogical and teaching demands as a consequence of the adaptation to the European Higher Education Area (EHEA); challenges that they have to face during the internationalization processes of the Spanish public university system; the effort-reward imbalance in research; the taking on of management tasks without training or authority; the presence of some medieval hierarchical culture in the Spanish university noticeable in the criteria of “status and seniority” when taking decisions that together with the paternalistic and mentoring culture between mentors and students foster “invisible bonds” between the different groups of teachers and some sectarianism stemming from the relations of ingroup favoritism and outgroup discrimination and; finally, the demagogic promotion of the student discourse “customer-king”.

The final result is a feeling of ambivalence where an expecting, exciting and motivating idealization of the academic-scientific world contrast with a pragmatic, frustrating and demanding social and labor reality that encourages disillusionment and lack of interest among a group increasingly oppressed and in worse working conditions that also has serious consequences for the mental health of university teachers.

O144: Is Low Managerial Quality a Risk Factor of Long-term Sickness Absence in the Danish Workforce?
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Objective: Managerial quality, also called leadership quality, is a major research topic in work and organisational psychology. However, unlike other psychosocial work environment exposures, e.g. job strain or effort-reward imbalance, managerial quality has only rarely been examined in large-scale epidemiological studies. To address this paucity of research, we examined whether low managerial quality predicted risk of long-term sickness absence (LTSA) in a 12-months follow-up study of a large sample of the Danish workforce.

Methods: The Work Environment and Health in Denmark (WEHD) Study is a survey on physical and psychosocial work environment factors, health status and health-related behaviours conducted in a representative sample of the Danish workforce every two years. We included participants from the 2012, 2014 and 2016 random sample, yielding a sample of 50,942 unique
individuals (50.4% response rate). We assessed managerial quality with an 8-item scale, covering different aspects of managerial quality such as appreciation and support by the manager, whether the manager cared for the worker’s professional development and whether the manager involved the worker in the planning of the work. LTSA, defined as sickness absence spells of ≥6 weeks, was assessed in a national register of social transfer payments (DREAM) that covers LTSA in Denmark. Participants were linked to DREAM using their unique civil registration number. We excluded participants who had LTSA spells in the two years before baseline assessment of managerial quality, who did not have a manager or who had missing values on any covariate, yielding a final sample of 38,168 participants. We followed these participants in DREAM for a maximum of 52 weeks from the date they filled in the WEHD survey until they either became cases of LTSA or were censored due to emigration, parental leave (≥8 consecutive weeks), retirement, death or end of follow-up, whichever came first. Using Cox proportional hazard models, we calculated hazard ratios (HR) and 95% confidence intervals (95% CI) for the prospective association of exposure to low managerial quality with risk of LTSA, adjusted for sex, age, education, cohabitation, and children living at home. To assess potential effect-modification, we further conducted analyses stratified by sex, age and education.

Results: There were 1,434 cases (3.8%) of LTSA during the 12-month follow-up. Participants reporting low managerial quality at work (lowest quartile of the managerial quality scale) had a HR of 1.84 (95% CI=1.57-2.17) for LTSA compared to participants reporting high managerial quality (upper quartile of the scale) after adjustment for all covariates. Associations were similar for women (HR=1.81, 95% CI=1.49-2.19) and men (HR=1.90, 95% CI=1.42-2.55) and across age groups. Associations were more pronounced in participants with the highest level of education (HR=2.70, 95% CI=1.48-4.92) than among participants with the lowest level of education (HR=1.57, 95% CI=1.08-2.29).

Conclusion: Low managerial quality predicted an increased risk of LTSA in this large sample of the Danish workforce. The association was stronger in participants with a high level of education than in participants with a low level of education.

O145: Perfectionists on Vacation: A Respite Study Examining Relationships Between Two Dimensions of Perfectionism and School Teachers’ Wellbeing
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Recovering from workplace stress during non-work time has been widely accepted as a fundamental element for maintaining employees’ mental and physical health. Recovery has been suggested to occur during varying lengths of non-work periods including evenings and weekends, but with fuller recovery occurring during vacation periods. Vacation research has explored how employees generally experience a vacation period; but more recently, researchers have begun to investigate whether experiences of a vacation vary amongst individuals. Specifically, one personality type that has been suggested as a possible predictor for dissimilarities in benefits gained from a vacation is multidimensional perfectionism. Multidimensional perfectionism contains a variety of components that together describe two higher-order dimensions: perfectionistic concerns and perfectionistic strivings. Perfectionistic concerns contain facets that are considered neurotic or damaging to the individual; whereas perfectionistic strivings are comprised of facets that are considered normal or even healthy.

This seven-week longitudinal study examined the relationship between the two perfectionism dimensions and school teachers’ rate of recovery experienced during a half-term vacation and the rate in which the vacation benefits faded out once work resumed. A sample of 280 school
teachers from the United Kingdom and the United States filled in measures of burnout and affective wellbeing each Friday afternoon for seven consecutive weeks. The seven weeks included two occasions before the half-term, at one point during the half-term, and for four weeks following the half-term. The general rates of recovery and fade out of burnout and affective wellbeing were explored using multilevel growth curve modelling.

It was found that when the employees returned to work, their vacation benefits faded out with a curvilinear trajectory; which was represented by a rapid decrease in wellbeing when work resumed followed by slight fluctuations as time continued. Adding both perfectionistic concerns and perfectionistic strivings to each model as predictor variables allowed for a direct testing of whether the two dimensions of perfectionism aided or hindered rates of recovery and fade out over the vacation period. The results found that both perfectionism dimensions had no relationship to the rate of recovery and fade out for the burnout measures, but was an indication for different initial starting points. However, perfectionistic concerns predicted more drastic growth patterns over the seven weeks for affective-wellbeing, whereas perfectionistic strivings predicted a more stable trajectory in recovery and vacation fade out.

These findings highlight the importance of a vacation to employees’ affective wellbeing, especially those with high levels of perfectionistic concerns. Additionally, the findings suggest that employees do experience recovery during a week-long vacation, but benefits from a vacation begin to rapidly decrease immediately when returning to work. Practical recommendations such as respite-oriented interventions that offer guidance on ways to prolong the benefits gained during that period would be helpful for all employees. This would especially be beneficial to those who may be more vulnerable to work-related stress, as seen here by employees with high levels of perfectionistic concerns.

O146: Psychosocial Working Conditions, Anxiety and Loneliness in 12-hour Shift Workers
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Background: Anxiety together with depression is the most common mental disorder in the general population and has a high disability risk. Research shows that shift workers are more often affected by anxiety. Social support is considered as a protective factor of anxiety, so the lack of support in private life increases the risk of anxiety and may modify the relationship between working conditions and anxiety.

The aim of this paper is to assess the relationship between psychosocial working conditions and anxiety in 12-hour shift workers and to test whether loneliness is a moderator in the relationship between work and anxiety.

Data and Methods: Data were obtained from a longitudinal study on social, psychological and physiological consequences of 12 hour shifts and permanent night work, initiated by the Federal Institute for Occupational Safety and Health in Germany. The data were collected through written questionnaires and physical exams in a German chemical company in 2017/18. For this analysis, data on 195 male workers were available. Anxiety was assessed with a brief 2-item screening tool, the Generalised Anxiety Disorder (GAD-2). Psychosocial working conditions were measured with a modified version of the German Copenhagen Psychosocial Questionnaire and self-constructed items. Loneliness was evaluated with a German short version of the De Jong Gierveld Loneliness Scale. To assess the relationship between psychosocial working conditions, anxiety and loneliness, linear regression models were estimated. The final model includes all variables that are correlated significantly with anxiety and contribute to the explanation of variance.
Results: Around 6% of the shift workers were detected to have anxiety symptoms. Correlation analysis showed that anxiety is associated with a variety of psychosocial working conditions: higher work pace, role conflict, and insecurity over working time changes are job stressors related to higher anxiety scores; whereas predictability, support from colleagues, quality of leadership, influence at work, recognition and justice were related to lower levels of anxiety. In the final regression model, justice, role conflict and loneliness were predictors of anxiety in shift workers, explaining nearly 20% of variance in anxiety. Loneliness and role conflict were related with higher anxiety scores, whereas justice had a reducing effect. Significant interactions with loneliness were found for both work factors, role conflict and justice, suggesting that if loneliness was higher, the effects of these psychosocial working conditions on anxiety increased.

Conclusions: Work factors related to anxiety are justice and role conflict. Loneliness is strongly related to anxiety and moderates the relationship between work factors and anxiety.

O147: Psychosocial Risks, Safety Climate and Organisational Restructuring in the Norwegian Oil and Gas Industry
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The nature of work in the oil and gas industry has changed dramatically over the last years due to high focus on efficiency initiatives, cost-reductions, technological advances as well as wide-ranging reorganizations taking place in companies. These changes have been accompanied by the increased prevalence of new and emerging types of risk to workers’ health and safety, such as psychosocial risks. The purpose of this study is to assess the development of psychosocial risk, safety climate, downsizing and reorganizations in the Norwegian offshore industry from 2015-2017.

Based on current developments in the industry and established knowledge about organisational change and restructuring and their impact on psychosocial risk we set out to explore the development of the psychosocial work environment following two main issues: 1) Has employee perception of the psychosocial work environment and safety climate changed from 2015-2017?; 2) Do employees who have experienced restructuring also report an increase in psychosocial risk and poorer safety climate?

To assess the development of psychosocial risk aspects, safety climate and the relationship to organisational restructuring and downsizing this study used data from the RNNP survey (Trends in risk level in the petroleum activity). The RNNP survey is distributed to personnel on offshore facilities on the Norwegian Continental Shelf (NCS) and onshore installations every other year, for the first time since 2001. Results show a negative development concerning the psychosocial work environment and safety climate from 2015 to 2017. Furthermore, results indicate that employees who have experienced restructuring report poorer safety climate compared to employees who have not experienced reorganizations in the same time-period.

O148: The Moderating Effect of Perceived Supportive Leadership on the Association between Salutogenic Health and Workplace Bullying – a Two Wave Study
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Background: Workplace bullying is a serious workplace stressor and affects about 10% of the working population, in all levels and all sectors of working life (Zapf, Escartin, Einarsen, Hoel, & Vartia, 2011). The association between workplace bullying and ill-health has been established
by several researchers (e.g. Einarsen & Nielsen, 2015; Nielsen & Einarsen, 2012; Theorell et al., 2015). Longitudinal research indicates that the direction of influence mainly goes from a situation of bullying exposure to negative health consequences even if there also may be circumstances where the association is bi-directional (Einarsen & Nielsen, 2015). Some researchers (e.g. Finne, Knardahl, & Lau, 2011) have also pointed to a possible reversed association, that worsening health even may lead to workplace bullying. However, a perceived supportive leadership style has been shown to have a general positive effect on the health of employees (Schmidt et al., 2014) as well as a protecting effect against workplace bullying (Gardner et al., 2013; Van den Brande et al., 2016; Goodboy, Martin, Knight, & Long, 2017).

Aims: The aims of the study were twofold. Fristly, to investigate a possible vicious circle or a reversed effect, that a worsening health may lead to a bullying exposure. Secondly, to investigate a possible interaction effect of a perceived supportive leadership style on the association between health and workplace bullying.

Method: A two-wave longitudinal web-based survey (20 months in between) carried out on a sample of employees from a Swedish governmental institution. Summed and complete response rate for both waves: 51.8 % (n = 958); women/men: 57.5/42.5 %; age span: 22–71 years; median age: 45. Workplace bullying was measured by the Negative Acts Questionnaire Revised (NAQ-R; Einarsen, Hoel, & Notelaers, 2009), health was measured by the Salutogenic Health Indicator Scale (SHIS; Bringsén, Andersson, & Ejlertsson, 2009), supportive leadership style was measured by the Perceived Supportive Leadership (PSL) subscale of the Psychosocial Work Environment Questionnaire (PSYWEQ; Rosander & Blomberg, 2018). Sex and age, as well as a measure of role clarity and role conflicts in the organisation, were used as covariates. On the SHIS and the PSL – high scores were positive, and on the NAQ-R – high scores were negative.

Results: There was a highly significant negative effect (p < .001) of the SHIS (wave 1) on the NAQ-R (wave 2). There was also a highly significant moderation (p < .001) by the PSL (wave 2) on the association between the SHIS and the NAQ-R.

Conclusions: A lowering health seems to increase the risks over time of being exposed to workplace bullying. This risk, however, seems to be conditioned on a perceived supportive leadership style that actually may obliterate the risk of a lowering health leading to workplace bullying. The implications of the results will be discussed.
were more at risk of being a target of bullying behaviors at work than women, contrary to our hypothesis and to the general idea in the literature. This study provides new insights about workplace bullying in a sector and a country that has been largely absent from research to date. Additionally, the results challenge and contextualise the dominant idea in the literature that the weaker and defenseless worker is the most likely target of bullying.

O150: Ostracism, Emotional Labor, Nurse-Patient Relationship and Turnover Intention: A Model of Workplace Ostracism and Its Consequence in Nursing Professional

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Although the bulk of the research suggests that workplace ostracism negatively affects one’s psychological emotions and attitudes, limited research has addressed how such psychological impact leads to work-related behavioral outcomes.

Drawing on emotional regulation and conservation of resources theory, we argue that when one perceives ostracism, that individual may deliberately regulate their emotions by engaging emotional labor (typically with surface acting or deep acting) which impacts job performance and further leads to turnover intention. This study employed a time-lagged survey design with 379 staff nurses from one large public hospital in China. Participants completed a survey at two points in time with measures of the major study variables in the hypothesized model. Structural equation modeling was used to test the relationship between workplace ostracism and turnover intention via emotional labor (surface acting vs deep acting) and nurse-patient relationship. Findings provided support for the hypothesized model differentially linking workplace ostracism, deep acting /surface acting, nurse-patient relationship, and turnover intention. Specifically, 1) the path from workplace ostracism to surface acting shows a significant positive coefficient, just as well as the path to deep acting; 2) while the path from surface acting to nurse-patient relationship shows a significant coefficient, there is an absence of relation between deep acting and nurse-patient relationship; 3) lastly nurse-patient relationship had a significant negative direct effect on turnover intention. Overall, the results suggest that only surface acting as an emotional labor regulation strategy mediates the negative relationship between workplace ostracism and patient care (nurse-patient relationship), which negatively influence turnover intention.

Our study contributes to the literature in the following ways. First of all, this study introduces emotional labor in the process of workplace ostracism and its consequences, which better explains how workplace ostracism impacts employee behavior and work-related outcome. By so doing, we integrate the psychological impact and pragmatic impact of ostracism in Robinson, O’Reilly and Wang’s model (2013). In our study, the impacts’ pathway is sequential rather than parallel as Robinson et al. proposed (2013). Second, this study narrows our knowledge gap about the relationship between workplace ostracism and turnover intention with empirical support from a nurse sample in an under-researched setting – Chinese public hospital. The practical value of this study lies in the implication for hospital managers to better manage nurses for nursing care quality and nurse retention.

O151: Friend or Foe? The Impact of High Performance Work Practices on Workplace Bullying

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The aim of this study was to examine the relationship between high performance work practices and workplace bullying, and identify possible mediators. High-performance work practices here refer to a group of separate but interconnected human resource practices designed to enhance
employees’ skills and efforts and are typically seen to include, at the least, sophisticated approaches to recruitment and selection, incentive-based compensation systems, extensive employee involvement, and rigorous performance appraisal processes.

Hypotheses based on two competing perspectives are presented: a positive, mutual gains perspective arguing that high performance work practices lead to higher perceptions of justice and lower role conflict, thereby reducing the risk of bullying, and a critical perspective arguing that high performance work practices lead to work intensification and competition among colleagues, and thereby to more bullying. Given the counterbalancing effects of these mechanisms, we further hypothesise that they cancel each other out. A two-wave survey (n=209) was conducted among business professionals in Finland. Validated measures were used to measure high performance work practices, workplace bullying, role conflict, organisational justice, competition, and job demands.

The results show that HPWPs were associated with less bullying, and justice and role conflict mediated this relationship. The results thus provide support for a mutual gains perspective on HPWPs, and demonstrate that HPWPs appear to have a positive impact on interpersonal employee behavior and group dynamics. Furthermore, it challenges prevailing assumptions in the bullying literature, which suggest performance-enhancing HR practices are a risk factor. Instead, the results point to the significance of well-implemented HR practices as an important tool to prevent workplace bullying.

The contribution of this study is thus two-fold. First, it contributes to the HRM literature, furthering our understanding of how high performance work practices affect employee and interpersonal behavior and wellbeing, and the mechanisms through which this occurs. Thus, it also responds to calls for more employee-centered HRM research. Second, it contributes to our understanding of workplace bullying, examining how work environment factors and organisational practices, here high performance work practices, contribute to or reduce the risk of workplace bullying.

O152: Changes in Objective Working Hour Characteristics are Linked With Parallel Changes in Work-Life Conflict of Hospital Employees
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Background: Cross-sectional survey studies report more work-life conflict (WLC) among shift workers than day workers. In a previous study (Karhula et al., 2017) utilising partially the same dataset, unsocial working hour characteristics were found to be associated with increased WLC. With new follow-up data, our aim was to investigate associations between changes in objective working hour characteristics and parallel changes in WLC.

Methods: Survey responses from three waves of the Finnish Public Sector study (2008, 2012 and 2015) were combined with payroll data from 91 days preceding the surveys. The participants were hospital employees (n=2 482, 93% women) with period-based work contract (114:45h in 3 weeks).

Time-dependent fixed effects logistic regression models adjusted for marital status, number of children and stressfulness of the life situation, were used to investigate whether changes in proportion of unsocial working hour characteristics (long work weeks, evening and night work, quick returns, single days off and weekend work) were associated with parallel change in WLC. The working hour characteristics were dichotomized with cut points in </>10% or </>25% occurrence) and WLC to frequent vs. seldom/none.
Results: The proportion of employees with perceived WLC was similar through the 7-year follow-up (35% in 2008, 34% in 2012 and 2015). The employees with increased or decreased WLC (one or two changes during the follow-up time) were included in the analysis and, respectively, the employees with stable low or stable high WLC were excluded.

Change in proportion of evening and night shifts, and weekend work was significantly associated with parallel change in WLC (adjusted OR 2.19, 95% CI 1.62–2.96; OR 1.71, 95% CI 1.21–2.44, OR 1.63, 95% CI 1.194–2.22, respectively). Similarly, increase or decrease in proportion of quick returns (adjusted OR 1.45, 95% CI 1.10–1.89) and >40h work weeks (adjusted OR 1.26, 95% CI 1.04–1.52) was associated with parallel increase or decrease in WLC. Single days off and >48h work weeks showed no association with WLC.

Conclusion: Changes in unsocial working hour characteristics, especially in relation to evening shifts, were associated with parallel changes in WLC. These findings suggest that reducing proportion of evening shifts, night shifts, weekend work and quick returns can reduce WLC among shift workers.

O153: Towards a Recovery Hygiene Agenda: Psychophysiological Markers of Circadian Stress and Fatigue in Cabin Crews

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The compulsory fatigue risk management system in the aviation industry represents a positive development in the acknowledgement of how work schedules may strongly impact the performance, safety and health of workers. This new-found organisational accountability for the exposure to extreme working patterns is not without controversies as no consensus exists on the assessment of occupational fatigue or circadian stress. A biomedical approach emphasizes disturbances to circadian rhythms and adopts physiological markers as cortisol and self-reports of sleep disturbances. A psychosocial approach focuses on how the nature, duration and rhythm of activities executed may contribute to higher levels of fatigue and impaired performance. The type of flight operations (i.e., long haul and medium range flights) strongly contributes to different working time patterns and recovery opportunities. Although, current flight limitations exist for both types of operations, the impairment associated with long haul flights is balanced with extended opportunities for recovery.

The presentation reports on preliminary results of a project designed to explore the repercussions of circadian stress on cabin crew both from short haul (SH) and long haul (LH) flight focusing on:

1. The differences between fatigue levels before and at the end of a regular working day (i.e., neuroendocrine and psychological markers)
2. The differences between different fight operations (i.e., LH and SH crews with neuroendocrine and psychological markers).

A total of 93 cabin crew where invited to participate in this study. The Karolinska Sleepiness Scale (KSS) and the Samn-Perelli status check were adopted to measure acute fatigue. A reduced version of POMS was used to measured mood. Neuroendocrine responses were evaluated with salivary cortisol and melatonin. At the beginning of a flight duty period (FDP), crews were invited to provide saliva samples and to fill in the self-reporting measure. At the end of a FDP, a new saliva sample was collected along with a second round of questionnaires. The two-way mixed-model ANOVA suggests that the type of operation has distinct effects on the neuroendocrine responses and the psychological markers. While similar psychological
responses were reported for all crews, contrasting effects were found for the physiological responses according to the type of operation: The increase in cortisol and melatonin levels in LH participants contrasted with the sharp decrease found in SH cabin crew. A similar pattern of psychological responses was obtained for all crews with higher levels of fatigue and worst mood at the end of a FDP. Greater psychological fatigue is expressed by LH as more adverse consequences are reported at both measurement points. In regards to the neuroendocrine markers, significant interaction effects were found for cortisol \(F (1,82)=19.858, p< .000\) and melatonin \(F (1,42)=6.437, p< .015\). A closer analysis of the results suggests distinct impacts: LH crews had no significant changes in the cortisol levels and an increased in melatonin levels. In contrast, SH crews exhibit significant reductions in both cortisol and melatonin, a pattern of results suggests significant circadian disturbances. The relevance of a multidisciplinary approach to recovery management and circadian stress is discussed.

O154: The Impact of Extended Shifts on Wellbeing and Organisational Outcomes as Employees Adapt and Respond to Change
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Background: Against a backdrop of increasing demand for mental health services and severe financial pressures (UNISON, 2017), service providers have been testing new models of delivering care to reduce costs, with shift patterns and workforce planning a key focus. Evidence on the impact of extending working hours (e.g. increase from 8 to 12 hour shifts) is mixed and focuses on potential negative consequences e.g. increased accidents, fatigue, adverse effects on health and wellbeing, performance and absenteeism (Dall’Ora et al., 2015; 2016; Knauth, 2007; Smith et al., 1998). Research also highlights potential benefits to employers (fewer handovers, less overtime) and to workers (less travel time and longer periods between shift patterns) (Knauth, 2007). Few studies move beyond cross-sectional analysis and evaluate the impact on employee wellbeing after initial satisfaction of a condensed working week has passed (Smith et al, 1998, Tucker 2006). In addition, Gibbs et al., (2012) have called for quantitative research that highlights the nature and extent of stressors associated with organisational change, to be complemented by qualitative evaluations. With these issues in mind our mixed methods study evaluates the impact of extending shift hours on employee wellbeing and organisational outcomes in a large Mental Health Trust in the UK.

Methods: 30 in-depth semi structured interviews were conducted from 3 layers of participants (ward managers, nurses and healthcare assistants) to evaluate employee experiences as they adapt and respond to the move from an 8 to 12 hour shift pattern. Interviews took place 6 months after the shift change with follow up interviews 6 months later. We combine this with Interrupted Time Series (ITS) modelling to identify any impact over time on outcomes such as staff turnover, absence, agency staff use, rest breaks and violence against staff.

Findings: We will present the analysis of our qualitative findings and a brief overview of the ITS model results. Preliminary analysis indicates that changes to working hours are accompanied by changes to the organisation of work, workload intensification, colleague support and supervisory configuration, all of which may elicit differences in how employees adapt and respond to change, and increase stress amongst some workers. Unforeseen consequences for employees include reduced opportunity for reflection on patient care and stressful incidences, limits to employee voice, increased use of agency staff, isolation from colleagues, lower quality handovers, and disruption to patient routines and continuity of care. Yet the narrative put forward by many participants offers us insight into why previous evidence signals a preference for working longer shifts, as many coped with stress and anxiety relating to extended shifts by focussing on the trade-off of a condensed working week.
Contribution: This study contributes to literature on shift work and adapting to organisational change, as one of the few that combines quantitative analysis with qualitative data to shed light on the unforeseen consequences of extended shifts and condensed working weeks. We add to knowledge by contextualising our evaluation with the nuances of work conditions which are often overlooked when evaluating the impact of job strain on employee wellbeing.

O155: Shift Work Disorder among Hospital Personnel with Night Shifts - Insomnia and Excessive Sleepiness on Days Off
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The International Classification of Sleep Disorders, Third Edition (ICSD-3), defines shift work disorder (SWD) as insomnia and/or excessive sleepiness, accompanied by reduced total sleep time, associated with a recurrent work schedule that overlaps the usual time for sleep. We investigated the prevalence of SWD among hospital employees according to the number of non-day shifts (i.e. early morning, evening, and night shifts) using objective data on working hours. Secondly, we studied associations between SWD and symptoms of insomnia and excessive sleepiness on days off.

As part of the Finnish Public Sector cohort in 2015, employees of five hospital districts and one Department of Social Services and Health Care, excluding physicians, answered questionnaire on background, SWD, and insomnia and excessive sleepiness on days off. Shift workers with night shifts (n = 2917) with at least 31 work days during the past 91 days were included in the study. Shift work was determined based on payroll data on working hours of 91 days prior to answering the questionnaire. SWD was defined based on the self-reported insufficiency of sleep and occurrence of morning, evening, and/or night shift-specific symptoms of insomnia and/or excessive sleepiness in the absence of symptoms of insomnia and/or excessive sleepiness on holiday. SWD was studied by using two limit values for the number of objective non-day shifts: at least one and at least three per month.

Prevalence of SWD was 5.8% to 9.5% depending on the number of non-day shifts. Regardless of the used limit value of non-day shifts, on days off SWD associated with excessive sleepiness (p < 0.0001), but not with insomnia (p > 0.55). The prevalence of SWD decreased as employees with only few non-day shifts were excluded, suggesting that future studies should set a lower limit for recurrence of non-day shifts in order to exclude cases with symptoms of insomnia and/or sleepiness unrelated to SWD. Secondly, our result suggest that those with SWD may not be able to overcome excessive sleepiness on days off.

O156: Cognitive and Affective Functioning as a Result of Work Onset after Partial Sleep Deprivation
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Introduction: Individual-level diurnal and seasonal mood rhythms seem to be consistent with sleep and circadian rhythm (Fabon, Stafford, & Nello, 2017; Golder & Macy, 2011; Miller et al., 2015). Individuals typically exhibit high positive affect in the morning, which detreat throughout the day, and peak again at the end of the work day. Negative affect varies less than positive
affect and is lowest in the morning but increases throughout the day, and peak at night time. Positive and negative affect may, however, be altered by sleep loss. The prevalence of short sleep duration increased from 1975-2006 among full-time workers (Knutson, Van Cauter, Rathouz, DeLeire, & Lauderdale, 2010), and there is no reason to believe that this trend has stopped. The aim of the present study was to examine the effect of partial sleep deprivation on affect measured at different times in the morning.

Methods: 59 healthy individuals between 18-35 years of age participated in a 11-day study protocol with partial sleep deprivation the last 3 days of the study. Sleep duration was measured with actigraphy and sleep diary. Partial sleep deprivation (SD) was calculated individually based on sleep duration the week before, and was completed in the beginning of the night (go to bed later), and consisted of sleeping 2 hours less than they usually did. The participants completed a questionnaire on the first day measuring different aspects of individual differences and health including morningness/eveningness preference, and the PANAS state version as well as completed the Conners’ Continuous Performance Test 3 (CCPT-3) five mornings during the study; three times with normal sleep, after one day of SD, and after three days of SD. Testing was performed between 7.30am and 9.30am and the participants chose at what time point within this range they wanted to be tested.

Results: Correlation analyses showed that morningness was associated with earlier testing times. There were no relationships between time of day and positive and negative affect before sleep deprivation. Negative affect after sleep deprivation was higher among those starting early, and positive affect was higher among those tested later in the morning. The number of commissions as measured with the CCPT was higher later compared to earlier in the morning the day before and the day following sleep deprivation. These effects were largely also confirmed in regression analyses controlling for age, gender and morningness/eveningness.

Conclusion: Our results show that partial sleep deprivation influence positive and negative affect in the morning, especially in the early morning even when controlling for diurnal preference. Cognitive control functioning however, seem to be poorer later in the early morning independently of sleep deprivation. These findings have implications for shift workers, but also day workers who suffer from sleep loss and quick returns. Managers need to consider possible benefits of flexible work arrangement based on morningness/eveningness in cases where the employees are likely to be sleep deprived and whether affect sensitive work can be moved to later in the day if workers are sleep deprived.

O157: Mental Health Literacy in the Workplace: Translation and Validation of a German Version of the MHL-W Scale
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Introduction and aim: Empirical evidence suggests that people who develop a mental disorder often receive necessary treatment with a great deal of time delay (Wang et al. 2007). While the reasons for the delayed treatment seeking are manifold, the lack of ability to recognise mental health problems is cited as an important barrier (Gulliver, Griffiths & Christensen 2010). This ability is described as mental health literacy, referring to the knowledge and attitudes that contribute to the prevention, detection, and treatment of mental disorders (Jorm et al. 1997, Jorm 2011).

So far most tools for evaluating mental health literacy are focusing on clinical aspects of mental disorders (Jorm et al., 1997; O’Connor et al., 2014; Wei et al 2015) and do not fit the working context. Recently Moll et al. (2017) developed the first English mental health literacy tool for the
workplace (MHL-W), consisting of four vignettes describing potential mental health problems in the workplace. However, no such tool is available in Germany. Consequently, the aim of this paper is to translate and validate a German version of the MHL-W. Further, we contribute to the existent literature as we address important issues of mental health literacy at the workplace, such as possible gender effects (Cotton et al. 2006).

Procedure/Preliminary Results: To adopt the MHL-W, we followed the four steps proposed by DeVellis (2016). (I) For the preliminary examination the vignettes of the MHL-W were translated into German by both authors independently. Further, we modified the gender of each vignette, creating a male and female version of each vignette, to be able to test for possible gender effects. Differences were discussed, adjusted, and the German version was then back translated into English by two independent experts. Afterwards, the research team that had developed the original MHL-W was contacted and rated the back translated version as adequate.

(II) For the expert survey, we asked 15 experts of different fields (medicine/psychology/management) in an online survey to submit open-format assessments for the four vignettes. The answers again were used to verify the content of the vignettes. Experts derived comparable characteristics and diagnoses of possible interference patterns from the translated vignettes, and no noteworthy differences between genders were reported.

(III) The pretest was conducted as a two-time-point questionnaire using a sample of German students (t1:n=122, t2:n=26). It is beyond this to report all results. Therefore, we focus on the most relevant. Using SEM, the factor structure of the German MHL-W indicates a second-order construct. The German MHL-W showed discriminant validity and the retest revealed good within-person correlations between the two points in time, both for the overall MHL-W (r = .82, p<0.001) as well as all vignettes (raverage=.69, pall<0.001). Further, correlations with related constructs indicate convergent validity and to some degree results hint at gender effects.

(IV) The main survey will be conducted in summer 2018 and consists of various working individuals with and without a health profession background.

O158: The Third Version of the Copenhagen Psychosocial Questionnaire
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Background: The reasons for developing the third version of the Copenhagen Psychosocial Questionnaire (COPSOQ III) were: 1) Experiences from international use of the questionnaire, 2) New trends in work and 3) New theoretical concepts. Most prominent, COPSOQ III is characterised by defining core items for assuring opportunities for international comparisons over time and additional items for making national adaptations of the questionnaire. The specific aims of the present paper were to analyse psychometric characteristics of the new version on the core and middle level.

Method: In 2016-2017, the questionnaire was tested among 23,361 employees in seven populations in Canada, Spain, France, Germany, Sweden and Turkey. 22 dimensions of the core, 25 of the middle, and 2 of the long version were tested. Cronbach’s α (for scales), means, fractions with ceiling, floor and missing values, and Spearman correlations between the core and middle version were summarised for the scales as well as Spearman correlations between scales.
Results: Core scales with 2-4 items had mean α from .72-.86. Mean scores for the core dimensions ranged from 34 (insecurity over working conditions) to 76 (sense of community at work); mean scores varied across samples regarding some dimensions (eg. Insecurity over working conditions and employment). Ceiling and floor effects were present in dimensions with low or high means. Missing values were hardly found. Correlations between dimensions were mostly low (of 190 core correlations, 2 were 0.60 - 0.66, involving Quality of leadership and Vertical trust). Validations of international and national middle versions with generally more items showed corresponding results.

Discussion: The results show that construct validity of core and middle scales of the new COPSOQ III is satisfactory in all studied populations. A number of scales have large floor and ceiling, reflecting differences in the prevalence of the psychosocial working environment in the populations studied. COPSOQ III allows for local adaptations of scales still ensuring validity and comparisons between populations and over time.

O159: Developing the E-Work Wellbeing Scale (EWW): A Multi-Dimensional Approach to Wellbeing at Work
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Purpose: The current study has focused on developing and evaluating the E-Work Wellbeing scale (EWW). To the best of researchers' knowledge, a measure assessing remote e-workers' wellbeing at work is not currently available. Recent data provided by the Eurofound and ILO (2017) report suggested an increase in the number of remote e-workers. Remote e-working was found to affect many spheres of individuals' working lives such as relationships, job satisfaction, and perceptions of professional advancement (Allen, Golden, & Shockley, 2015). The EWW scale is a five-dimensional scale, framed within Van Horn et al.'s (2004) wellbeing at work model; including 79 items which assess the affective, cognitive, social, professional, and physical dimensions. The affective dimension is consisted of emotions, job satisfaction, organisational commitment, and emotional exhaustion. The social wellbeing dimension is examined through the relationships with colleagues, and supervisors, and feelings of social isolation. The professional dimension is determined by integrating perceptions of autonomy, competence, and career progression. The cognitive dimension is focusing on cognitive weariness, and the physical dimension is looking at physical symptoms and complaints. Hence, the scale has been tailored to the needs of remote e-working populations, considering the findings from a systematic review and semi-structured interviews conducted by the researcher.

Design/Methodology: The newly devised scale was reviewed and refined within the research team, using feedback gained from external subject experts. This process safeguarded scale's face validity. A current pilot study has recruited 160 participants, but still aims to collect 200 responses to implement Structural Equation Modelling analyses (Tabachnick & Fidell, 2001). SEM analyses will enable the researchers to examine whether the developed items are indeed underlain by the latent constructs (DeVellis, 2016) and will lead to elimination of items that are not that good. To assess instrument's construct and discriminant validity, other validated measures looking at individuals' wellbeing are used along (e.g., psychological distress, mental-wellbeing, sleeping problems). Correlation analyses will determine whether the new tool correlates, but is simultaneously distinct from already existing measures.

Results: Remote e-workers' wellbeing at work is expected to manifest itself in five dimensions, namely: the affective, cognitive, social, professional, and physical. The EWW scale is expected to relate to already existing tools such as psychological distress, mental-wellbeing and sleeping problems.
**Limitations:** The snowballing method used to collect data may eliminate researchers’ control concerning data collection, thus threatening the representativeness of the recruited sample.

**Practical Implications:** The use of the newly devised EWW scale will enable individuals and their organisations to better understand the impact of remote e-working, and technology use, on wellbeing at work. Any areas of high-risk (e.g., challenge in relationships with colleagues and supervisors) will be identified, so e-workers and their organisations can take action towards them.

**Originality:** This research will provide a very useful tool that organisations may use when monitoring and assessing their e-workers wellbeing at work. Additionally, this research will investigate understudied links between remote e-working and wellbeing at work by, for example, looking at sleeping problems, cognitive weariness, and switching-off from work.

**O160: The Validity and Reliability of the Danish Psychosocial Working Environment Questionnaire (DPQ)**

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Participation in the workforce is a central component in many peoples’ lives. Psychosocial working conditions are important predictors of the wellbeing of workers – both in terms of the immediate day-to-day wellbeing at work and in terms of work-life sustainability. To expand the knowledge on psychosocial working conditions and their impact on the wellbeing of workers it is important to continuously monitor and develop the tools for assessing psychosocial working conditions in todays’ workplaces.

Self-administered questionnaires are by far the most widely used method to measure psychosocial working conditions as they provide a relatively convenient and cost-effective way to collect data on numerous variables in large populations.

The DPQ was developed by researchers at the National Research Centre for the Working Environment (NRCWE) in Copenhagen and follows four basic principles and theoretical considerations, namely that the questionnaire should (i) be theory-based, but not based on one single theory, (ii) inquire into psychosocial working conditions that are located at different organisational levels in the workplace (e.g. individual, group, and organisational levels), (iii) be comprehensive by focusing on a variety of factors in the psychosocial working environment that may be associated with the wellbeing of employees, and (iv) be generic, meaning directly applicable to all types of jobs.

The aim of this presentation is briefly to describe the development of the DPQ and to present results on the reliability and the validity of the measures in the questionnaire. The reliability and the validity of the DPQ were investigated in a stratified sample of 4,340 employees in 14 job groups. Respondents were sent a test-questionnaire with 150 items operationalising 38 dimensions of the psychosocial working environment. The reliability of the measures was investigated using internal consistency (Cronbach’s α) and test-retest reliability. The factorial validity of the measures was investigated using confirmatory factor analysis (CFA). For each multi-item scale we undertook CFA’s within each job group and multi-group CFA’s to investigate factorial invariance across job groups. Finally, using multi-group multi-factor CFA, we investigated whether scales were empirically distinct.
Analyses of the internal consistency reliability and the test-retest reliabilities yielded satisfactory results. Findings from the CFA’s showed that, overall, the factorial validity of the multi-item scales was satisfactory within each of the 14 job groups. Results from the multi-group CFA’s indicated that factorial invariance could be ascertained in 10 of the 28 multi-item scales that were investigated, implying that factor loadings of individual items within multi-item scales were not identical across job groups for the remaining 18 scales. Finally, results support the hypothesis that the scales of the DPQ were empirically distinct.

Overall, the Danish Psychosocial Working Environment Questionnaire offers a valid and reliable instrument for assessing psychosocial working conditions in a variety of job groups. The results from the validation study also indicate, however, that questions about psychosocial working conditions may be understood differently across job groups, which again can have implications for the comparability of questionnaire-based measures of psychosocial working conditions across job groups.

O161: Does Pay for Performance Increase Employee Motivation and Performance? Results from a Longitudinal Study in a Swedish Industrial Company
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The private sector in Sweden as well as other industrial countries is rapidly moving towards more performance-oriented pay systems in order to increase employees’ work motivation. In the research literature there has been a long lasting debate on whether pay for performance increases or decreases motivation, especially in relation to intrinsic motivation (the crowding-out effect), and scholars are still debating the effects of pay-for-performance systems on employee motivation and performance. The overall aim of this study is to contribute to an increased understanding of how pay relates to employee motivation and performance within the context of a pay-for-performance system. More specifically, drawing on self-determination theory (SDT) and goal setting theory this study investigates how psychological needs (autonomy and feedback), goal setting (goal clarity), pay level and performance-based pay raise (assessed at Time 1) relate to subsequent motivation (intrinsic and extrinsic) as well as self-rated and supervisor-rated performance (assessed at Time 2), after controlling for demographic factors (age and sex). Questionnaire data was collected in 2015 and 2016 among all employees in a private Swedish industrial company (N=512, response rate approximately 40 percent). This was supplemented with register data on monthly pay level and individual pay raise along with performance ratings from their pay-setting managers. The findings indicate that pay for performance may have a positive impact on employee motivation and performance but that psychological need satisfaction and goal-setting seem to be crucial for both motivation and job performance. The study gives an input to the pay-motivation-performance puzzle with implications for managers and organisations.

O162: Staff Retention in the UK National Health Service - Determining the Relative Salience of Drivers of Early Exit
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The challenge of staff shortages is an enduring feature of the UK National Health Service. The issue is not new, nor is it news. But there are reasons to believe that the threat posed by staff shortages in key clinical staff groups is intensifying (Addicott, 2015; NHS Support Federation 2016). A recent survey of Health Trust Executives in England for example reported that 55%
were ‘worried’ or ‘very worried’ about future staffing levels (Ford, 2016). Signifying the gravity of concern, NHS Improvement (NHSI) - the government body with responsibility for overseeing NHS care provider organisations - recently produced guidance for employers on staff retention (NHSI, 2017).

Effective intervention however requires clear insight into the relevant push variables that motivate early exit, their relative salience, and the degree to which their effects can be considered universal or prone to vary demographically, e.g. by age, profession / role; job grade; type of care provider organisation. This paper reports on findings from a Medical Research Council funded project Extending Working Lives in the NHS – Challenges and Prospects (Nolan et al 2014-date). Informed by a thematic analysis of interviews with NHS employees, it identifies a set of eight headline drivers of early exit. This set of push influences formed the subject matter for a ranking task performed by a larger sample of NHS employees ($N = 1533$).

Causal influences have variously been attributed to rising demand for services, regulatory impacts; Uncertainty arising from the prospect of Brexit (the UK Nursing and Midwifery Council reported a 96% fall in EU nurses registering to work in Britain following the 2016 referendum; the Royal College of Nursing forecasts a shortfall of more than 40,000 nurses due to Brexit by 2026); withdrawal of government funding reducing demand for nurse training places (there is evidence of ~20% fall in applications; Maguire, 2017; Merrifield, 2017), underpinned by widespread speculation that excessive job demands, in part a product of staff shortages in the context of rising demand for care, is driving early exit.

The merits of selecting of Turnstone’s Case V method of paired comparisons to produce the ranking afforded relative to alternatives: with respect to determining the relative salience (interval between) of items; testable reproducibility; statically testable differences between sub-samples, are discussed. The results highlight the primacy of staff shortages/resource constraints and job demands. With respect to contemporary perspectives, it raises questions over the salience of flexible working hours. Results are discussed with reference to findings from our qualitative interviews with NHS staff ($N = 304$) and the background literature on staff retention in the health sector.

O163: Eudaimonic and Hedonic Orientations as Motives for Engagement: The Utility Value of Work, a Future Time Perspective
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The focus of this study is on how employees' orientations towards personal growth (eudaimonia), and pleasure (hedonia) predict the initiation of actions at work, and the process pursued. Based on these orientations, employees are thought to employ two different self-regulation styles when they initiate actions during daily tasks; either a decision-making based approach for future goals, or how they control their impulses to sustain their engagement during an immediate-future based task. To better understand the role of time in employees' motivation to invest themselves at work, this study utilises the Future Time Perspective (FTP) theory to examine how employees' perceptions of the future influences their present-day actions. FTP theory also allows for their perceptions of the utility value of present-time tasks to be assessed. These perceptions will expand our understanding of engagement and the motivation underpinning this from an employee perspective via support from Kahn (1990). It was hypothesised that employees' FTP would moderate the effects of both employees' orientations and self-regulation styles on their perceptions of the two processes of psychological meaningfulness and utility value of their work, and their levels of autonomous motivation. Secondly, that employees with higher tendencies towards eudaimonic orientations would have a future-focused TP, and employees with hedonic orientations would have a present-focused FTP. Finally, employees' perceptions of the two
processes and their levels of autonomous motivation would predict variations in their engagement levels. An online study was conducted, before a planned diary study, to test these hypotheses, and provide an initial test of the role of employees' FTP in employees' motivation and engagement. Employees from key UK industries completed the survey with results analysed using Path Analysis. The main findings supported the hypothesised relationships with some exceptions, e.g. the role of self-regulation styles.

This study has both theoretical and practical implications. To date, research has treated eudaimonia and hedonia as different types of wellbeing and failed to acknowledge that, by definition, these are in fact orientations that influence daily actions, and the persistence of those actions, e.g. engagement. The way we anticipate how the future influences employees' pursuit of personal growth and momentary pleasure is important for examining employees’ daily behaviour in helping organisations with their understanding of how different tasks promote or inhibit motivation to engage. Accounting for the role of how employees anticipate the immediate and distant future, this study contributes to our theoretical understanding of how employees make decisions in the present. Furthermore, there are practical implications for managers when setting targets within their teams. If realistic, for both the immediate and distant future, and in alignment with their employees’ FTP, they will have a team that has more sustained engagement levels. Finally, the combination of the FTP theory and Kahn's (1990) conceptualisation of engagement provides new theoretical insight into engagement from an employee’s perspective. By moving away from comparing groups of employees and accounting for their FTP of present-time tasks, this study will help managers gain a deeper understanding of the motives which underpin engagement levels in their workforce.

O164: From Teacher Burnout to Engagement: Using Appreciative Inquiry Interviews to Discover the Positive Core of the Teaching Profession
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Background: What brings out the best in teachers and their classrooms? This is an important question to tackle due to the high rates of burnout and voluntary turnover in the teaching profession. To supplement the understanding of teacher burnout, there has been a recent call to research more optimal aspects of teaching, such as teachers' work engagement and autonomous motivation. According to Ryan and Deci's self-determination theory, autonomous motivation refers to a sense of behaving with full choice and volition in one’s environment. Research shows that teachers’ autonomous motivation relates to heightened work performance, engagement, lowered burnout, and improved student outcomes. One way to promote autonomous motivation and its positive outcomes is with Appreciative Inquiry (AI). AI is a strengths-based organizational change philosophy that can be used to uncover and activate the positive core of a human system to leverage employee-driven positive change initiatives. According to AI, a positive core is comprised of stories, core values, peak experiences, strengths, and plans for creating a desired future. To date, AI has been applied to school wide interventions, but application for the purpose of promoting teachers’ autonomous motivation and wellbeing is needed. In the current qualitative study, we used AI methodology to understand the positive core of the teaching profession.

Methods: Thirteen elementary and secondary school teachers from Canada and the US completed 30-minute semi-structured AI interviews. Interview questions and probes directed teachers to answer the research question of what comprises the positive core of the teaching profession. Specifically, teachers were asked to describe their peak teaching experiences when they felt most alive, happy, and effective in their schools as well as their home lives, what they value most about the teaching profession and themselves as teachers, and their vision for the future of teaching. All data was transcribed and qualitatively analysed by two researchers.
**Results:** Thematic analysis results uncovered key themes denoting the positive core of the teaching profession: (1) genuine student-teacher connection, (2) supportive colleague relationships, (3) autonomy-promoting schools, (4) teacher self-care as a foundation for teaching effectiveness, and (5) generating meaning from long-term impact on students. These themes represented factors fuelling teachers’ autonomous motivation to teach and a host of subsequent cognitive, affective, and behavioural benefits in the classroom and beyond.

**Implications:** The current study was the first to apply an AI strengths-based interview to uncover the positive core of the teaching profession. Themes from this study can be used to guide future research in promoting teachers’ autonomous motivation and understanding how teachers can feel most psychologically healthy and effective in their work. Implications for future research and practice to promote autonomous motivation via leveraging the positive core of teaching will be described.

**O165: Adopting Financial Incentives in Primary Health Care and Life Cycle Implications**

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One of the characteristics of public health services, such as introduced in the UK and in some other European countries, was the principle of trust. It was assumed that health professionals were driven by vocational values rather than financial incentives. Yet, in parallel there have been pressures in the UK and elsewhere to adopt the P4P of Pay-For-Performance. This paper follows the recommendation of Paauwe, Guest and Wright (2014) to assess how this has been perceived by health professionals in terms of motivation and performance and does so by a comprehensive study on the scope and limits of financial reward systems for performance in primary care system where different models of management are in place in a southern European country. This involved thirty-nine semi-structured, audio taped and fully transcribed interviews with thirteen (n=13) doctors, thirteen (n=13) nurses and thirteen (n=13) health administrators in thirteen different family health units as well as thirty (n=30) patient satisfaction questionnaires in three different family health units of which ten questionnaires were in a unit with financial incentives for the unit as a whole rather than for clinical and administrative staff; another ten for the unit as a whole as well as individual financial incentives for all staff, and the rest in transition between the two models.

The findings indicate that interest in financial incentives relates very much to life cycles. Doctors and administrators in their later 40’s, 50’s or more are not much interested in such incentives since in relative terms they have enough income, job security and few financial concerns. Whereas financial incentives are ranked more highly by younger health staff it also was found that these did not in themselves motivate higher performance. Patient satisfaction with doctors and nurses was found to be is higher with financial incentives but only marginally so. A clear finding nonetheless has been that P4P can be de-motivating where this is introduced for only some rather than all health employees in a unit. An implication meriting further research is that greater concern in adapting to changing needs in health care should be given to life cycle concerns rather than only performance for pay.

**O166: Differential Effects of Diverse Constellations of Job Demands on Workers’ Health**

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Empirical evidence indicates the detrimental effects that adverse working environments may exert on workers’ health. However, occupational health research often disregards potential heterogeneity in terms of both the burden that workers perceive as arising from the demands of
their jobs and workers’ vulnerability to health problems. In order to account for potential heterogeneity in the relationship between job demands and health, this study intended to both identify typological job demand profiles and typological symptom clusters and to examine the potential associations between these profiles and clusters. This approach makes it possible to explore the differential health effects of diverse constellations of job demands.

In this study, we examined self-reported data provided by a cross-sectional survey of a sample of Austrian employees (N=16,466). By means of latent class analysis, a set of indicator items was used to identify both job demand profiles and symptom clusters. In the following step, we estimated a multinomial logistic regression model by having the symptom clusters regress on the job demand profiles.

Latent class analysis revealed four different subgroups, each of which showed a particular typological response pattern in terms of the perceived burden due to job demands (i.e. the job demand profiles) and the occurrence of diverse health symptoms (i.e. the symptom clusters), respectively. Moreover, multinomial logistic regression analysis demonstrated that the revealed symptom clusters were significantly associated with the revealed job demand profiles, while the strength of association differed considerably depending on the nature of the job demands that a worker experienced.

This study served to demonstrate the application of an alternative method for investigating the relationship between job demands and health by adopting a combined person- and variable-centred approach. The findings suggest that different constellations of job demands have a hierarchical order with regard to the seriousness of reported health symptoms. The synchronous burden from psychosocial, physical, and organizational job demands was found to be most critical in terms of exhibiting signs of poor health.

O167: Associations Between Fixed-term Employment and Occupational Health and Behaviours: What Are the Mechanisms?

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Objective: To analyze the associations between fixed-term employment and health (work ability and mental health) and behaviours (engagement and performance). Psychological contract fulfilment (PCF) and breach (PCB) are investigated as potential mediators of these associations.

Methods: Seven hundred workers employed on fixed-term contracts from a broad range of organizations participated in the study. Structural Equation Modelling was performed to analyze the data.

Results: Mediation analyses revealed that good occupational health and productivity are more likely to be achieved by those workers who perform non-manual work and (to some extent) accept their contracts because they experience high levels of PCF and low levels of PCB.

Conclusions: Apart from the lack of physical workload, psychological contract fulfilment has been revealed as yet another significant mediator between a higher socioeconomic position and good health and productivity of fixed-term workers.
O168: Working Conditions and Psychosocial Risks in Migrant Ecuadorian Workers in Spain
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The groups of migrant workers are likely to suffer from psychosocial risks as a result of the precarious working conditions, discrimination and mistreatment they experience for being foreigners. Among all the social groups exposed to psychosocial risks, the migrant population is one of the most vulnerable to worse employment conditions, short-term contracts, labour precariousness and difficult access to more highly-qualified jobs. There is a tendency among the migrant population to work mainly in the sectors of services, construction and agriculture, being highly significant the sectors of domestic services and hospitality where working and health conditions are usually worse and physical demands higher.

This fact has worsened after the recent economic crisis that Spain has faced, which has caused a serious destruction of jobs that particularly affected the migrant population, unable to meet their expectations as a result of the loss of jobs and the sharp drop in incomes. This study has enabled us to identify the psychosocial risks to which migrant Ecuadorian workers are exposed to in the South of Spain. To do so, we conducted a qualitative study based on in-depth interviews with 31 Ecuadorian workers in the city of Granada about the migration process, working conditions, perception of their work environment, evaluation of their personal experience at work, job expectations, among others.

From the analysis of their statements, the results enabled us to determine the psychosocial risks to which migrant workers are exposed and classify them in 2 groups. On the one hand, risks associated with the conditions of the individual job they perform and which include overload, schedule, work control and low salaries.

The second group of risks is made up of those risks related to the perceived psychological demands such as uncertainty, social pressure, discrimination, supervision, social relationships or work-family balance. The first four risks are the most experienced by migrants due to the fact of being foreigners, especially discrimination and social pressure.

Thus, we consider that our study proves the existence of specific characteristics in terms of psychosocial risks among the migrant population.

O169: Precarious Employment: On Its Definition and Measurement
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Precarious employment is a salient topic in both the societal and the scientific discourse. Although the subject has received considerable attention in sociology, there is no generally accepted definition hitherto. While almost all definitions contrast precarious employment with so-called standard employment (i.e., fulltime, permanent, income that ensures a livelihood, integration in social security systems), various authors have proposed different sets of dimensions that constitute precarious employment. Furthermore, authors disagree on the importance of, the number of, and the relationship between objective and subjective factors. To date, contributions from the field of psychology remain scarce. With our study, we aim at the development of a psychological perspective on this topic rooted in existing sociological research. Specifically, we focused on classifying subjective experiences of precarious employment and their measurement.
First, we reviewed prominent definitions of precarious employment in order to highlight similarities and differences. As a result, we identified the multidimensional concept by sociologist Klaus Dörre as one of the most comprehensive definitions of precarious employment. Following Dörre and colleagues, we defined precarious employment as deficiencies that arise from the conditions of employment on five dimensions: (a) income below a cultural minimum standard as defined by society, (b) social discrimination at the workplace, (c) exclusion from safety standards and social security systems, (d) deficits in status and recognition, and (e) loss of meaning and lack of identification with the employment. Relations to well-established concepts of work psychology (e.g., job insecurity, social support, effort-reward imbalance, meaning in work) are discussed.

Second, we operationalised the five dimensions (reproductive—material, social—communicative, legal—institutional, status and recognition, meaningful—subject-related). The resulting SEWP scale (subjective experience of work-related precariousness) was tested in two validation studies \((n_1=268, n_2=216)\). We report results on the psychometric properties of the SEWP scale and its associations with both work-related behaviour and health-related outcomes.

The experience of precarious employment related negatively to organisational citizenship behaviour and positively to deviant workplace behaviour. Furthermore, the experience of precarious employment was associated with lower levels of psychological wellbeing and higher levels of somatic complaints. Our preliminary results suggest that the SEWP scale allows for an economic, reliable, and valid measurement of precarious employment. We discuss current shortcomings of the scale, the relation of subjective evaluations and objective facts, as well as priorities for future development.

**O170: Trajectories of Insecurity: Young Adults' Employment Entry, Health and Wellbeing**

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Young adults in the transition from education to employment are vulnerable to employment insecurity. We explore trajectories of employment insecurity over six years after leaving education, and investigate their associations with sociodemographic predictors, self-reported health and life satisfaction. Based on a sample of 2,752 education leavers from a representative longitudinal dataset in Germany, we identify five distinct trajectories via latent class growth analysis: (1) 'smooth transition' (43%) signifies a quick entrance into permanent employment; (2) 'inhibited transition' (23%) comprises repeated temporary employment; (3) 'stepping stone' (21%) indicates a transition from temporary to permanent employment; (4) 'long-term NEET' (Not in Education, Employment or Training, 10%) describes persistent exclusion; and (5) 'dropout' (3%) captures transitions from permanent employment to NEET status and/or temporary employment. Low education and migration background are associated with long-term NEET status. Both low and high education are associated with inhibited transitions. Young women face fewer difficulties after leaving education than men, but parenthood increases women's likelihood of insecure trajectories. Long-term NEET status and inhibited transitions are associated with persistently lower health and life satisfaction. We find deteriorating health among long-term NEETs and the stepping stone trajectory; and deteriorating life satisfaction for long-term NEETs, the inhibited transition and dropouts.
O171: A Meta-analysis of Demographic, Lifestyle, and Physical Health Factors as Predictors of Sickness Absence Among Nursing Personnel

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Background: The nursing profession is a stressful occupation with physical and psychosocial stressors that are considered inherent in its practice. Thus, it is not surprising that there are higher sickness absences in this occupation compared to many others.

Objective: This paper is one of two studies that sought to examine the determinants of sickness absence among nurses and health care aides (HCAs). This paper examined and measured demographic, lifestyle, and physical health factors by conducting a meta-analysis.

Methods: A meta-analysis was undertaken to quantify the association between theoretically driven predictive variables and sickness absence. Using a registered protocol, keyword searches were conducted on five online databases: CINAHL, PROQuest Allied, PROQuest database theses, PsychINFO, and PubMed, as well as references of identified studies. Further screening and quality testing were conducted to determine study eligibility.

Results: From 812 studies that were examined following the exclusion of duplicates that met eligibility and had sufficient statistical data, in particular odds ratios (OR) and confidence intervals (CI), 19 studies were included for meta-analytic computations. Sex was found to be a significant demographic predictor of sickness absence, with female nurses or HCAs (OR= 1.73; CI 95%= 1.33 – 2.25) having higher odds than males. No lifestyle factors (i.e., physical activity and difficulty sleeping) were predictive of sickness absence. All physical health factors were predictive of sickness absence including (1) those who rated their health as poor, (OR= 1.38; CI 95%= 1.19 – 1.60); (2) those with history of sick leaves (OR= 3.35 CI 95%= 1.37 – 8.19); and (3) those who experience musculoskeletal pain (OR= 2.41; CI 95%= 1.77 – 3.27). Furthermore, among those with musculoskeletal pain, the odds of sickness absence were higher in those experiencing back and lower back pain (OR= 3.05; CI 95%= 1.66 – 5.62).

Conclusion: There are a number of specific factors that increase the likelihood of sickness absence among nursing personnel. Future research should seek replication of this current effort while also examining other salient determinants of health-related absenteeism through quantitative and qualitative methodologies.

O172: Is Job Control a Double-Edged Sword? Analysing the Interplay of Quantitative Workload, Emotional Dissonance, and Job Control on Emotional Exhaustion

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Over the past decades, quantitative workload (i.e., levels of work volume) has continuously increased in advanced industrialised societies (Sonnentag & Frese 2003). Furthermore, due to the increase of service sector occupations, employees face high emotional demands, as they are required to display emotions and behaviours that are in line with organisational rules or expectations, even if this means “faking” emotions and suppressing true feelings (referred to as emotional dissonance, Grandey 2000). So far, research has provided convincing evidence that high levels of these job demands can cause impairments in employees’ psychological wellbeing (Häusser et al. 2010; Van der Doef & Maes 1999). Therefore, investigating the interplay between job demands and employees’ wellbeing has become of central interest in research on occupational health.
One of the most influential models guiding this research is the Job Demand–Control (JD-C) model (Karasek 1979; Karasek & Theorell 1992). In his seminal model, Karasek (1979) proposed that impairments in psychological wellbeing are most likely to arise in jobs with high job demands and low job control. This prediction suggests that job control buffers the adverse impact of job demands. Despite its dominant prevalence in occupational health research, empirical evidence for the validity of the JD-C model has been mixed. In particular, several meta-analyses found support for the interaction of job demands and job control in less than half of the studies (de Lange et al. 2003; Häusser et al. 2010; Van der Doef & Maes 1999).

In the present study, we aim to shed light on the inconsistent findings by analysing the moderating effect of job control on the adverse consequences of quantitative workload and emotional dissonance as two distinct job demands. We propose that prior research on the JD-C model has adopted a one-sided, biased view of job control by focusing solely on its potential favourable consequences. Supplementing this view, and drawing from notions of the strength model of self-control (Muraven & Baumeister 2000), we argue that coping with high job control requires employees’ self-regulation and therefore, might as well have adverse consequences for employees’ psychological wellbeing. Consequently, we suggest that job control buffers the adverse effects of quantitative workload while it reinforces the adverse effects of emotional dissonance, which also necessitates self-control.

We examine the proposed relations among employees (N = 139) in a cross-lagged panel study with a six-month time lag. Our results demonstrate a mix of causal and reciprocal effects of job characteristics on emotional exhaustion over time. Furthermore, as suggested, our data provides evidence for contrasting moderating effects of job control. That is, job control buffers the adverse effects of quantitative workload while it reinforces the adverse effects of emotional dissonance on emotional exhaustion.

The current study offers several important implications for organisations on how to support employees’ psychological wellbeing. Specifically, in jobs with high levels of quantitative workload, it is beneficial to enhance the employees’ job control. However, the results reveal that job control harms employees’ psychological wellbeing when their jobs are characterised by high levels of emotional dissonance.

O173: Engaging Under Pressure: The Effects of Change, Role Stress and Illegitimate Tasks on Disengagement in UK Academic Staff
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The shifting political and social agenda in higher education has played a significant role in shaping the daily working lives of academic staff in higher education institutions internationally. Changing patterns of work and increasing bureaucracy have resulted in higher levels of role conflict and ambiguity (Kinman & Wray, 2014), and misalignment between academic identity and the institutionally prescribed job role of academic staff (Billiot, 2010). Role strain and the perception of work tasks as illegitimate (Semmer et al, 2010) have been associated with a range of negative outcomes including psychological distress and burnout (Orrqvist & Wincent, 2010; Semmer et al, 2010). Furthermore, role strain and illegitimate tasks have been negatively associated work engagement (Crawford et al, 2010; vanSchie et al, 2014).

This study examines the links between perceptions of change, role strain and illegitimate tasks, and levels of disengagement in UK academic staff. An online questionnaire was distributed electronically to members of the University and College Union in 2014. The study draws on respondents employed on full time, permanent contracts (N=4010;53% female).
Satisfaction with change and role strain were measured using two subscales of the HSE Management standards indicator tool (Mackay et al, 2004). The Bern Illegitimate task inventory (Semmer et al, 2010) was used to measure unnecessary and unreasonable tasks. Disengagement was measured using six items from the Oldenberg Burnout Inventory (Demerouti & Bakker, 2007).

A serial multiple mediation model (Hayes, 2017) was used to examine the mechanism by which dissatisfaction with the management of change affects levels of disengagement in academic staff. Two models predicted dissatisfaction with change would be mediated first by role stress and then via unreasonable (model 1) or unnecessary (model 2) tasks.

A direct effect of change on levels of disengagement was observed in both models, increasing dissatisfaction with change was associated with a reduction in disengagement in model 1 (unreasonable tasks; \( c' = -0.02 \), \( t(4006) = -3.51, p < .001 \)) and model 2 (unnecessary tasks \( c' = -0.02 \), \( t(4010) = -2.97, CI = -0.01-.01 \)). No indirect effect of change on disengagement via role was observed across either model, however significant indirect pathways from change through unreasonable tasks (95% CI = [-.23 - -.18]) and unnecessary tasks (95% CI = [-.03--.02]), suggesting that change mediates levels of disengagement via both unreasonable and unnecessary tasks, resulting in reductions in levels of disengagement. Indirect pathways from change via role and then unreasonable (95% CI=[-.01- -.01]) and unnecessary tasks (95% CI=[-.02- -.01]) suggests that the indirect pathway from change works first through role and then through unreasonable or unnecessary task, to reduce levels of disengagement in academic staff.

Findings indicate that academic staff who experience high levels of dissatisfaction with change respond with reducing levels of disengagement, and that this reduction in disengagement is mediated first through role strain and then elements of illegitimate tasks. The results suggest that rather than disengage from work, academic staff are more likely to engage more when faced with increasing change, and when work tasks are perceived as illegitimate.

O174: The Effect of Job Involvement on the Physical and Psychological Wellbeing of Secondary School Teachers
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This study examines the relationships between emotional labour, job involvement and physical and mental health in a sample of UK secondary school teachers. A cross-sectional correlational design was utilised. A survey was distributed to 1500 secondary school teachers. Six hundred and twenty-eight questionnaires were returned (74% female). Validated measures were used to assess job involvement, emotional labour, emotional dissonance, psychological distress and physical symptoms.

Significant positive relationships were observed between emotional labour, emotional dissonance and job involvement and psychological and physical symptoms. Teachers who reported higher levels of emotional labour and dissonance, high job involvement and conflict reported higher levels of psychological distress and somatic symptoms. Hierarchical regression analyses were conducted to examine whether emotional labour, emotional dissonance, job involvement and interpersonal conflict predicted levels of psychological distress and somatic health symptoms. Moderated relationships were examined to assess whether emotional labour and emotional dissonance moderated the effects of job involvement and inter-personal conflict on psychological and physical health.
Psychological distress: Main effect of job engagement, emotional labour, emotional dissonance and inter-personal conflict, entered in to step 2 of the model, explained nineteen-percent of the variance in psychological distress, with emotional labour greatest unique contribution ($\beta=23$, $p<.001$). Two-way interactions between job involvement, interpersonal conflict and emotional labour and dissonance were entered in to step three of the model, and accounted for a further 4% of the variance. Job involvement was moderated by emotional labour ($\beta=-.10$, $p<.05$) and emotional dissonance ($\beta=-.51$, $p<.01$). When job involvement was low, high levels of emotional labour and dissonance increased levels of psychological distress. The moderating effect of emotional labour and dissonance reduces as job involvement increases. Respondents with high job involvement reported higher levels of psychological distress, regardless of levels of emotional labour and dissonance.

Physical health symptoms: Job involvement, emotional labour and emotional dissonance all made unique contributions to the model, explaining 18% of the variance in the model. Job involvement made the greatest single contribution to the variance ($\beta=.26$, $p<.01$). No significant contribution was made by interpersonal conflict. Two-way interactions between job involvement and emotional labour and dissonance explained a further three-percent of the variance in somatic symptoms. Emotional labour and dissonance moderated the relationship between low job involvement and physical symptoms, however, when job involvement is high, levels of emotional labour and dissonance have little impact on the relationship.

The results offer further insight in to the relationship between job involvement, emotional labour and wellbeing in the teaching profession. Emotional labour and job involvement were associated with higher levels of psychological distress and physical symptoms. Emotional labour had particularly strong associations with psychological distress, whereas job involvement made the largest contribution to physical ill health. For those with lower levels of job involvement, the negative effects of involvement were exacerbated by high levels of emotional labour and emotional dissonance, however, for those high in job involvement, this effect diminished. Psychological distress and somatic symptoms were highest in those with the highest levels of job involvement.

O175: What is More Problematic: Experiencing Emotions or Regulating Their Expression?
Implications of the Measurement Confound in Research on Surface Acting
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Effects of Surface Acting and the Issue of Confounded Measures: Dealing with emotional labour by surface acting (i.e. regulating the display of emotions felt) consistently predicts poor wellbeing and performance (Grandey & Melloy, 2017; Hülsmeyer & Schewe, 2011). Regulating emotional display requires effort, which depletes resources. Inauthenticity creates tension, and it may be detected by others, thus impairing social interactions. Emotional dissonance is regarded as the core experience. Furthermore, negative emotions typically persist even when their expression is regulated.

Questions assessing surface acting typically ask if participants hide emotions, show different emotions than they feel, or the like (Brotheridge & Lee, 2002; Diefendorff, Croyle, & Gosserand, 2005). Such questions confound experiencing emotions and regulating their display. Thus, it is unclear to what extent effects are due to emotions felt versus emotional display regulation. This would not be a problem if surface acting would occur equally often with negative and positive emotions felt. However, surface acting typically involves not expressing negative emotions. However, having negative emotions requires attention, and thus effort (Beal, Weiss, Barros, & MacDermid, 2005). As negative emotions persist during surface acting, effects of surface acting may actually be due to the emotions felt.
The relative impact of emotions felt and emotions regulated: There are some results showing effects of surface acting even after controlling for emotions felt (e.g., Scott & Barnes, 2011). However, controlling for emotions felt diminishes the importance of surface acting, with emotions felt explaining more variance than regulating their display (Erickson & Ritter, 2001). In our own research, controlling for emotions felt rendered the effect of surface acting insignificant in three studies; it was emotions felt that explained the results (Semmer, Messerli, & Tschan, 2016).

We cannot conclude from such results that display regulation has no effect. We do conclude, however, that research does not allow conclusions about the relative effect of emotions felt versus display regulation, due to the measurement confound. It follows that attributing effects of surface acting to display regulation is exaggerated and not justified. Furthermore, in the (typical) case of negative emotions, it seems likely that the effect of having these emotions is stronger than the effect of regulating their display.

Theoretical/Practical Implications: The extent to which effects of surface acting are due to experiencing emotions versus regulating their display has yet to be determined, and research should focus on disentangling the two.

To the extent that effects of surface acting are due to experiencing negative emotions, attributing them to display regulation may direct attention away from an important problem, that is: What are triggers of negative emotions, how can they be avoided or attenuated, and how can they be dealt with? Questions of job design (e.g., avoiding performance constraints; granting autonomy), of a culture of respect and appreciation, of building organizational as well as personal resources would become more prominent, both in theory and in practical efforts.

O176: A Daily Diary Investigation on the Job-related Affective Experiences Fueled by Workaholism

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By using a daily diary research design, we investigated the quality of the job-related affective experiences associated with workaholism, a topic which has not received a clear answer from the available research. We drew on the effort recovery model and addiction theory and anticipated that workaholism would fuel both a higher level of daily job-related negative affect and a lower level of daily job-related positive affect. Moreover, we also expected that such affective experiences would mediate the relationship between workaholism and the level of emotional exhaustion reported at the end of the working day. We focused on a sample of 213 workers mostly consisting of entrepreneurs, managers and the self-employed, who were followed for 10 consecutive working days. Multilevel structural equation analyses controlling for neuroticism and daily workload (i.e., two strong correlates of workaholism) revealed that workaholism indeed uniquely fueled daily job-related negative affect and that daily job-related negative affect mediated the relationship between workaholism and daily emotional exhaustion. On the other hand, workaholism did not negatively impact daily job-related positive affect - this impact emerged only when removing neuroticism from the model. We discuss how such results advance our understanding of workaholism and its consequences.
O177: Depressive Symptoms and Non-Participation in Work - Results from the Longitudinal Study on Mental Health at Work (S-MGA)

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Introduction: Depressive symptoms as health determinants are acknowledged antecedents of disability pensions (dp). But dp is only one dimension of broader concepts such as early retirement and participation in work. The evidence about the effect of depressive symptoms on participation in work is sparse due the lack of representative samples with a broader age range and longitudinal design. The Study on Mental Health at Work (S-MGA) addresses this gap.

Method: The panel was sampled from all employees in Germany being subject to social security contributions and born between 1951 and 1980 at the date of sampling from the register. The baseline consists of N= 4,511 participants who were interviewed in 2012 (baseline). The analysis is based on n=2640 participants who completed the interview at baseline and at follow-up five years later. Non-participation in work was classified according to the International Labour Organization, i.e. less than 1 hour/week in gainful employment. Cross-sectional and longitudinal associations were analysed by logistic regression.

Results: At baseline 5.5% of the respondents were not employed (12.8% at the follow-up). The cross-sectional association between depressive symptoms and lack of employment yielded an odds ratio (OR) of 1.97 (95% CI: 1.18 - 3.27) at baseline and OR= 2.62 (95% CI: 1.91 - 3.60) at follow-up. Depressive symptoms at baseline were associated with a lack of employment five years later by an OR=1.8 (95% CI: 1.25 - 2.61).

Discussion: There are stable associations between depressive symptoms and non-participation in work within cross-sectional and longitudinal analyses. We conclude that depressive symptoms are an issue for the exit from the labour force that it is relevant for longer periods of the employment history.

O178: An Exploration of Trauma-related Symptoms among Workers in High-risk Industrial Occupations

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Post-traumatic Stress Disorder (PTSD) was first introduced in 1980 and has given us insight into symptoms of individuals who are exposed to trauma. Mining is an important industry in Canada and has directly and indirectly employed 563,000 Canadians in 2015. Of those, 256,000 were in Ontario specifically. Volunteer mine rescue workers are crucial to the mining team and there are a total 878 in Ontario.

We are aware of prevalence rates of PTSD in many rescue workers; however, to our knowledge, there has been no research on prevalence rates of PTSD in the mine rescue population. This research focuses on determining if there is a difference in PTSD symptoms and prevalence rates among mine rescue workers in comparison to non-mine rescue workers. Many pre-trauma risk factors have been shown to affect the development of symptoms for PTSD. This study also explores some of these factors in the mining population to determine if they have an impact on the development of their symptoms.
A one-way analysis of variance (ANOVA) indicated no significant difference in PTSD symptoms among mine rescuers and non-mine rescuers $F(1, 1423) = .111, p< .739$. A multiple regression showed that pre-trauma risk factors had a significant effect on the development of PTSD symptoms $F(8, 1297) = 76.392, p< .001$ and $h^2=.320$. These factors included social support, annual salary, ever being diagnosed with a mental health related issue, recently being diagnosed with a mental health related issue, and sleep problems.

O179: Perceptions of Justice, Victim’s Dehumanisation and Burnout in School Teachers
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In several studies, it has been shown that burnout is a serious problem in school teachers (e.g., Rita, Patrão & Sampaio, 2010). This situation not only affects teachers’ mental health but also the quality of their work (Rita, Patrão & Sampaio, 2010). Departing from the finding that dehumanisation of patients may be a defensive mechanism for health care workers (Vaes & Muratore, 2012), we investigated the possibility that dehumanisation of a victim of school bullying may be a defensive mechanism for teachers and therefore may be associated with lower burnout.

Furthermore, knowing that Belief in a Just World (BJW) is a personal resource used by people to maintain their belief that they are living in a fair world (Correia, 2010), to deal with traumatic events (e.g., cancer, unemployment) (e.g., Fetchenhauer, Jacobs & Belschak, 2005), to analyse unfair situations that happen to others (e.g., Muller, Caldwell & Hunter, 1994), and is negatively associated with burnout (Gonçalves, 2016), we investigated if defensive dehumanisation and infrahumanisation (mechanisms used to justify painful, harmful, and unjust decisions in the world, Haslam & Laughman, 2014; Lammer & Staple, 2011) could mediate the relation between BJW and burnout.

The participants were 135 school teachers (23.7% male and 76.3% female; age $M = 49.98$, $SD=7.77$), with an average of 24.94 years as professionals ($SD=8.64$). They answered to an online questionnaire where they filled in measures of Personal and General BJW (Dalbert, 1999). Next they we are presented with scenario of a bullying victim and they were asked to infer the emotional state of the victim with uniquely human and non-uniquely human emotions. Finally, burnout was measured (Patrão, Rita & Maroco, 2012). We predicted that (1) higher levels of BJW are associated to higher dehumanisation of the victim, (2) the higher the BJW the lower burnout levels, and (3) dehumanisation mediate the relation between BJW and burnout levels. The results partially confirmed the hypothesis. The theoretical and practical implications of the results will be discussed.

O180: Firefighter Health Study (FHS): Do Young Fire Fighters Selected on Health Criteria Experience Mental Health Symptoms?
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Mental health problems among fire fighters have been reported in several studies worldwide. The physical and psychological demands placed on them include cumulative exposure to extreme, unpredictable and potentially life-threatening events. Theoretically, firefighters should have an increased risk of developing specific psychiatric morbidities, especially post-traumatic disorders.

In Brazil, the Fire Services are based on a military organisational structure linked to Civil Defense and Public Security. They are trained to perform activities such as rescue, fire fighting and the
provision of emergency care. Recruits to the Fire Services are selected by public calls and have to meet strict health criteria to be admitted: candidates with symptoms of chronic disease, physical or psychological, are not accepted. Moreover, all recruits have to be under 29 years of age and be physically fit. As a result, the selected group shows no serious health problems, appears less prone to harmful lifestyle risks and displays a repertoire of behaviors appropriate to the challenges of the profession. However, a recent cross-sectional study reported a high prevalence of Posttraumatic Stress symptoms (PTS) and psychiatric medication use among Brazilian firefighters compared to the general population of that country.

Against this background, it is important to better understand the relationships between work and health in the Fire Services. The Firefighter Health Study (FHS) is a prospective study, designed to assess individual and organisational risk factors for the development of mental health symptoms among firefighters. At present, data is available from the first cohort (intake of recruits) at two measurement points (2014 - baseline; and 2017 – follow-up 1). This paper focuses on prevalence variation of smoking and PTS and Common Mental Disorder (CMD) symptoms. Trainee firefighters (N=532) were assessed during training (2014) and 320 (60.0%) firefighters were subsequently reassessed 24 months after beginning firefighter duty (after possible exposure to occupational trauma).

Analyses showed that the prevalence of smoking and CMD symptoms were not significantly higher than at follow-up. However, likely PTS cases were significantly higher at the second measurement point (1.6% at 2014 and 4.7% at 2017). Compared to the general Brazilian population, self-reported mental health symptoms were less prevalent among recruits and firefighters. In terms of PTS symptoms the picture is somewhat different. They were less prevalent among recruits at baseline and more prevalent among firefighters when both assessments were compared to the general population.

Results could indicate that the rigorous health selection process in the Fire Service explains the better health status among recruits when compared to general population (Healthy Worker Effect). Due to the specific nature of their work, firefighters are at risk of developing PTS symptoms in the first years of their careers. Training, job organisation and individual characteristics might not protect firefighters mental health after exposure to trauma at work. Future follow-ups will allow testing of hypothesis relating to cumulative effect of trauma exposure. Moreover, interventions focused on the mental health of young firefighters are recommended from the beginning of their activities at Fire Services.

O181: Predicting Subjective Career Success Using Career Resources
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Now more than ever, individuals are faced with a constantly changing work environment which is a result of job structuring, technological advancements, and globalization. These changes have made careers less structured and predictable and people need to take increasing responsibility for their own career development. As a consequence, self-directed and individually customized career paths have gained importance and individual career resources (e.g. career adaptability) are becoming more and more relevant for successful and satisfying career development, especially for attaining subjective career success. Although research regarding both career adaptability and other relevant career resources increased over the last years, it is not clear how career adaptability resources are related to other career resources and more general key resources. Moreover, the relative importance of career adaptability resources compared to other career resources for the attainment of subjective career success remains unexamined.
In our paper, we extend current career adaptability research by investigating the relative importance and incremental utility of career adaptability compared to other types of resources (e.g. career and key resources). Specifically, the main aims of the present paper are first, to examine the relationship of career adaptability resources to other types of career and key resources and (i.e., self-esteem and optimism) and second, to examine the relative importance and incremental utility of career adaptability resources compared to other types of career resources in relation to subjective career success (e.g. recognition, meaningful work, personal life).

To address these issues, we conducted a longitudinal study with 574 employees working in private industry and found support for the notion that the key resources of optimism and self-esteem are meaningfully related to career adaptability and a range of career resources. The results also demonstrate that career adaptability should be conceptualized with a larger network of resources that are relevant for attaining subjective career success. As our study shows, career adaptability is significantly related to other types of career resources but career adaptability resources, knowledge and skills career resources, motivational career resources, and environmental career resources each explain unique variance in subjective career success. However, the conducted relative weight analyses suggest that especially motivational and environmental career resources might be more important to attain subjective career success compared to the psycho-social career adaptability resources.

Overall, the study contributes to a better understanding of the specific role of the career adaptability resources for subjective career success within a larger nomological net of resources. The findings help to better position career adaptability within a more general resources framework, including offering a better understanding of the unique contribution of career adaptability resources beyond other types of resources.

O182: Preventing Psychological Violence/Harassment at Work Through Enhanced Occupational Safety and Health (OSH) Management Systems

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Background: Psychological violence/harassment in the world of work has taken a considerable toll on the health and wellbeing of individuals. It bears repercussions on families and communities hence threatening the essence of decent work. This review aims to highlight successful legal and workplace management responses from around the world that address harassment at work. The method used is a literature review of existing legislation, publications and tools, key informant interviews, and results and recommendations from high level reports.

Results: Most countries have some form of legislation that imposes on the employer a general duty to ensure and protect the health and safety of workers in the workplace. Health and safety often implicitly includes physical and psychological health. Depending on the jurisdiction, employers are required to take steps to prevent the occurrence of psychosocial pressure and psychosocial risk, psychological abuse, threats of violence, moral (psychological) harassment, and victimisation.

The duty often also requires the employer to undertake a risk assessment to identify specific risks to the workers’ health and safety. Many countries require employers to undertake preventive measures in relation to psychosocial risks that lead to work-related stress. Sometimes these psychosocial risks include psychological violence.
At times, there exists a duty to create internal rules/guidelines on workplace violence. For example, risks to physical and mental health linked to psychological harassment have to be assessed in France, where psychological harassment is considered a risk inherent to the working environment. Sometimes workplace violence training is required as well. Specific prohibitions regarding mobbing (Poland, Slovenia, France and Paraguay), harassment (UK, Singapore, Spain, and New Zealand) and bullying (Chile, Mauritius, Poland, and Slovenia) have been enacted in a number of jurisdictions.

Several OSH institutes have developed occupational safety and health management systems (OSHMS) to address forms of psychological violence. These systems takes into account various factors of the work environment that may not be considered in a traditional OSHMS. These factors include psychological support; organisational culture; clear leadership and expectations; recognition and reward; workload management; work-life balance and psychological protection from violence, bullying, and harassment among many others. Other ways in which traditional OSHMS can be adapted to better control for psychosocial risks are through trainings and awareness raising, complaint mechanisms, remedies, and care and support for workers.

Conclusion: There is zero tolerance to abuse, harm and injury due to simply trying to do one’s job, it is a human right. The scope, prevention, protection and remedial provisions to manage and eliminate harassment at work need to be spelled out in national legislation and practice. It is important to use existing national and workplace mechanisms for the management of violence, including workplace OSH management systems, policies and programmes and national tripartite OSH committees. This will allow for the integration of the risk of violence in all procedures.

Further to the need to harmonise national legislation and enhance prevention and protection from workplace violence, there is also a need to standardise methodologies used to research and study workplace violence.

O183: The Relationship Between Witnessed and Instigated Incivility – an Exploration of Mediating and Moderating Factors
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Workplace incivility, defined as “low-intensity deviant behaviour with ambiguous intent to harm the target” (Andersson & Pearson, 1999, p. 457), has been described as a phenomenon that may elicit reciprocal responses of rudeness between colleagues. Some researchers have used the metaphor of a virus, where incivility is considered to be contagious, risking the spread in the workplace (Foulk, Woolum, & Erez, 2016). Similarly, Andersson and Pearson (1999) suggested that uncivil exchanges can be observed by bystanders, who in turn would model their own behaviour after the observed interaction. However, relatively few studies have been conducted on witnessed workplace incivility (Schilpzand, de Pater, & Erez, 2016).

Therefore, the aim of the present study was to explore how witnessing workplace incivility from coworkers and supervisors relate to instigating incivility towards others. Additionally, the goal was to investigate if witnessed incivility was indirectly related to instigated incivility via perceived stress and low job satisfaction. Lastly, a further aim was to investigate if control, social support and job embeddedness moderated the relationships between witnessed and instigated incivility.

A total of 978 individuals (743 females, 235 males), sourced from a Swedish trade union, completed an online questionnaire. Witnessed and instigated workplace incivility was measured with modified versions of the Workplace Incivility Scale (Cortina, Magley, Williams, & Langhout, 2001), and stress, job satisfaction, control, social support from coworker and supervisor were...
assessed with The Copenhagen Psychosocial Questionnaire (Pejtersen, Kristensen, Borg, & Bjorner, 2010). Job embeddedness was measured with Crossley, Bennett, Jex and Burnfield’s (2007) global measure of embeddedness. Structural equation modelling and hierarchical multiple regression analyses were used to test the study hypotheses.

Results showed that witnessed incivility from both coworkers and supervisors was related to instigated incivility. Witnessed incivility was related to both perceived stress and low job satisfaction, but witnessed incivility was not linked to instigated incivility via perceived stress or low job satisfaction. Moreover, the results showed that participants who had witnessed coworker incivility and at the same time perceived high levels of control, social support (from coworkers) or job embeddedness on average reported higher levels of instigated incivility. Furthermore, participants who had witnessed supervisor incivility and at the same time perceived high levels of control, social support (from coworkers and supervisors), or job embeddedness on average reported higher levels of instigated incivility. The findings expand the literature on bystander workplace incivility and demonstrate the importance of organisational factors in models of workplace incivility.

**O184: Workplace Bullying in Medicine: Routes to Resolution**  
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*Purpose:* Workplace bullying remains a problem amongst medical staff. Union representation is an important potential route to resolution, particularly as there is no specific legislation to deal with the issue. However, union involvement has received little research attention. This exploratory study examines the causes and consequences of workplace bullying in medicine, and focuses upon the role of union representation in cases.

*Methodology:* Qualitative and quantitative methods were used to collect data in the UK in 2017. Data were obtained from both staff involved in cases of bullying and union representatives involved in their resolution.

*Findings:* Data analysis reveals a complex picture of the way in which cases of bullying arise and are dealt with. Several factors emerged that inhibited resolution and complicated union involvement, with those involved left with significant costs.

*Limitations:* The research was conducted with employees in one specific job role. Future research might examine the issue of union involvement in bullying in other contexts.

*Contribution:* This study makes an important contribution to research on the causes and consequences of bullying in medicine and the role of union representation in case resolution. The findings suggest strategies that may be used to manage cases more effectively, and highlight the utility of a dual perspective approach and the use of multiple data sources.

**O185: The Contribution of Work to Social Inequalities in Bullying Exposure: Evidence from France**  
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Social inequalities in health are well documented in the epidemiological literature. There is overwhelming evidence that morbidity and mortality rise steadily with gradually decreasing social or socio-economic status. This inverse and graded relationship in individuals is consistently observed both with educational and occupational status and is commonly known as the social
gradient (Hämming and Bauer, 2013). However, there are, to our knowledge, no studies on the social gradient in bullying at the workplace. Thus, it seems to us interesting to study the existence of socioeconomic inequalities in exposures to bullying at the workplace.

The main aim of the study is to test the existence of a social gradient in bullying exposures. It is also to investigate the contribution of a wide range of physical and psychosocial work factors including work organisation, working conditions, social relationships and job resources in decreasing or increasing social inequalities to bullying exposures. The reasons, mechanisms and pathways behind this graded association and inverse relation between social status (or socioeconomic position) and bullying exposures have to be explored. Several possible explanations could be mentioned. One explanation could be the position in the organisational hierarchy. Both clerks and blue-collars are non-managerial occupations positioned relatively low in the organisational hierarchy. Sociologists consider them as belonging to the same job class (i.e., entry-level, subordinate class), with limited autonomy and power in decision-making. Another important explanation could be the role and contribution of the work environment. Work factors have been recognised as important determinants of bullying (Agervold, 2009; Agervold and Mikkelsen, 2004; Einarsen et al., 1994; Hauge et al., 2007; Notelaers et al., 2010; Vartia, 1996; Zapf et al., 1996), and a number of work demands, job characteristics and occupational exposures have been found to be associated with socioeconomic or occupational status, the work environment is considered to be one of the major sources of social inequalities in health (Kristensen et al., 2012; Niedhammer et al., 2009). However, none of these studies analyse how work factors could increase or decrease social inequalities in exposures to bullying. This will be the aim of our study.

We base our work on a French occupational hazards survey known as SUMER 2010 (Surveillance Médicale des Expositions aux Risques Professionnels; Medical Surveillance of Exposure to Occupational Hazards), conducted from January 2009 until mid-2010. It surveys 2,400 occupational physicians (equal to more than 20 percent of occupational physicians working in France) and 56,314 randomly selected employees, of which 47,982 responded to the questionnaire. We use a step by step forward procedure with binomial logistic regressions. A strong social gradient is observed for the three forms of bullying. Work contract had a role on the association between occupation and bullying. The inclusion of work organisation variables showed that the most important changes in ORs were observed after controlling for autonomy and skill varieties. These results have important theoretical and practical implications about the role of organisational initiatives for decreasing socioeconomic inequalities in exposures to bullying.

O186: The Economic Cost of Work-related Psychosocial Aggression: A Systematic Review of Cost of Illness Studies

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Background: The body of literature investigating work-related psychosocial aggression has rapidly increased in the last two decades (Hershcovis, 2011; Samnani & Singh, 2012). This burgeoning literature has culminated in meta-analytic evidence identifying its respective antecedents and consequences to workers' health and organizational performance. While the last two decades has seen progressively more discussion surrounding workplace aggression at policy and practice levels, as well as an ever growing number of high quality studies observing the associated human and organizational costs. However, comparatively much less attention has been paid to understanding its respective financial cost. Although small, this growing area of investigation attests to the sizable financial costs associated with work-related psychosocial
aggression for individuals, organizations and national economies. Such economic estimates are important (and often highly cited) sources of information, commonly used to exemplify and communicate the scale and magnitude of a given health problem or disease; and, in turn, argue the business case for preventative action. However, detailed evaluations of such cost estimates have seldom received attention in the broader literature, with some frequently cited figures being produced without clear specification or transparency in their employed methodology. We feel there is now an imperative need for OHP, and indeed allied research fields, to develop a stronger empirical understanding of where and how such cost estimates are derived. The aim of the current study, therefore, is to systematically collate, summarize, review and critique the available economic estimations of workplace aggression in the literature; something that has not previously attempted.

**Method:** A peer-reviewed research protocol detailing the search strategy, study selection procedures and data extraction process was developed *a priori*. Both the academic and grey literature was examined. To allow for basic comparison, all costs were converted and adjusted to reflect 2014 US dollars.

**Results:** Twelve studies from five national contexts met the inclusion criteria and were reviewed: Australia (n=2), Italy (n=1), Spain (n=1), the United Kingdom (n=3) and the United States (n=5). The annual cost of work-related psychosocial aggression varied substantially, between $114.64 million and $35.9 billion. Considerable variations in aims, utilized prevalence statistics and included costs were observed. The majority of reviewed studies accounted for indirect production-related loss costs, with just one study accounting for directly incurred medical and healthcare costs.

**Conclusion:** This study concludes that work-related psychosocial aggression carries substantial financial costs to society. Although, the diversity in aims, cost types and definitions means more research is needed to understand the “true” cost of workplace aggression. Implications for research, policy and practice will be discussed.
POSTERS
P1: The Conceptual Model for the Relationship Between Emotional Labour and Aggressive Behaviour at Work
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**Introduction:** Emotional labour (Hochschild, 1983/2012) involves two key strategies, namely deep and surface acting. In service sector organisations there is an expectation for employees to regulate their emotions, believing that it contributes to effective communication with a client and better relationships at work (Meier et al., 2006). However, previous empirical studies and theoretical speculations, suggest that emotional labour can add to the impediment of work relationships. For example, in a meta-analytic study, Hulsheger and Schewe (2011) reported surface acting being linked to two out of three elements of burnout, i.e. emotional exhaustion and depersonalisation. This proposes that employees using surface acting may exhaust resources and at the same time signal a potential dysfunction in the relationship (i.e. depersonalisation means withdrawal from the relationships, cynical, negative, and callous attitude; Maslach, Schaufeli, & Leiter, 2001). Some other previous studies reported on the mechanisms linking emotional labour and aggressive behaviour towards others at work, however, there was no systematic approach summarising the findings that would result in a model explaining the underlying mechanisms. Hence, we aimed to perform a systematic review explaining how deep and surface acting are linked to aggressive behaviour towards others at work.

**Methods:** The PRISMA guidelines were used to perform the systematic review in the Scopus data base. Eligible studies analysed the link between emotional labour and aggressive behavior (e.g. workplace bullying/harassment, interpersonal counterproductive work behaviour) directed towards others (clients, colleagues, supervisors, or subordinates) at work. Out of 4025 initial hits, 12 studies fit the eligibility criteria for qualitative data synthesis and were included in the conceptual model.

**Results:** The key findings of the current study suggest that depletion of resources is the principal factor explaining links between surface acting and aggressive behavior at work, while emotional intelligence (EI) and its competencies help in securing emotional resources and refraining from participation in aggressive acts. The results also uncovered that some work conditions, such as co-worker support and policy strength, significantly moderated the links between surface acting and dysfunctional behaviour toward others. There is a limited number of studies analysing how deep acting may lead to aggressive behaviours and, therefore, no firm conclusions could be made regarding this strategy of emotional labour.

**Conclusion and practical implications:** Findings of the current meta-analysis suggest that surface acting is linked to dysfunction in behaviour towards others at work. Service sector organisations should consider the negative side of faking emotions and may wish to make adjustments in employee performance expectations. Although, it is generally believed that goodwill and smile help embrace customers better (Zhao & Ghiselli, 2016), however, in reality, “putting a smile on a face” can result in aggressive reactions.

P2: Ostracism, Attributions, and Their Relationships with International Students’ and Employees’ Outcomes: The Moderating Effect of Perceived Harming Intent
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**Objectives:** Ostracism refers to the extent to which an individual is being ignored or excluded by other people, without explicit explanation (Williams, 1997). According to the temporal need-threat theory of ostracism (Williams, 2009), the victim immediately detects ostracism in the social surroundings (stage 1). At stage 2, or the reflexive stage, the victim experiences need-threats and social pain. At stage 3 or the reflective stage, the victim directs cognitive attention to
ostracism and makes attributions. At stage 4, the victim will experience depression, helplessness, and withdrawal. This study focused on the reflective stage, wherein victims cognitively process the information and make attributions. There were three aims of the study. First, I tested victims’ internal and external attributions of ostracism. Second, due to the ambiguous nature of ostracism, I examined the victims’ perceptions of the actors’ harming intent. If the perceived harming intent is low, the victims would be more likely to make internal attributions and blame themselves. If the perceived harming intent is high, the victims would be more likely to make external attributions and blame the actors. Third, I proposed two moderated mediation model in which perceived harming intent would moderate the indirect effect of ostracism and outcome via both internal and external attributions.

Methods: Study 1 included 154 international students from U.S. universities, with 80 males and 74 females. Their mean age was 25.40. In Study 2, 236 full time employees were surveyed twice with one month time interval. The mean age was 35.20. Ostracism was measured with the 10 items by Ferris et al. (2008). Following each ostracism item, I asked one question to assess the victim’s perceived harming intent of the actor. Internal and external attributions were measured with seven items developed by Hershcovis and Barling (2010). Self-esteem was measured with the 10-item by Rosenberg (1965). Depression was measured with 5 items by Radloff (1977). Psychological strain was measured with the 10 items by Cohen, Kamarck, and Mermelstein (1983). Physical strain was measured by seven items by Derogatis (1975). Absence was measured with one item used by Beehr and Gupta (1978).

Results and discussion: In both studies, ostracism was significantly related to negative outcomes such as lower self-esteem, more depression, psychological strains, physical strains, and absence. Victims made both internal and external attributions of ostracism. Internal attribution was more strongly related to negative outcomes than was external attribution. Perceived harming intent moderated the relationship between ostracism and internal attribution. Ostracism was more significantly related to internal attributions when the perceived harming intent was low rather than high. In addition, the indirect effect of ostracism on victims’ outcomes via internal attribution was more significant when perceived harming intent was low rather than high. For actors of nonpurposful ostracism, their ostracism behaviour may seem naïve. However, the detrimental effect on the victims is unneglectable. In addition, for the employee sample, perceived harming intent significantly moderated the relationship between ostracism and external attribution. The relationship was significant and strong when perceived harming intent was high rather than low.

P3: Detrimental Effects of Workplace Incivility on Self-Esteem: The Moderating Role of Observed Incivility and Self-Blame
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Many employees are exposed to workplace incivility and previous studies have clearly shown its negative effects on employees’ mood, motivation, and job satisfaction. Extending this line of research, the present study aimed to examine whether the experience of incivility also affects how employees feel about themselves (i.e., self-esteem). Uncivil behaviour may signal social rejection and devaluation, resulting in a threat to one’s social standing. According to sociometer theory (Leary & Baumeister, 2000), such a threat may result in a self-esteem drop. In the present study, we further tested the potential moderating role of a contextual and a personal variable, namely level of observed incivility and trait self-blame. Both are likely to affect the individual’s attribution of the event and hence its impact on one’s self-esteem. We expected the detrimental effect of experienced incivility to be particularly strong for individuals who assume that they are the only target of incivility (i.e., low observed incivility towards others) and those who tend to blame themselves for being treated impolitely (i.e., high trait self-blame).
We conducted a diary study over two weeks. 171 participants reported the frequency of experienced and observed workplace incivility at the end of work; state self-esteem was measured in the morning and at the end of work. Trait self-blame was measured before the diary study started. As predicted, experienced incivility was related to low self-esteem both on the within- and the between-person level. In contrast to our assumption, however, observed incivility only moderated the effect of experienced incivility on the between-person level. Trait self-blame had no moderating effect.

In sum, our findings confirm the harmful effect of incivility and indicate that employees consider themselves as less valuable when they are treated impolitely at work. On the between-person level, focusing on interindividual differences, the link between experienced incivility and self-esteem was particularly strong for those employees who observed little incivility towards others. This supports the assumption that uncivil behaviour might interpreted as a signal of one's social standing and value. On the within-person level, focusing on intrindividually differences and short-term effects, the effect of incivility on self-esteem seems to be independent of the level of observed incivility. These inconsistent findings are unexpected, therefore, future research may want to examine the interplay between experienced and observed incivility in further details, for example by focusing on the target's attribution of the uncivil behaviour.

P4: The Longitudinal Association between Supportive-Disloyal Leadership, Moral Disengagement and Counterproductive Work Behaviors
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Destructive leadership comes in many forms and shapes, including one where a given leader portrays supportive behaviours towards subordinates while simultaneously being disloyal towards the organization they serve. A Supportive-Disloyal leader is as a kind of supervisor who, for the sake of achieving personal goals, may strategically show concern for the wellbeing of followers but, at the same time, may violate the legitimate interest of the organization. As an example, the Supportive-Disloyal leader may misuse material or financial resources of the organization, may exploit followers by granting them more benefits at the cost of the organization, and may also appreciate or foster negativity in followers (Aasland et al., 2010; Einarsen et al., 2002). Such leadership practices may then have important detrimental effects on the moral engagement and behaviours of subordinates.

The link between such Supportive-Disloyal Leadership, Moral Disengagement and Counterproductive Work Behaviors among subordinates was therefore addressed by means of a longitudinal survey study. Moral disengagement is the complex socio-cognitive process of convincing the self that ethical standards do not apply to oneself in a particular context, and therefore it involves the cognitive re-construing or re-framing of destructive behaviours as being morally acceptable without changing the behaviour or the moral standards (Bandura et al., 1996). Counterproductive Work Behavior is employee behaviour that goes against the legitimate interests of the organization, by harming the organization as a whole or people in organizations such as employees and clients, customers, or patients (Sackett et al., 2006).

Our main hypothesis was that daily interactions with a Supportive-Disloyal leader, even considering a relatively short period of time, would be associated with an increase of Moral Disengagement among followers and this, in turn, would eventually result in a proliferation of Counterproductive Work Behaviors displayed by followers. In sum, we imagined the existence of a vicious cycle connecting these three variables. A structured anonymous questionnaire was distributed three times to a group of 632 Italian adult workers, with a time lag of about seven
weeks between the measurement points. A path analysis model was implemented and tested adopting the Bayesian approach. Interestingly enough, Supportive-Disloyal leadership was found to mediate the relation between Moral Disengagement and Counterproductive Work Behavior. Therefore, it seemed that a Moral Disengagement-oriented attitude among followers could constitute the basis for a Supportive-Disloyal leadership style to emerge, with negative consequences in terms of the Counterproductive Work Behaviors of subordinates coming afterwards. The interplay between Moral Disengagement and Supportive-Disloyal leadership needs to be explored more carefully since Supportive-Disloyal behaviours could be one of the most subtle paths a leader can walk along in order to act destructively against both organizations and followers.

P5: Team Interdependence and Satisfaction: The Mediating Role of Socioaffective Relationships Within Workgroups

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Today, teams are recognised as an essential element of organisations, and interdependence relations have long been considered as one of the basic features of group existence. Group interdependence in the workplace is usually defined by the relationships required for the accomplishment of work and the commonly studied group interdependence dimensions are related to task and results. Simultaneously, it is commonly assumed that within teams’ people are also linked by socioemotional ties with important implications on group climate and functioning.

The present study aims to test the hypothesis that socioaffective interdependence (relational closeness, open expression, and work-related emotionality) mediates the relation between teamwork interdependence (task, results, and functions) measured through social network density indicators, and group satisfaction (i.e., team members’ satisfaction with different aspects related to the task and the affective system of the team). Data were collected from 83 teams of several Portuguese organisations (industry, information and communication technology services, and hospital institutions). All of these teams (i.e., commercial and marketing teams, project teams, human resources management teams, quality control teams, financial management teams and top management teams) were responsible for tasks with relative autonomy and participation in decision-making. The size of the teams ranged from three to ten members.

Indirect effects were calculated through the estimation of an OLS regression-based mediation model, conducted at the group-level of analysis. The main results confirm the mediating role of socioaffective interdependence between teamwork interdependence and group satisfaction. The mediating effects of each of the three dimensions of socioaffective interdependence (i.e., relational closeness, open expression, and work-related emotionality) were significant when explaining the association between functional interdependence and group satisfaction. The results also revealed that the team work-related emotionality significantly mediated the relation between task interdependence and group satisfaction (positive indirect effect) and the association between results interdependence and group satisfaction (negative indirect effect). In general, these results point to different mediating effects of each of the three socioaffective interdependence variables. Results are discussed in the context of work and socioaffective interactions within the workgroups, and the practical implications for team management are presented.

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P6: How Flexible Are Our Social Needs? Can Social Needs Be Satisfied in Flexible Work Arrangements and Therefore Increase Job Engagement?
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To date, there are contradictory results regarding the ability of media-mediated communication to substitute the amount of face-to-face communication in flexible work arrangements. In private communication research, Ahn and Shin (2013) found a resolution for the two contrasting hypotheses around media use, the augmentation and displacement hypothesis. The authors argued that relatedness, an innate basic need motivating human behavior (Deci & Ryan, 1985), consists of two aspects: seeking connectedness and avoiding isolation. The aim of this study was to explain the impact of flexible work arrangements on relationships at the workplace by the possible explanatory mechanism of distinguishing relatedness into connectedness and isolation.

For this purpose, 324 participants completed an online questionnaire measuring the availability and use of flexible work arrangements, the use of face-to-face and media-mediated communication via self-constructed items. The UCLA Loneliness Scale was used to assess feelings of connectedness and isolation (Russell et al., 1980), and the Utrecht Work Engagement Scale was used to assess job engagement (Schaufeli et al., 2006).

When comparing employees with high use of media-mediated communication to employees with high use of face-to-face communication, our results revealed that feelings of connectedness mediate the relationship between communication use and job engagement in both groups. However, the feeling of isolation was only a mediator for employees with high use of face-to-face communication and not for employees, who mainly communicated via media. Therefore, the explanatory mechanism of Ahn and Shin (2013) has been validated in the work context.

Based on our findings, we conclude that feelings of connectedness and isolation can be seen as two different, independent concepts which have the potential to further differentiate and explain (conflicting) results in research on communication, relatedness, and flexible work arrangements.

P7: Workplace Accidents: The Impact of Civility Norms and Work-safety Tension
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Civility norms have been linked by previous researchers to a number of organisational outcomes (McGonagle, Kath, Walsh, Morrow, 2014), including aspects of safety climate and, more distally, safety outcomes. McGonagle et al (2014) argued that high civility norms should support a positive safety climate, and indirectly, various safety outcomes. Work-safety tension is an aspect of safety climate that refers to the extent to which work pressures such as productivity or performance are perceived to be competing with employee safety. Using two samples – railroad maintenance workers and grocery store employees – McGonagle et al found significant relationships between high civility norms, and reduced work-safety tension, through the mechanism of management safety climate. Additionally, they found that safety outcomes, including minor accidents were related to civility norms and work safety tension. In this study, we turned to the manufacturing sector to examine further evidence regarding links between civility norms and safety outcomes. Consistent with McGonagle et al’s (2014) work, we hypothesised that higher civility norms would be related to fewer minor accidents, and that this relationship would be partially mediated by work-safety tension, such that high work-safety tension decreases the beneficial relationship between civility norms and accidents.
Participants for this study were 742 employees from six mid-size manufacturing companies, who participated in the third wave of a multi-wave data collection that assessed a variety of worker health, work attitudes, and psychosocial work conditions. The antecedent variable, civility norms was assessed using a brief version of the Civility Norms Questionnaire (Walsh, et al, 2008). The mediating variable, work-safety tension, was assessed using a 5-item measure adapted from Morrow et al (2010). The distal outcome variable, minor accidents, was assessed using Smecko and Hayes’ (1999) measure of compliance with safety behaviours at work in which participants indicated the frequency of minor accidents occurring, on a scale of 1-8.

We tested the hypothesised mediation using the SPSS PROCESS macro (model 4) with bias-corrected bootstrapping to estimate indirect effects (Hayes, 2018). Age, job category, and gender were included as covariates. Results indicated that high civility norms are related to a lower occurrence of minor accidents (direct effects = -.1193, SE = .0480, CI (-.2171, -.0216). This relationship is partially mediated by work-safety tension such that the relationship between civility norms and minor accidents is decreased (indirect effects =-.0992, Bootstrapped SE = .0255, Bootstrapped CI (-.1534, -.0537).

The results of this analysis imply that civility norms and work-safety tension may be concepts that are incompatible with one another. Where civility implies respect and concern for others, which is consistent with engaging in safe work behaviours, work-safety tension implies a greater emphasis on performance, even at the cost of safety behaviours that support civility norms. The results of this study replicate the work of McGonagle et al. (2014) in a novel context and highlight the need for further research to better understand the causal mechanisms underlying these relationships.

P8: Effort-Reward Imbalance: A Risk Factor for Bullying?
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Previous research shows that work environment factors are important antecedents of workplace bullying, because of the stress they may induce. While previous studies have typically used Karasek’s (1979) JDC-model and DR (Bakker & Demerouti, 2007), the present study investigates whether another important occupational stress model, that is the Effort-Reward Model (Siegrist, 1996), is also associated to workplace bullying. A survey study in 19 Belgian organizations (n=6,517) confirmed that employees experiencing an imbalance between efforts and rewards were more likely to be targets of bullying. This study illustrates that stressful situations make employees more vulnerable to bullying and is the first to point to a relationship between effort-reward imbalance and bullying.

P9: Prevalence of Sexual Harassment of Security Employees in Guadalajara Mexico
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Introduction: Sexual harassment is repetitive, insistent behaviour that brings satisfaction to the perpetrator and is expressly unwanted by the person receiving it; it is therefore considered a psychosocial risk. It is defined as a criminal act in Mexico’s Federal Penal Code; nevertheless, filing a complaint and presenting evidence is complicated due to the scarcity of consensually valid instruments. It is generally based on the victims’ or witnesses’ declaration. The objective of this study is to identify the prevalence of sexual harassment in security employees in Guadalajara, Mexico.
Method: Three hundred seventy randomly selected employees from four organizations offering government and private security services in Guadalajara, Mexico were surveyed. Eighty-five percent (315) were male and fifteen percent (55) female. Fifty-five percent (204) claimed they had basic middle school education (9 years), average seniority at work was 8.5 (+ 5) years, and they worked 48 to 60 hours a week. The HOSEL Questionnaire (Preciado & Franco, 2013) was applied, consisting of 40 items. Three scalar dimensions (22 items): risks in the work environment, verbal threats and emotional responses; a component of personal, work-related and social consequences (11 items), and another of preventive measures (7 items).

Results: Nine percent (34) of the employees reported medium or high level sexual harassment (SH) in the environment; 3% (10) received unwanted verbal sexual advances, and 3.1% (11) suffered emotional disturbances due to SH. Three percent (9) indicated harm done to their work and social relationships. Forty-five percent (45%) reported there were no SH prevention procedures or regulations in their company. Thirty percent (108) were not familiar with laws dealing with HS and 44% (165) knew about work colleagues had reported being victims of HS.

Conclusion: Sexual harassment is a covert practice, rarely reported by the employees of the organizations offering security services in Guadalajara, Mexico.

P10: The State of Sexual Harassment Preventative Training
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Sexual harassment has been a heated topic recently, escalating into the #MeToo movement that thousands have participated in across the world. Counteracting sexual harassment is not a new goal within organizations, but one with renewed importance. Whether driven by ethical concerns or fears of financial reprisal, preventing sexual harassment has commonly been addressed through use of sexual harassment training. However, there is a large gap in knowledge on these trainings. With the rapidly changing landscape of today's workplace, it can be difficult to assess if these trainings have lasting impact on employees and organizations. Various formats of trainings exist, from online videos to in-person group trainings to role playing. Pervasiveness of training, styles/types, requirements, employee perceptions, and outcomes of those trainings are not clear (Antecol & Cobb-Clark, 2003; EEOC, 2016b; Magley & Grossman, 2017). A call has gone out to recognize the pervasive problem of workplace sexual harassment, with the EEOC reporting nearly 13,000 federal charges with $40.7 million dispersed in benefits within the United States alone (EEOC, 2018; Roehling & Huang, 2018). What we hope to achieve in this submission is a further exploration into the state of sexual harassment training and employee outcomes.

Data from 524 individuals were collected from a representative sample from across the USA. Participants were 49.8% female, 81% white, 61.6% 40 years old or under, and 68.8% had at least a college degree. A majority were in management, education, business and financial operations, office and administrator support, and sales types of positions.

Results showed that 26% of respondents had never participated in sexual harassment training in any of their jobs across their working life, with another 26% reporting 5 or more instances of training and the remaining 48% between 1 and 4 trainings across their working life. When asked about their current job 34% had not participated in training, followed by 29% reporting one instance of training and the remaining 37% from 2 to over five trainings. Most individuals who completed a training reported that it covered information about sexual harassment laws in the USA, the company's sexual harassment policies, how to avoid sexually harassing others, and how to deal with being sexually harassed by others. The most common styles of training were lectures only at 17% of trainings, followed by a combination of lectures and videos at 15%, and a computer or web-based training at 14% of trainings.
Overall, the findings regarding training efficacy are not encouraging. Survey respondents were given a short quiz asking about facts of sexual harassment in the USA (i.e. “Only men can be sexual harassers, true or false”). There was no significant effect of amount of training at one’s current job on correct answers on the quiz ($p > .05$). There were no significant differences between style of training combinations on correct answers ($p > .05$). There were also no significant differences between content of trainings on correct answers ($p > .05$). Further analyses will be conducted to explore the training variables and efficacy of training.

**P11: Workplace Bullying among Employees in Germany: Prevalence Estimates and the Role of the Perpetrator**

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Workplace bullying is a known serious risk factor for the physical and mental health of the targets as well as for the economic wellbeing of companies. Despite this, assessing the prevalence of bullying may be problematic given different understandings of what constitutes bullying and the variety of scaling methods and criteria for classifying targets adopted in studies. In addition, there is currently scarce evidence about the prevalence of bullying depending on the perpetrator (i.e., superiors or co-workers) of the negative behaviours.

The aim of the present study was to examine the influence that different criteria for classifying targets and types of perpetrator have on the prevalence estimate of self-reported bullying, using a hybrid measurement approach consisting of the self-labelling combined with the behavioral experience method. Data was taken from the Study on Mental Health at Work, a German large representative sample ($N=4,143$) of employees subject to social security contribution. Participants were asked to report whether they felt being unjustly criticised, harassed or shown up in front of others by co-workers or superiors over the last six months. An affirmative response was followed by a question asking about the frequency of the experienced negative acts. The prevalence estimate of workplace bullying was calculated according to two different criteria: 1. Reporting exposure to bullying (Yes/No), without considering frequency; 2. Reporting severe (at least weekly) exposure to bullying.

We found prevalence estimates ranging from 2.9 to 17% depending on the type of perpetrator and the classification criterion used. Prevalence estimates were lower when a stricter criterion considering frequency of exposure was used, and if the perpetrators of bullying were co-workers (bullying by co-workers without criterion of frequency: 7.3%; severe [i.e. at least weekly] bullying by co-workers: 2.9%; bullying by superiors without criterion of frequency: 13.3%; severe bullying by superiors: 5.0%). Of the participants, 1.2% reported being severely bullied by both perpetrators and co-workers. While age was unrelated to bullying by co-workers, younger employees reported severe bullying by superiors more often than older employees. There were no gender differences in the prevalence estimates of workplace bullying.

Our results indicate that it is crucial to distinguish by type of perpetrator and consider frequency of exposure when assessing the prevalence of workplace bullying. Prevalence estimates found in previous studies (e.g. from different countries or with different sub samples regarding gender, age, or occupation) should not be compared without critically examining the definition of bullying and the combination of perpetrators and frequency.
A Polish psychometric tool for measuring and diagnosing workplace mobbing, called SDM Questionnaire will be presented and described. This tool has been developed, tested and improved for a couple of years, since 2006. The experimental version of the instrument was mostly inspired by Leymanns’ LIPT Questionnaire and a Polish explorative mobbing study (dozens of semi-structured interviews conducted with mobbing victims). Based on that research it was noticed that mobbing victims experienced not only a typical set of behaviours but they also experienced a repetitive pattern of emotions and cognitive interpretations resulting in developing a range of neurotic, depressive and psychosomatic symptoms. Thus, these indicators were also added to the experimental version of the tool, constituting a new questionnaire scale. The accuracy of each item was checked (panel of 5 experts: psychologists experienced in diagnosing mobbing) and the weakest items (behavioural indicators) were discarded.

Based on the number of quantitative research projects (2006: N=367, 2008: N=465 and 2015, N=1350) conducted on heterogeneous samples of employees, further analysis and improvements were made. Finally, the SDM questionnaire consists of two main, positively correlating scales: the SDM-IDM scale (catalogue of mobbing behaviours: 43 items; α Cronbach: 0.956) and the SDM-ODC scale (psycho-somatic indicators, 21 items; α Cronbach: 0.97). The SDM-IDM scale consists of three subscales (factor analysis result): isolating and intimidating behaviours (19 items; α Cronbach: 0.927), humiliating and ridiculing behaviours (17 items; α Cronbach: 0.932), behaviours impeding professional tasks completion (7 items; α Cronbach: 0.803). An ordinary, 5-point Likert scale is implemented in the tool. Then, based on the scales correlations, the probability theory and the density distributions a new, multidimensional-dimensional key for calculating the results was created. The questionnaire can be used for both group research and individual mobbing diagnoses. It provides reliable, psychologically more sophisticated and complex results (combination of behavioural and psychosomatic indicators for cut-off points) than the traditional tools (example: LIPT or NAQ Questionnaires), providing more information about the measured phenomenon.

According to Andersson and Pearson (1999) “workplace incivility involves acting with disregard for others in the workplace, in violation of workplace norms for respect” (p.455). Although there is an abundance of empirical support for the negative consequences of workplace incivility (Caza & Cortina, 2007) little is known about its effects beyond the workplace. Spillover theory suggests that emotions and behaviours in one domain carry over to the other (Staines, 1980). Consistent with this theory, superior-initiated incivility was associated with increased work-family conflict (Lim & Lee, 2011). Superiors control important organisational resources, therefore targets may actively suppress their negative emotions about their superior and engage in surface acting, which involves repressing felt emotions (i.e. repressing anger to display positive emotions) (Hoschild, 1983).

According to Conservation of Resources theory (COR), individuals have a limited reservoir of resources, engaging in surface acting depletes these limited resources, thus limiting resources used to balance the work-family domain (Hobfoll, 1989). Therefore, we hypothesise (H1) that surface acting at work will mediate the relationship between incivility experiences and work-family
conflict (H2) the mediated relationship between experienced incivility, surface acting and work-family conflict will differ depending on the perpetrator’s power. Specifically, there will be a positive relationship between perpetrator power and surface acting.

Two-hundred and twenty-two state police workers responded to a self-report survey. Incivility was assessed using an adapted version of the Workplace Incivility Scale (Cortina, Magley, Williams, & Langhout, 2001), surface acting was assessed using items from the Emotional Labor Scale (Brotheridge & Lee, 1998), work-family conflict was assessed using Carlson, Kacmar and Williams (2000) multidimensional measure of work-family conflict and perpetrator power was measured using a scale developed by Swan (1995). We used conditional process modeling to test for moderated mediation using the PROCESS macro (Preacher, Rucker, & Hayes, 2007). Experienced incivility positively predicted work-family conflict (β = .31, p < .05). The main effect of incivility and perpetrator power on surface acting was insignificant (β = .07, p > .05; β = .13, p > .05). Incivility, however, interacted significantly with perpetrator power to predict surface acting at work (β = .17, p < .05).

There was no indirect effect of surface acting at work for the relationship between incivility and work-family conflict when perpetrators had low (95% CI [-.0923, .0096]) and moderate (95% CI [-.0085, .0059]) power. There was an indirect effect of surface acting when perpetrators had high power (indirect effect = .04, SE=.02, 95% CI [.020, .099]). Therefore, results suggest the presence of a moderated mediation (index of mediation = .02, SE=.02, 95% CI [.0007, .0633]). Analyses were conducted using 10,000 bootstrapped samples and sex was included as a covariate. Perpetrator power has differential impacts on the emotional regulation of incivility targets and is related to whether an individual will engage in surface acting, thus depleting resources and in turn, increasing work-family conflict. Therefore, context is important when examining the mechanisms by which incivility spillover into the non-work domain.

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Background: Client aggression is considered a growing stressor in several workplaces. This study aims to analyse how and why these experiences may trigger burnout. Focusing on healthcare workers, we tested a moderated mediation model of the relationship between exposure to patient verbal aggression and burnout with the goal of assessing the mediation effects of emotion work and the moderating effects of a personal resource (i.e. perceived self-efficacy in communication with patients) and some job resources (job control, role clarity, social support by colleagues and by supervisors) on this relationship.

Methods: A purposive sample of 356 nurses was recruited from four hospitals in northern Italy. A structured, self-report questionnaire was used to collect data. Mediated and moderated mediation regression models with PROCESS were used to test the hypotheses.

Results: Emotion work mediates the relationship between patient verbal aggression and nurses’ burnout. Role clarity and social support were found to reduce the harmful effects of emotion work triggered by patient aggression. The perceived self-efficacy in communication with patients does not have a buffering effect in the tested model.

Conclusion: These results offer a novel approach to design preventive actions aimed at cultivating resources against the impact of perceived exposure to client aggression on wellbeing.
Examining Workplace Bullying in Cyprus' Work Environment
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Workplace bullying has not only gained a great deal of attention in the scientific literature but also constitutes a significant issue for employees and employers. Workplace bullying has been acknowledged as a detrimental characteristic of modern workplaces which has harmful results for organisations and individuals who are being bullied (Hershcovis et al., 2015). Consequently, a significant number of studies have been undertaken in order to define the “phenomenon” of workplace bullying, to present in detail its forms and to identify the factors from which bullying at work is influenced (Moreno-Jiménez et al., 2008). It can be seen that studies examining bullying in Cyprus mainly focus on bullying in schools in Cyprus (e.g. Kaloyirou & Lindsay, 2008; Papacosta et al., 2014; Stavrinides et al., 2014; Stavrinides et al., 2010). However, research investigating workplace bullying in Cyprus’, is sporadic.

Moreover, as stated by Giorgi et al. (2011), according to the Fourth European Survey on Working Conditions, 4-5% of employees suffered from bullying in South Europe and this percentage is increasing. Thus, by exploring and measuring bullying in the Cypriot workplace, will definitely add value to the scientific literature.

Therefore, for the purpose of this research, a quantitative approach has been used to collect data by the administration of the Negative Acts Questionnaire-Revised (NAQ-R), (Einarsen et al., 2009). The researchers distributed 272 questionnaires across several companies in Cyprus (response rate = 94.10%). From the 256 participants, 56.86% were females while 43.14% were males. The participants were assured about the strict confidential treatment of their responses.

Our results show that based on the total score of the NAQ-R (operational method), only 9.77% of the participants indicated that they had not experienced bullying during the last six months. The remaining percentage, 90.23% reported that they had experienced bullying behaviours. In terms of the self-assessment technique, (where the participants were given a definition of workplace bullying and they were asked if they were victims over the last six months), most of the respondents 68.40% reported that they had not been bullied at work at all while the rest 31.60% expressed their exposure to workplace bullying.

Additionally, a Pearson correlation analysis pointed out that there was a positive significant relationship between the two examined variables (Total NAQ-R score & 23rd item “Have you been bullied at work?”) as r=0.541 and p<0.001 (based on 256 complete cases). Furthermore, it turned out that males experienced more frequently workplace bullying than females. The study showed that there was a significant difference in the scores for males (M=3.20, SD= 1.15) than for females (M= 2.76, SD= 1.21); t (253) =2.94, p=0.004.

It appeared from the present study, that the notable percentage of people who had experienced workplace bullying in Cyprus, is alarming. It is of utmost importance to realise that although workplace bullying is an interpersonal conflict, the efforts of individuals to relieve the impact of the phenomenon is insufficient. Organisations through their managers must take the responsibility and be able to apply proactive steps to prevent the phenomenon.
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Background: Work-related violence has long been seen as a major occupational safety and health (OSH) issue among workers, organisations, and policy makers. The human and organisational cost of direct and indirect (vicarious) exposure to acts or threats of work-related violence is evidenced in the extant literature. For many in the field of OSH, such economic estimates are important (and often highly cited) sources of information. Such financial estimates are commonly used to exemplify and communicate the scale and impact of disease, illness or injury; and, in turn, are often used to support the development of a business case encouraging preventative action and recursive management. However until recently, detailed evaluations of such financial estimates have seldom received attention in the broader literature within the field of OSH. With some frequently cited figures being produced without clear specification or transparency in their employed methodology. Recent empirical work has critically and systemically examined the available COI studies estimating the financial burden posed by work-related (Hassard et al., 2017) and psychosocial aggression (Hassard et al., 2017). Such reviews have yielded important insights and conclusions regarding the breadth, depth and empirical rigour of current knowledge in this field. However, to date no such work has been conducted in the area of work-related violence.

Consequently, the current study has three key objectives, to: (i) garner a macro-level understanding of nature and extent of the financial burden posed by exposure to work-related violence; (ii) gain a more in-depth and critical understanding on how and where such figures derive; and (iii) identify important gaps in knowledge, which can be used to inform a research agenda in this field. The current study aims to systematic review was to collate, review and synthesize cost estimates of work-related violence.

Method: A peer-reviewed research protocol detailing the search strategy, study selection procedures and data extraction process was developed a priori. Both the academic and grey literature was examined. To allow for basic comparison, all costs were converted and adjusted to reflect 2017 US dollars. Ten studies from two national contexts met the inclusion criteria; and were consequently reviewed: US (n=9) and the England and Wales (n=1).

Results: The annual cost of work-related violence were observed to vary substantially, between $2.3million to 1.02 billion. Considerable variations in aims, operationalized definitions of work-related violence, utilized incidence statistics and included cost components were observed across studies. In general, the majority of reviewed studies based their economic estimates on incidence statistics of direct physical acts of violence, with a limited number accounting for psychological forms of this hazard. None of the identified studies considered indirect (vicarious) forms of exposure. The majority of studies accounted for direct (i.e., medical and healthcare) costs in their economic estimates (n=8) and indirect production related loss costs (n=7); albeit only one study accounted for intangible quality of life cost components.

Conclusion: A critical reflection of the study's observed findings will be outlined, with implications to research, practice and policy discussed by the presenting author.
P17: Heuristics, Bias and Personality Traits Attribution: The Cognitive Side of Gender Career Inequalities in a Male-dominated Work Sector
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Background: We have witnessed significant work-life policy advancements designed to help men and women combine employment with career opportunities more equally, yet gender inequality persists. This is particularly evident in some industry sectors that are traditionally male-predominant. A study was thus aimed at exploring gender career opportunities using the perspective of the Implicit Personality and the social cognitive theory in a particularly male-dominated work sector: the Construction Industry (CI).

Methods: This study is based on a qualitative approach by using ethnographic observations and interviews in 10 construction sites in the West Midlands, UK in a frame-time period of 6 months. The great part of the data collection period was structured in observation ranged between 2 and 4 hr per day, 1 to 3 days per week. In each site, observations involved activities by 5 to 20 people.

Results: The research was able to clarify different aspects related with career opportunities for male and female Construction workers. While they enjoyed working in the environment, there was an obvious gender-lopsided workforce with most leadership positions being held by men while women work in mainly softer roles. These gender differences were markedly perpetuated by different social cognitive biases and implicit personality heuristics.

Conclusion: The Implicit Personality and the social cognitive paradigm represent an excellent framework to explain gender imbalance in construction. An understanding of how women view the construction workplace will contribute to attracting and retaining them in an industry that is in a constant growth but with a persistent gender imbalance.

P18: Brilliantly Resilient: The Role of Cognitive Ability in Work Stress Management
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Drawing from the transactional theory of stress (Lazarus & Folkman, 1984), we propose to examine how and why cognitive ability can be considered as a resilience trait that moderates the relationship between work stressors and job performance. Specifically, given that the stress process is essentially a series of cognitive activities, cognitive ability may not only serve as a protective factor that alleviates the negative effect of hindrance stressors over job performance, but also as a promotive factor that facilitates the positive effect of challenge stressors on job performance. In addition, we seek to introduce the concept of cognitive flexibility that further explains this moderating role of general cognitive ability. Embedded in the transactional theory of stress, two types of cognitive flexibility – appraisal and coping flexibility – both serve as proxies of the general cognitive ability and alter the work stressor-job performance relationships. Specifically, intelligent individuals are expected to be able to flexibly and accurately appraise the nature of work stressors and deploy appropriate coping strategies in order to achieve satisfactory job performance. The hypothesised relationships are integrated in a mediated moderation model.

The hypothesised model will be tested with two samples using a multi-wave and multi-source design. The first sample consists of 200 employees and their supervisors from business organisations in Mainland China. The second sample consists of 200 part-time MBA students from University of Hong Kong and their supervisors. Employees will fill out surveys at three different time points with two one-month intervals in between. (Time 1: cognitive ability and other
individual characteristics; Time 2: employee’s evaluations of work stressors, appraisals, and coping strategies; Time 3: supervisors’ rating of employees’ job performances). We will also obtain GMAT scores as an additional measure of cognitive ability for the sample of MBA students. All hypotheses will be tested using Structure Equation Modeling following the statistical recommendations for mediated moderation.

Findings of the proposed study, if supported, have important implications for staffing and training practice in organisations. From a selection point of view, managers and human resource specialists should include cognitive ability as an important criterion in screening and selecting candidates, especially for occupations or jobs in which employees are exposed to high level of work stress and resilience is highly valued. From a training perspective, the present study offers important and novel insights that can be implemented in stress management programs such as the employee assistance programs (EAP). Using the concept of appraisal and coping flexibility, trainers, or managers, can help employees understand the series of important tasks and decisions involved in the stress process, and more importantly, how to efficiently and effectively appraise and cope with stress in order to thrive under various types of work demands.

P19: Job Stress Among Humanitarian Aid Workers: Two Models Combined
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Introduction: The Job Demand-Control-Support (DCS) model (Karasek & Theorell, 1990) and the Effort-Reward Imbalance (ERI) model (Siegrist, 1996) are most frequently cited in the association between psychosocial hazards at work and the health of workers. In view of the conceptual differences between the models and ongoing debate concerning which model best accounts for health outcomes, the aim of this study was to examine both the individual and combined contribution of the models in the risk estimation of psychological distress.

Methods: The analyses were based on data collected from a cross sectional survey of humanitarian aid workers based in one international organisation in Geneva, Switzerland (N = 283, response rate = 40.4%). Standardized measures of both job stress models were related to psychological distress (GHQ-28) using logistic regression analyses. A composite score approach (additive model) was used to combine occupational variables from the models with the view that these combinations are likely to explain more variance in the outcome measure than any of the occupational variables in isolation.

Results: The results show that while both models were predictors of psychological distress, combinations of job stress models were shown to explain greater variance in psychological distress than a single model alone. Furthermore, gender specific associations were found. For females, ERI was found to have more explanatory power as a model of work stress than DCS, whereas for males, the reverse was true.

Discussion: This study conducted on humanitarian aid workers not only emphasizes the detrimental effects of the psychosocial work environment on mental health but it was the first study to demonstrate both independent and combined prediction effects of two job stress models. Comparing and combining the relative strengths of two models to predict psychological distress and thereby including a broader range of variables could improve risk estimation of stress related outcomes and provide guidance in effective intervention strategies.
P20: Disengagement Strategies at Work Might Not Always be a Bad Idea: The Role of Job Demands
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According to recent evidence, context is important when examining the usefulness of emotion regulation strategies. In fact, previous research has demonstrated that in contexts of high emotional intensity, using disengagement strategies such as distraction is considered more effective than the use of engagement strategies such as reappraisal or problem-solving. Thus far, the literature on the efficiency of disengagement strategies, a category of emotion regulation strategies which entail avoiding the experience or expression of negative emotions through attentional or behavioral mechanisms, remains elusive. The present study contributes to this line of research by examining the influence of work demands on the effectiveness of disengagement strategies, and in turn their impact on negative arousal at the end of the workday.

To examine the role of context, a social demand (i.e., social conflicts at work) and a task demand (i.e., time pressure) will be considered. Theories highlighting the regulation-situation match argue that avoidance strategies may be adaptive under certain circumstances, especially in situations with limited personal control. Therefore, we expect that when faced with social conflicts at work, employees’ use of disengagement strategies might be adaptive, and this will predict reduced negative arousal at the end of the workday. When faced with time pressure, however, use of disengagement strategies will be related to more negative arousal at the end of the workday. Moreover, previous research suggests that when it comes to interpersonal problems, older persons regulate their emotions better through the use of passive (avoidant) emotion regulation. Therefore, we predict that age will be an important moderator for the relationship between work demands, disengagement strategies, and negative arousal. We collected data from 152 full-time employees using a daily diary design with three daily measurements (morning, lunch, evening) for ten working days. Findings from this study will shed light on the potential benefit of disengagement emotion regulation strategies in the work setting, and the possible advantage that older adults may have in their choice of strategies.

P21: The Mediating Role of Wellbeing on the Relationship Between Mindfulness and Work Behaviours
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Purpose: Research has recently started to elucidate the benefits of mindfulness to important work-related outcomes as innovative behaviours, task performance or physical health. Despite the growing number of research on this theme, there is still scarce empirical evidence about it. The present study attempts to broaden the understanding of mindfulness in different contexts and behaviours, specifically its influence on two different behaviours – creative performance and procrastination. Building on the conservation of resources theory, we propose that mindfulness by opening awareness and attention in the optimisation of work experiences and personal resources, consequently, can improve wellbeing and influence behaviours, as creative performance and procrastination.

Design/Methodology: Two cross-sectional studies were carried out to test our hypotheses: The first study was a research on 261 employees from various Brazilian organisations; the second one was conducted on 1281 employees from the public and private sector in Brazil. These studies were conducted with different outcome variable – creative performance and procrastination, respectively. Data analyses were conducted using PROCESS for SPSS.
Findings: The research findings supported our hypotheses that mindfulness positively predicts creative performance and procrastination. Additionally, findings suggest that the relationship between mindfulness and these outcome variables are better explained through wellbeing. The mediation model was confirmed in both studies.

Limitations: The cross-sectional nature of the study limits the generalisation of its results. Also, self-reported data is subjected to common method biases.

Research/Practical Implications: The study fills a gap in the literature and extends previous knowledge on the relationship between mindfulness and work behaviours. Therefore, it contributes for a better understanding of the mechanisms by which it may promote positive behaviours and avoid negative ones.

Originality/Value: The research highlights the understanding of emerging literature on mindfulness by establishing personal conditions that can promote positive behaviours or inhibit negative ones. The study makes theoretical and practical contributions by describing mechanisms that stimulate creative performance and buffer procrastination.

P22: Reality Check: A Study About Occupational Stress and Quality of Working Life in a Federal Teaching Network

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This study looks at the concepts of occupational stress and the quality of working life (QWL). Occupational stress is considered an intervening factor in work relations of Higher Education professors of a federal teaching network. Absences, conflicts of power, stress in activities and work leaves are examples of the stressful factors. This leads to some questions on how these teachers who go through these factors feel. Regarding QWL, we observed how the professors understand this concept, and its content. We also analysed the relationship between occupational stress and QWL. Therefore, our main question was: How does occupational stress affect QWL, from the perspective of higher education professors of a federal teaching institution in the city of Rio de Janeiro?

Our main objective was to analyse the relationship between occupational stress and QWL in higher education professors, how they understand occupational stress and QWL, and to analyse the effects of occupational stress on QWL. The approach was exploratory and qualitative, and data were collected using semi-structured interviews. 34 professors participated in the study, who have been working for more than two years as professors in the network. The data were analysed using content analysis. The research was structured in theoretical model “Systemic Model of Quality of Life at Work” by Villas Boas and Morin (2014) and the “Model of Occupational Stress by Cooper, Cooper & Eaker (1988). In the model of Cooper et. al (1988) we confirmed the sources of pressure such as intrinsic work and interpersonal relations. In the general model of quality of working life by Villas Boas & Morin (2014, 2015) we realized the applicability of the categories of the model. The professors recognized the relation between stress and QWL and confirmed that one of the factors for the lack of QWL in the organizational environment is due to relations with the superiors, conflicts in interpersonal relations and the lack of planning and organization of work. Some cases of leave from work due to psychological diseases, transfersences to other work campuses and stress in relationships came from the lack of QWL, an increased stress level, almost causing total exhaustion. Other sources of pressure and dimensions appear, which point to the importance of further research with professors, contributing to strategies that balance the indicators which affect the professor’s health as presented and analysed in this research, in order to minimize this situation.
In the present study, we investigated the worries that employees have about potential leadership roles and how these worries relate to their error orientation. Our first aim was to identify unique and distinctive worry patterns, that is, to identify subgroups of employees who have similar worries about leadership (WAL). Our second aim was to investigate how the subgroups identified differed in error orientation on dimensions of error risk-taking and error strain. WAL is a new construct, defined as the worries people have about the possible negative consequences of assumed leadership role. Error risk-taking is associated with an achievement-oriented attitude and furthermore being willing to adjust to changing conditions at work and to take responsibility despite potential negative consequences. Error strain refers to a generalised fear of committing errors and negative emotional reactions.

Electronic questionnaire data was gathered from 1151 Finnish upper white-collar employees in March-April 2017. The sample included members of four Finnish national labour unions: The Finnish Union of University Professors (n=104), The Finnish Union of University Researchers and Teachers (n=582), The Finnish Business School Graduates (n=237) and Academic Engineers and Architects in Finland (n=228). The participants were not working in management positions. The average age of the participants was 45.5 years (range 25–72; SD = 10.9) and 56.2 % of the participants were women. Worries about leadership were measured with nine items from the WAL-scale. These items represent three core dimensions of WAL: worries about failure, worries about work-life imbalance, and worries about harm. Error orientation was measured with six items from the Error Orientation Questionnaire. These items represent two dimensions of error orientation, namely error risk-taking and error strain.

First, to identify subgroups of employees with unique and distinctive patterns of WAL, we performed latent profile analysis (LPA), which enabled us to investigate whether we can identify different combinations of the three worry dimensions, i.e. worries about failure, worries about work-life imbalance and worries about harm. Second, differences in error risk-taking and error strain between the subgroups were investigated by using ANCOVA.

Based on the LPA, five distinct patterns of WAL were identified: 1) low worries (36%), 2) failure worries (9%), 3) average worries (37%), 4) social worries (11%), and 5) high worries (7%). The ANCOVA results showed that those employees who had low worries reported less error strain and more willingness to take risks than the employees in the other worry patterns did. Employees in the groups of failure worries and high worries reported higher error strain than in the other groups. Our results suggest that employees can be categorised according to their pattern of worries concerning the negative consequences of leader position. The results further indicate that attitudes towards errors are associated with WAL.

P24: Leading to Better Care: Leadership and Interpersonal Job Performance in Long-term Care
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The service profit chain model (Heskett et al., 1994) proposed that human resource practices have the ability to affect employee attitudes and behaviors and, ultimately, improve customer outcomes and firm performance. Research has generally supported the model finding linkages between employee behavior and customer outcomes (e.g., Herington and Johnson, 2010). More
recently, Myrden and Kelloway (2016) extended this model by focusing on leaders’ transformational leadership behaviors as predictors of employee engagement. Engagement, in turn, was hypothesized to mediate the link between leaders behavior and customer outcomes (perceptions of service quality). Longitudinal diary data supported these hypotheses.

In the current study we extend the model to include the provision of care in long-term care facilities. We hypothesized that perceptions of transformational and passive leadership would predict employees love of the job which in turn predicts interpersonal job performance among caregivers. Love of the job (Inness et al., 2017) comprises passion for the work, affective commitment to the organization and positive relations with coworkers (see also Kelloway et al., 2015). Interpersonal job performance (Stewart & Barling, 1994) focuses on the interpersonal relationship between caregiver and resident rather than the technical aspects of caregiving. Taking time to explain procedures, calling residents by name and spending extra time with residents who are upset or confused are all aspects of interpersonal job performance.

Our model is tested using data from 850 caregivers employed in 65 long term care facilities in eastern Canada. Multi-level structural equation modeling confirmed our hypotheses showing that transformational but not passive leadership predicted love of the job (b = .48, p < .01). In turn love of the job predicted interpersonal job performance (b = .37, p < .01). As hypothesized, these relationships existed at the within-group (i.e., individual) level controlling for between group effects to avoid conflation. None of the between group (i.e., facility) level effects were significant.

The results of the current study extend previous research in suggesting that the way in which leaders interact with employees influences the quality of care given to residents in long term care facilities. Implications for research and practice are discussed.

**P25: Board of Directors’ Influence on Occupational Health and Safety: Scoping the Literature in Quest of Best Practice and Evidence**

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**Background:** The board of directors is a strategic leadership function responsible for company governance, i.e. the system by which the organisation is directed and controlled. As such, the board is fundamentally responsible for the long-term value creation of the company and has a substantial influence over a range of organisational processes and outcomes. Given the role of the Board of Directors, they can be expected to influence occupational health and safety (OHS). Yet, there is no overview summarising the role the board plays. The aim of this study was to scope the literature on the role the Board of Director’s play for OHS in privately held companies.

**Method:** A scoping review protocol was used to collect recommendations and empirical studies describing influence of Board of Directors on occupational health and safety in privately held companies. The search period was set from inception of the respective databases to the date of search (i.e. 18th May 2017). A structured search was performed in MEDLINE (Pubmed), EMBASE, PsycInfo, Sociological s, CINAHL. Grey literature searches, reference- and citation tracking was used.

**Results:** 49 studies were included in the final selection. Literature was highly diverse in research tradition and nomenclature. About half the sources were peer-reviewed (n=26, 53%) and most of the sources focused on both health and safety (n=20, 41%) or safety only (n=15, 31%). The majority of the sources contained empirical data (n=28, 57%), some were entirely normative
(n=16, 33%), and a few contained normative claims far beyond the included empirical data (n=5, 10%). The findings are unison in the importance of the role of the board for OHS, but there is scarce empirical literature to support such claims.

**Discussion:** The Board of Directors has a broad potential to influence OHS of companies. The normative literature suggests board activities based on OHS and corporate governance regulation. However, the empirical support is incomplete and the understanding of how Board of Directors actually act, why they act as they do as well as how, and through what mechanisms, the board influences OHS outcomes is limited. Further, context dependent mechanisms could hinder one set of ‘best practice’ applicable to all companies. For instance, suggested board activities for safety are not necessarily applicable for psychosocial health issues. The findings suggest that there is a need for empirical research that looks deeper into the mechanisms and context related factors that can describe how and why boards influence OSH outcomes.

**P26: The Good, the Bad and the Ugly: Leadership and Safety Behaviors**
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There is growing evidence that leadership exerts a pervasive effect on occupational safety (for a review see Wong, Kelloway & Makhan, 2017). Much of the extant literature has focused on transformational leadership behaviors (e.g., Barling, Loughlin & Kelloway, 2002). Kelloway et al. (2011) argued that leaders could be both passive and transformational, and showed that passive leadership moderated the relationship between transformational leadership and safety attitudes and behaviour, such that the effect of transformational leadership on safety was weakened by passive leadership. In the current study, we extend this finding. First, we focus on a larger range of leadership behaviors including transformational and passive leadership as well as abusive supervision as predictors. Second, we expand the outcomes under consideration, predicting both safety behaviors (i.e., safety compliance and safety initiative) as well as enacted aggression and violence.

Using data from a representative sample of approximately 600 (due to missing data, Ns varied from 527 to 603 across analyses) employees, we test the proposed relationships using moderated regression analyses. All analyses controlled for gender, age, years of education, union status and whether or not participants held a management position.

Both safety compliance and safety initiative were predicted by transformational leadership (b’s = .30 and .16 respectively) and the interaction of passive and transformational leadership (b’s = -.16 and -.12). Safety compliance was also predicted by the three-way interaction of transformational, abusive and passive leadership (b = .26). Both enacted aggression and enacted violence were predicted by passive leadership (b’s = .05 and .01 respectively) and the interaction of passive and abusive leadership (b’s = .08 and .05). Enacted aggression was also predicted by abusive leadership (b = .10) and enacted violence was predicted by the three-way interaction of passive, abusive and transformational leadership (b = .03). Each significant interaction was further decomposed by the calculation of simple slopes.

Results of this study extend previous analyses suggesting that leaders can display multiple behaviors including positive (transformational), negative (passive) and abusive leadership behaviors. Moreover, these leadership styles interact to predict safety and violence-related behaviors suggesting the value of leaders’ consistency in promoting workplace safety. Implications for research and leadership development are discussed.
P27: Contributing to Human Factors Investigation in Work Accidents Using a Psychosocial Risk Assessment Approach
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Introduction: An energy company implemented a two-wave preliminary study in 9 gas stations that were undergoing intense operational restructuring inspired in lean management. Our applied research aimed to implement a psychosocial risk assessment in order to try to explain possible human factors in work accidents when comparing employees from gas stations with higher and lower accidents.

Design/Methodology: The first wave was collected in March 2016, with a total of 169 participants and the second wave was collected in November 2017 with a total of 91 respondents. The sample consisted of employees from 9 gas stations in the Lisbon Region and was divided into 2 different clusters considering the frequency of work accidents that occurred in the last 3 years.

A psychosocial risk analysis was performed using different translated and validated items that measure: Job Demands (Karasek et al., 1998) Emotional Demands (Zapf, Vogt, Seifert, Mertini & Isic, 1999), Emotional Exhaustion, Self-Efficacy (Schaufeli, Maslach & Jackson, 1996) Engagement (Shaufeli, Salanova, Gonzalez-Roma & Baker, 2002), several Organisational and Work-Life dimensions (Kristensen et al., 2000) and Coping Styles (Carver et al., 1989). Contextual interviews were also performed with each Gas Station manager to clarify their perceptions of work-related stress, safety incidents and wellbeing in their teams.

Results: In the first moment, results showed no significant differences between the 2 groups. Nonetheless, workers’ perceptions, from gas stations with higher accident rates, seemed higher for Job and Emotional Demands, and lower in Autonomy, Engagement and Management Efficacy. In the second moment, significant differences in perceptions occurred concerning Emotional Demands, Workload and the higher use of Spiritual and Emotional Expression coping strategies. The results also showed a significant increase between the two moments for the total sample concerning: Workload, Emotional Exhaustion, Undesirable Behaviors, Passive Coping Strategies and Substance Consumption.

Limitations: The sample was not randomised and the company proposed the specific clusters used in the analysis, limitations when generalising the results, even within the company, must be considered.

Implications: After this first preliminary study, a secondary intervention was designed and implemented in December 2017 addressing the higher risk dimensions identified earlier. An impact study will be performed in the near future.

Originality/Value: This applied research project considered an integrative approach when investigating human factors in accidents and psychosocial risk analysis, making possible collaboration between Safety and HR Wellbeing assessments and practices that seem to remain disconnected areas of intervention and management in organisations.

P28: Identifying Frontline Sales and Sales Management Potential and Capability
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It is important for organisations to understand their workforce capability in order to prepare for future work demands. Therefore, an organisation based in the Arabian Gulf sought to understand and develop the national workforce capability of a customer facing department (N=148) at all levels (e.g. managers, specialists and agents) and be able to support them with any development
outcomes. The assessments spanned over a period of 5 months. The individuals were assessed against the behavioural competencies of the organisation. As part of the assessment process, standardized and bespoke assessments were administered. Individuals were assessed against behavioural competencies. Various gaps in competencies were identified for the different levels and common themes emerge. As a result of the overall exercise, training programmes were put in place for all the individuals in order to enhance their skills. In conclusion, the organisation was able to understand the capability of its workforce in a specific area of the business, and be able to put forward a more structured development programme which enabled individuals in being able to excel in their respective roles, and be better prepared for future opportunities.

P29: The Future of Work: Opportunities and Challenges for the Nordic models
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In this projected literature study, we aim to gather knowledge on the consequences and challenges of the changing work environment facing the Nordic countries, now and in the future. For example, there have been major industry shifts in recent years; moving away from oil-based industries being the most apparent. In addition, many industries are facing downsizing, automatisation, and digitalisation challenges. Furthermore, new ways of working are being adopted rapidly and across many fields of industry. Self-employment, independent work, and all sorts of flexible work contracts increasingly shape the modern workforce. All these changed in the current work environment may result in unforeseen challenges, leading to unpredictability, which may have detrimental effects on workers, including effects on motivation, physical- and mental wellbeing, and sickness absence. Since work factors affect employee health and wellbeing, it is important to identify changes in the working environment, as to be able to develop timely interventions and protect the workforce’s wellbeing.

P30: Development of a Scale to Measure Psychosocial Risk Factors for the Mexican Population.
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Objective: The objective of this work was to develop a scale to measure psychosocial risk factors for the Mexican population.

Introduction: The importance of psychosocial factors and especially psychosocial risk factors is in the impact they have on the health of workers (Sauter, Murphy and Hurrell, 1990). The psychosocial factors of risk or stress are the psychosocial and organisational factors that produce responses of maladjustment, tension and psychophysiological responses. That is, they are factors that negatively affect the health and wellbeing of the worker and trigger stress and work stress (Benavides, Gimeno, Benach, Martinez, Jarque & Berra, 2002, Peiró, 1993). In this group of factors are, for example, the content of the work, the overload and rhythm of work, the work schedule, the control over the work, the work environment, the organisational culture, the interpersonal relationships, the role, the development of the work career, the work-family relationship, the contractual security, among others (Cox and Friffith, 1996).

For the evaluation of psychosocial risk factors there are measurement instruments among which multiple scales stand out. Charria, Sarasosa and Arenas (2011) carried out an extensive analysis of instruments to measure psychosocial risk factors, highlighting the Job Content Questionnaire from the USA, the Effort Reward Imbalance Questionnaire from Germany, the Psychosocial Factors Evaluation Method FPSICO from Spain, the Copenhagen Psychosocial Questionnaire
Method: The scale was constructed to measure psychosocial risk factors based on the CoPsoQ and Istas 21. The methodology used consisted of the following stages: review of the literature, application of natural semantic networks for identification of psychological meanings, construction of the items, validity interjueces and pilot of the scale. The statistical analyses carried out were: analysis of items discrimination, factorial validity and reliability.

Results: The scale is composed of 20 factors. The factors are integrated into 5 groups: a) Psychological demands at work (F1, Quantitative psychological demands, F2, Cognitive psychological demands, F3, Emotional psychological demands, F4, Demands of hiding emotions, F5, Sensory demands), b) Control on work (F6, working time, F7, influence on work, F8, possibility of development, F9, variety of work, F10, meaning of work, F11, control over working time), c) Social support and quality of leadership (F12, role clarity, F13, role conflict, F14, leadership quality, F15, social support from superiors, F16, social support from peers, F17, group feeling), d) work compensation (F18, Job insecurity, F19, Recognition) and e) Work-family conflict (F20, Double presence).


P31: Is Mindfulness a Noticeable Quality? Development and Validation of the Observed Mindfulness Measure
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Background: Intervention research indicates mindfulness training (MT) is promising for reducing stress and related problems in working adults. This evidence is heavily dependent upon self-report data, and this is an acknowledged limitation for research in the field. Further, qualitative research indicates MT may have external benefits relevant to work, such as improved leadership and team dynamics. Evidence of such external effects requires that an individual’s mindfulness can be shown to have an impact on others. There is currently no quantitative measure for assessing such external effects. We seek to develop the Observed Mindfulness Measure (OMM) to validate self-reported results, and provide evidence for external effects of training. We define observed mindfulness as the noticeable tendency of another person to be mindful: attentive to and aware of current experience, and displaying an attitude of curiosity, openness and acceptance.

Method: The OMM study follows a three-phase approach informed by De Vellis’ guidelines for psychometric scale development. (1) The items from five previously validated self-report mindfulness scales were pooled and re-worded for observer-report and reviewed by an international panel of mindfulness experts (n=5). (2) Two independent samples are being recruited to statistically test item performance and scale characteristics. Sample A (n=332) is a community sample of individuals used to assess usability, interpretability, dimensionality and internal consistency. Sample B (target n=90 participant-observer pairs) will be used to confirm factor structure and test construct validity, where participant measures of mindfulness, reactivity, regulation, resilience and avoidance will be correlated with observer responses to the OMM. (3)
Temporal stability, sensitivity to change, consistency and predictive utility will be assessed using pre-post measures of mindfulness, stress, quality of life and organizational citizenship from a convenience sample of participant-observer pairs (Sample C, n=91) currently enrolled in a MT trial.

Results: Phase 1: Of 51 items reviewed by the panel, 30 were retained for testing in Sample A. Phase 2: One item was dropped based on usability feedback. Principle component and exploratory factor analyses on the remaining 29 items revealed a common latent variable with three discriminant factors. Following oblique rotation, 18 items were retained after meeting factor loading (>0.5) and discriminant cut points (>0.3). In Sample A the 18-item OMM showed a high degree of internal consistency (α = 0.89, λ-6 = 0.92), and the factor meanings aligned with key mindfulness construct terms: Awareness (n items = 8, α = 0.88, λ-6 = 0.89), Acceptance (n items = 6, α = 0.82, λ-6 = 0.84) and Attentiveness (n items = 4, α = 0.76, λ-6 = 0.74). Sample B is currently being recruited to complete Phase 2. Phase 3: Sample C has provided baseline data. Analyses will be conducted after post-intervention collection in May 2018.

Discussion: Results of all analyses and OMM properties will be presented, and the potential of this measure to support MT research and detect external effects discussed.

P32: Assessing Eustress: A Comprehensive Questionnaire
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Stress is a well-known concept that has been extensively researched in the psychological sciences. However, the idea of stress as a positive experience remains fairly new. Eustress, or “good” stress, was originally presented by Selye (1974) and was further addressed through the development and integration of Transactional Stress Theory (Lazarus, 1986). Eustress is not determined by the stressor type, but rather the cognitive appraisal of the stressor. Rather than view potential stressors as threats, eustress arises through the initial appraisal of demands as challenges and through the appraisal of the cognitive resources available to successfully complete such challenges. The response of this appraisal process is a heightened positive emotional response. Despite initial definitions of the construct, a complete and accurate assessment of eustress has still not come to fruition. Current eustress scales assess only certain aspects of this appraisal process by either inferring the assessment of the construct based on the initial primary appraisal of a stressor as a challenge (McGowan et al., 2006), or by questioning the secondary appraisal aspect of cognitive coping ability through cognitive resources such as affect, meaningfulness, and manageability. These measures are further confused with the concept of flow, which may also be considered the possible epidemic of eustress (Hargrove et al., 2013), however, this has yet to be scientifically tested. The current study has been designed to formally assess all of the possible aspects of eustress as defined in the literature in order to provide a complete and comprehensive survey for researchers to implement in their research. In the current investigation we provide three studies, each of which aid in identifying and validating the theoretical identification of eustress. Study one challenges the current popular assessment of eustress by providing evidence that the construct consists of more than simply the view of a stressor as a challenge. Study two supports the argument that eustress is not only positive cognitive appraisal but is also the resulting positive emotional response that is felt during the interaction with a stressor. Finally, study three includes the additional assessment of flow, which is a state of absorption and productivity. The current studies include grounded theoretical support for item generation, analytical confirmation through exploratory and confirmatory factor analyses, and evidence of test-retest reliability. Through these studies, we provide evidence that eustress acts as a positive emotional response as a result of optimistic cognitive appraisal processes. Temporally, eustress is likely to occur when distress normally would transpire should the
appraisal be negative. Despite previous arguments that flow is the height of eustress, based on multidimensional scaling, we argue that eustress may act as an antecedent to flow. Rather than flow acting as the pinnacle of eustress, it appears to be a separate state of focus and attention, whereas eustress is the positive emotional and physiological response to ideal stress. A deeper understanding of eustress is supported through our efforts, and a robust assessment is provided. Future researchers may use the resulting validated questionnaire for accurate and reliable measurement of psychological eustress.

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Society is continually changing - globally and locally. Globalisation and communication technology has forced many companies to become flexible and dynamic in order to maintain competitive advantages. Consequently, the experience of work is changing in several ways. Some important drivers of change in the way work is perceived and executed are:

*Globalisation and service sector growth*, intensifying competition and economic pressures, leading to more restructuring, downsizing, temporary and precarious work, and consequently attenuated job security. Fluctuations in the global economy affects many employees.

*The nature of work changes with technological innovation.* For instance, the automation and digitalisation of many processes previously considered too complex for machines to carry out may imply that the role of the human employee shifts towards carrying out more "human" tasks. Among the consequences of this may be an increasing complexity of tasks, requiring life-long learning and continuous education. The fact that work tasks are becoming less tangible and can be carried out more independently of time and location ("new ways of working") may provide flexibility and freedom, but may also interfere with personal life. In addition, the increased relevance of human interaction may increase the likelihood of specific problems related to social interaction, such as conflicts and bullying.

*An ageing population* poses challenges in terms of the organisation of work. Employers must aspire to create working conditions that promote productivity across age groups and face possible challenges associated with generational differences.

Based on these and other relevant drivers of change new psychological work factors may arise and already known factors (e.g. job insecurity) may increase in prevalence and/or take new forms. Hence, an "emerging occupational safety and health risk" may be seen as any occupational risk considered new (previously unknown and caused by novel processes) and/or increasing. More generally, "new" psychological work factors may arise from societal changes, and may represent both risks and growth opportunities for companies and employees.

To investigate consequences (on health/wellbeing, motivation, productivity etc.) of a changing work life questionnaires measuring psychological work factors believed to be particularly relevant is needed. The National Institute of Occupational Health (STAMI), Norway is currently working on developing questionnaire items/scales for assessment of novel and/or increasing aspects of work to be used both in academic work and by practitioners aiming to improve working conditions in organisations. Items/scales will be developed/collection through two phases:
Phase 1 is “explorative” with an aim of establishing an overview on “new” and/or increasing psychological work factors. In this process we will collect already existing scales/items. If possible (depending on the projects funding), interviews with a strategic sample of employees in organisations/sectors undergoing change will be conducted. Phase 2 will include formulation of questionnaire items based on needs and potential limitations identified in phase 1. Psychometric testing will be conducted as well as translation to relevant languages (e.g. English, German, Polish). Results of phase 1 and possibly phase 2 (depending on progression of the project) will be presented at the conference.

P34: Psychosocial Risk and Health Profile Groups Among Early Career Psychologists and Social Workers
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Stress-related sick-leave higher than 14 days is more common amongst psychologists, social workers and related professions than the general working population in Sweden. Women in these professions have the highest prevalence, 18.3/1000 compared to the 10/1000 norm for women, while their male colleagues have a 7.7/1000 prevalence compared to 3.1/1000 among men in general. Previous research amongst teachers and nurses indicates that the time in higher education (HE), as well as the transition from HE to work-life, influences long-term work-related health. So the question arises – are there context related profiles among newly graduated psychologists and social workers that could constitute risk or health groups?

A postal survey was sent to 5213 psychologists and social workers in Sweden who had graduated within three years of the spring of 2017 (respondents=2514, non-target group=103, response-rate 49%). Cases where the graduate had not entered a profession in line with his/her HE degree, and where data was missing on crucial variables or indexes were excluded, leaving 1742 women, 331 men and 14 of other gender-identity/unknown (n=2091). Of these, 1248 were social workers and 843 certified psychologists or psychologists in-training. The survey consisted of constructs from the Copenhagen Psychosocial Questionnaire (COPSOQII) – for example, organizational justice, social support, role clarity/conflict, emotional demands and influence. Work-related psychological flexibility was measured with the Work-related Acceptance and Action Questionnaire (WAAQ). Two five item indexes of how the transitions (HE to work-life, psychologist in-training to certified) were perceived were constructed for the purpose of this research. The survey also included the General Health Questionnaire (GHQ), the Shirom Melamed Burnout Measure (SMBM) and the Satisfaction With Life Scale (SWLS).

A hierarchical cluster analysis was performed using the SLEIPNER free ware on three contextual variables that correlated ≥0.30 with the health and wellbeing outcomes, while not showing signs of collinearity: perceived influence (range 1-5), professional isolation (range 1-5) and most recent transition (range 1-6). In conducting the analysis with Ward's minimum variance method a solution was sought with minimal intra-cluster and maximal inter-cluster variance, which proved to be an 8 cluster solution. Further ANOVAs (\(p \leq 0.001, d \geq 0.80\)) and Chi\(^2\) tests revealed that Cluster 1 (n=235; high influence, good transition, very low professional isolation) consists of professionals who rate the highest or second to highest on almost all of the personal and contextual resources, the lowest on almost all demands and rate their health the best of the total sample. Psychologists – both certified and in training – are overrepresented in Cluster 1. In comparison Cluster 8 (n=152; low influence, satisfaction with transition below the scale mean professional isolation above the scale mean) constitutes the complete opposite, including that social workers are over-represented. Cluster 8 is the only cluster in which the individuals score professional isolation higher than influence and perception of the transition. Differences in ratings of emotional demands or life satisfaction were not significant. Implications of these findings for our understanding of the statistics on sick-leave in these professions will be discussed.
P35: Occupational Stressors and Barriers to Help-seeking for Mental Health in Japanese Young Hospital Doctors: An Exploratory Study
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Background: Working Time Directive for doctors was not strictly established in Japanese hospitals for a long-time. In March 2017, the action plan for the realisation of work style reform led by Japanese Ministry of Health, Labour and Welfare, announced that they will apply the overtime management strategies within the next 5 years to all the physicians. Additionally, this action plan emphasises on the importance of the intensive effort concerning mental health care for physicians. According to the Japanese Medical Association, Japanese physicians’ work-related stress has been recognised as a one of the factor for current health care system problems in Japan, such as shortage of physicians. However, effective interventions have not been still taken and remain to be studied, particularly from the perspective of psychological supports. For next few years, an installation of health support service system specialized for doctors, such as American Physician Health Programs, UK's NHS Practitioner Health Programme, is strongly recommended in Japan.

Objectives: The main aim of this study is to explore what kind of research will be needed for developing the suitable health intervention for Japanese younger hospital doctors, who are in different situations such as medical education, health care system, working-hour regulation and also different culture compared with western physicians. To reach this main target, we qualitatively investigate what their stressors are, what their barriers to help-seeking for mental health are in Japan.

Methods: A qualitative methodology was mainly used with semi-structured interview with 16 young doctors (mean age=33.9±4.2; internal medicine=7, surgery=9; male=11, female=5) who work in hospitals situated in Tokyo Metropolitan area. All qualitative analysis was applied by Grounded Theory Approach. Quantitative questionnaires (GHQ-28, TIPI-J) were also collected for supplementary analysis of qualitative data. In order to compare results of Japanese physicians’ stressors and barriers to help-seeking with those of Western physicians, we conducted narrative literature review of Western article published in English or French from August 1972 to July 2017.

Results: Japanese physicians have a lot of stressors in common with those of Western physicians; "workload", "lack of personal life", "medical litigation", etc. In contrast, we found some unique stressors mainly based on inefficient work derived from Japanese hospital's customs; "inadequate division of labor", "different contents of doctors’ work for each hospital", etc. Additionally, there was some different tendency of stressors between participants depending on GHQ level and personality traits; e.g., only doctors with GHQ total score over a cut-off value reported "high expectation of patients" as stressors. Concerning barriers to help-seeking for mental health, "fear of jeopardising status", "social stigma", "role-conflict" and other some categories were the same as those of Western physicians. However, "low expectations for psychological intervention by psychologists" was extracted only in Japanese doctors.

Conclusions: This study indicates that most of the key components in Western physician health programs might be useful for Japanese doctors. In addition, due to the difference of medical system and culture, further efforts are needed to elaborate tailored interventions for stressors and barriers to help-seeking of Japanese doctors.
P36: Preferred Design Features and the Barriers to Use an E-Mental Health Program in High-Risk Working Men

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Objectives: Depression is prevalent in working men and has a huge impact on men’s health and productivity. E-mental health is a low cost and innovative approach for treatment and early prevention of depression. However, many men are reluctant to use web-based mental health program, even they are at high risk of having major depression. The objectives of this study were to understand, among working men who are at high risk of having major depression: 1) preferred design features of e-mental health program, 2) barriers and facilitators for using an e-mental health program.

Methods: A national survey was conducted in 510 high risk working men on preferred design features of e-mental health programs. An e-mental health program was developed based on men’s preferences and has been evaluated in an ongoing national randomised controlled trial (RCT) (BroMatters). The RCT was to evaluate the effectiveness of an e-mental health program and telephone-based job coaching on reducing the risk of major depression in Canadian working men. Over 1100 working men who were at high risk of having major depression were randomised into control group, e-mental health program and e-mental health program + job coaching. Participants in the two intervention groups who did not use the program and who used only once (n = 40) were interviewed regarding the barriers and facilitators to the program utilisation.

Results: Of the 17 different features assessed, the top three features that were most likely to be used by high risk men were: “information about improving sleep hygiene” (61.3%), “practice and exercise to help reduce symptoms of stress and depression” (59.5%) and “having access to quality information and resources about work stress issues” (57.8%). Participants reported a number of reasons why the program/service was not used, or used only once. The following themes were found from the interviews: lack of motivation, accessibility, attitudes, prioritisation and stigma. May reported no need for external help and preferred self-management, no time to use the online program, dealing with stress is not a priority, disbelief in the notion of prevention, and concerns about stigma. Strategies for motivating program use and prevention of depression were discussed.

Conclusions: E-mental health programs may be a promising strategy for prevention of depression in working men. Although e-mental health programs have gained increased attention for treatment and prevention of mental health problems, implementing such programs in working men is challenging. Research is needed to investigate how to enhance the uptake of e/m-mental health programs in high-risk working men and to make the program effective, acceptable and sustainable. Furthermore, research is needed to identify novel strategies in consideration of male gender role for the purpose of preventing mental health problems in the male population.

P37: Health Related Aspects In Police Work

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Aim: The aim of this study was to determine the health condition (emotional wellbeing and chronic diseases) as well as circumstances related to relaxation (factors that hinder relaxation as well as proposals to improve the opportunities to relax) of officers in Estonian Police and Border Guard that conduct fieldwork.
**Methodology:** For data collection, an electronic questionnaire was used. The emotional wellbeing (depression and anxiety) of police officers was measured using an Emotional State Questionnaire (EST-Q). The survey was voluntary and guaranteed the anonymity of respondents. Participants had approximately one month (13.02.2017 - 17.03.2017) to respond.

**Results:** Overall, 320 out of 3,200 officers filled in the questionnaire, representing 10% of the study population. A more frequent occurrence of symptoms indicating depression - as compared to the study population - highlights the intense work of police officers. EST-Q revealed the following results: 25.3% of the officers suffer from asthenia, 24.4% from sleep disorders, 13.4% from depression, 7.8% from anxiety, and 0.6% from symptoms indicative of a panic disorder. Prior to their employment, the most common diagnoses were allergies (5.9%) and over the duration of their employment, most accrued diseases were cardiovascular diseases (15.9%). The diseases diagnosed during their employment at the Estonian Police and Border Guard are analogous to the ones described in the rest of the world (cardiovascular, skeletal and muscle system, psychiatric diseases, tumours, injuries and sleep disorders), manifesting more among long-serving police officers. More than a tenth of the police officers (14.1%) do not know how to relax. According to police officers’ own assessment, a lack of money is the main obstacle preventing relaxation (58.4%) and a higher income would help improve opportunities to relax (24%).

**Conclusion:** Police officers’ stressful work and lack of finances for relaxation have a strong influence on officers’ (mental) health.

**P38: Occupational Stress among Project Managers: A Narrative Review**

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Mental health, or occupational mental health problems, constitute an increasing proportion of reported and evaluated occupational health and safety pathologies. WHO has address this problem as the 21st century epidemic, affecting workers from all continents. Occupational stress and, in particular, its negative individual and organizational consequences are of concern to researchers and practitioners in organisational and human resources management. Undergoing efforts are deployed to identify factors and propose solutions to prevent and manage intervention in order to better support workers who are subject to or who are struggling with this problem.

The lack of consensus among the scientific community on a definition of stress has contributed to the development of several theories and models. However, most models posit as an underlying assumption that occupational stress is influenced by job-related demands. To these demands are added other dimensions such as the level of autonomy and available resources. Hence, occupational stress has been investigated in several job categories such as peace officer, firefighter, nurse, physician, teacher, and manager. Although, to our knowledge, there is a dearth of research in the project management profession and the field of enquiries seems limited to construction, and to a lesser extent, technology. However, many determinants of stress identified in other professions appear to us as intuitively present, if not exacerbated, in the particular contexts in which project managers evolve.

The multidimensional environment, complexity, size, constraints, performance criteria, diversity of team members and temporary nature of these, are, just to name a few, particular and distinctive factors that make the study of stress among project managers relevant in many ways. Public and private organizations are increasingly turning to this way of organizing work to achieve their business strategies with greater efficiency. To our knowledge, no narrative review exposes a clear view of what we know pertaining to the stress among project managers in the various sectors of industry at the regional, even continental or global scale.
The objective of this review is threefold. First, to review the most commonly used theories of stress, and then specifically target those relevant to the employment conditions of the project managers. Second, to classify determinants of occupational stress as well as the outputs at different levels (individual, group, organization). Finally, to present a comparative descriptive analysis of empirical evidence related to occupational stress among project managers to ascertain which factors influence their stress level and ultimately its consequences. As a result of this review, we aim to propose a research agenda filling the gap in the existing models to prevent and mitigate stress among project managers.

P39: Psychosocial Symptoms in Nursing Staff in Guadalajara, Mexico
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Introduction: The manifestation of interpersonal problems, sleep alterations, symptoms of anxiety or depression are disturbances commonly found in health professionals. This study aimed to compare the symptoms of nursing staff in a general public hospital and nurses working in the manufacturing industry, both located in the Metropolitan Area of Guadalajara, Mexico. Surveyed during 2015.

Material and Method: Study with two independent samples, which were homogeneous in age, gender, marital status and hours / weeks worked. The discriminating variable was working hours: G1 = with rotation (hospital nurses) and G2 = fixed shift (industry nurses). The Goldberg GHQ-28 was answered under informed consent, including workers with a current employment contract and no disability record due to mental illness.

Results: 45 nurses participated in each group. 60% were women and 40% were married. Using Student's t-test, significant differences were found in: sleep alterations \( t = 2.44, p = 0.017; 95\% \text{ CI: 0.37 to 3.65} \), interpersonal problems \( t = -5.75, p = 0.000; 95\% \text{ CI: -4.74 to -2.30} \), and anxiety-depression \( t = -7.98, p = 0.000; 95\% \text{ CI: 2.7 to 4.58} \). We observed more affection in G2, finding that: 97% (45) of the G2 and 60% (28) of the G1 had symptoms for sleep disturbances; 95% (44) of G2 and 19% (9) of G1 manifested symptoms of anxiety-depression; and 97% (45) in both groups expressed interpersonal problems. No significant differences were found for the presence of somatic symptoms between groups, both reported having headaches and fatigue mainly.

Conclusion: This study suggests that nurses working in industry show more sleep symptoms compared to those performing in a hospital environment, despite not having a rotating work shift. However, in both groups, we observed interpersonal problems and anxiety-depression symptomatology, highlight the importance to intervene in the work context in order to prevent psychosocial alterations.

P40: Exploring the Association Between Shiftwork and Affective Disorders: A Systematic Review of the Impacts of the 24/7 Society
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The continuous availability of services is associated with the concept of a “24-hour society” where goods and services can be purchased and delivered on a 24/7 basis. The 24-hour society depends on an increased diversification of working time patterns with shiftwork being one of the most well-known approaches. Despite the consensus on the adverse physical health consequences associated with shift work, research has yet to summarise the psychological
consequences and long term mental health consequences of chronic exposure to shift work. The purpose of the study was to conduct a systematic review of the existing literature that explore the associations between shiftwork and affective disorders.

A literature review was conducted using the electronic databases Medline and PsycINFO and a set of inclusion and exclusion criteria were put in place. As inclusion criteria the review included full time work only and excluded part-time working positions, flexi work and work that takes place at home. In regards to the affective disorders, studies were included if they studied shiftwork and affective disorders i.e. depression, anxiety and bipolar disorder as well as depressive symptoms, such as depressive mood and negative mood. At the first level of review, studies were selected based on the title and , followed by a second level of review, which involved full text screening. Data extracted from the studies, such as affective disorder measured, definition of shift work and results were summarised and used to determine if an association exists between shiftwork and affective disorders. A total of 23 articles were extracted for the review.

A first conclusion of the review is the lack of consensus regarding shiftwork characteristics that should be studied (i.e., type of shift, shift length, shift rotation, shift direction) and the tools used to measure the presence of affective disorders varied greatly. After reviewing the 23 articles, four found no association between shiftwork and depression, six found an increase in depression and anxiety among shift workers, two found an association between shift work and anxiety, ten found an increase in depressive symptoms among shift workers and one article associated shift work with bipolar disorder.

Findings suggest that an association exists between shiftwork and affective disorders with most studies highlighting depression and anxiety. Future research should focus on establishing a consensus on the relevant characteristics of shiftwork as well as the level of analysis regarding affective disorders, i.e., symptoms versus clinical diagnosis. Finally, a better understanding of the psychophysiological mechanisms linking shiftwork to affective disorders, such as sleep, is also necessary.

P41: Monitoring of Common Mental Disorders in Nursing Workers in an Emergency Care Unit of a Public Hospital
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Introduction: In Brazil, the actual context of work process of nursing workers characterised by poor conditions in the public health system has caused concern to professionals and managers because the quality and the patient safety. Overwork, the insufficient human/material resources, and the complicacy and critical situation of patients, represent factors that contribute to the sickness of nursing workers who work in the emergency care unit. Considering that nursing workers are exposed to psychic workloads, which determine the strain processes and their monitoring is still flawed, this research was proposed, with a view to the early detection of these diseases and possibly the development of strategies that minimize the illness.

Objective: Identify the presence of common mental disorders (CMD) in nursing work of emergency care unit in the University Hospital of University of São Paulo (HU-USP).

Methods: This is a quantitative research, among 62 nursing workers at Emergency care unit in the University Hospital of the University of São Paulo. The data was collected by Self-Reporting Questionnaire (SRQ-20), after the acceptance of the Research Ethics Committees of EEUSP and HU-USP. The research identified the prevalence of CMD in 45.16% of nursing workers. The prevalence found was higher than that observed in other studies with nursing workers. The study identified that depressive episodes and decrease vital energy are the most prevalent symptom
of symptom groups among nursing workers of this unit. The highest incidence was between the female sex, in the age group of 20 to 39 years and greater than 60 years, they were single and nurses.

Conclusions: The research identified the prevalence of CMD in 45.16% of nursing workers, between 20 to 29 years and the prevalence of depressive episodes and decrease vital energy among nursing workers of emergency care unit. The monitoring of CMD psychic in nursing workers evidenced the need for local interventions for workers with a view to improving the quality of life and work.

P42: The Impact of Worksite Mental Health Interventions on Work-related Outcomes: A Systematic Review
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Objectives: The prevalence of mental health problems in the workplace is an emerging concern. Mental health problems can affect the employees’ work ability leading to sickness absence and productivity loss. Population targeted interventions have effectively been used in the prevention or treatment of mental health problems. However, in the context of the workplace, results of the effectiveness of mental health interventions have been inconclusive. This is likely due to the complex nature of the work environment and the interlinked system of factors impacting worker health and wellbeing. The aim of this study is to describe workplace mental health programmes and assess the impact on work-related outcomes, such as productivity, absenteeism, presenteeism, work performance and work ability, and review the methods used to estimate outcomes changes. The findings of this study will provide guidance to policy makers in the review and revision of workplace mental health policies and programs.

Methods: A comprehensive literature search (2005-2016) in Embase, Medline (Ovid), Cochrane Library and Scopus was conducted. Additional studies were identified from reference lists from all the (systematic) reviews with resembling objective as in this search and were included if they fulfilled our inclusion criteria. Two or more researchers independently screened s and full-texts for study eligibility and evaluated the quality of included studies. Disagreements were resolved by a consensus procedure.

Results: Emerging findings from the narrative synthesis will be presented. This will include a description of existing workplace mental health programs, populations who received intervention, and evidence of effectiveness, as well as a wide diversity regarding the measurement and valuation of work-related outcomes.

Conclusions: The results are anticipated to reveal potential lack of knowledge regarding the impact of interventions on work-related outcomes, highlighting the need for better evaluations of workplace mental health interventions. Economic evaluation studies of occupational health and safety would benefit from more methodological standardisation in their approach to quantifying productivity change.

P43: Mental Health Problems at Workplaces - Attitudes Towards Employees with Mental Health Problems and Measures Conducted to Support Work Ability
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Objectives: Mental disorders are the most common cause of disability pensions in Finland. Half (49.1%) of the disability pensions are granted for mental health disorders (MHD) and over one fourth (25.7%) of long sickness leave are due to MHDs. Nevertheless, work ability of employees
with mental health problems (rehabilitates) can be supported by workplace accommodations. We asked employers about their attitudes towards rehabilitates and workplace accommodations conducted in their organisations.

**Methods:** We conducted a structured telephone interview among 300 Finnish employers and HR professionals both from public and private sector and from work organisations of all sizes. Furthermore, 300 persons with MHDs either working or at the disability pension were interviewed. Both participant groups answered questions about workplace accommodations and attitudes related to mental health problems at workplaces.

**Results:** Nearly all employers responded that employees who suffer from MHDs should tell about their problems to the employer (95%) and to fellow workers (60%). From rehabilitates 62% would tell their employer and only 38% to their fellow workers about their problems. 92% of the employers responded that the whole work community should be trained to support employees returning to work after a sick leave because of MHDs, compared to 89% of rehabilitates. Further, 93% (employers) and 96% (rehabilitates) agree that workplace accommodations, such as cutting working hours, using supportive equipment at work or reorganising work tasks, should be conducted to support the work ability.

In addition to these results implicating a positive and supportive attitude towards employees with MHDs, also contradictory results were found. Half (49%) of employers and 73% of rehabilitates say that in case that someone’s mental health problems would come out, he or she would lose one’s position at the workplace. 49% of the employers reported that they have not conducted any concrete measures at their workplace to support the work ability of employees with MHDs. Compared to that, 45% of persons having MHDs and working said that workplace accommodations have helped them to continue at work and even 90% of persons on disability pension but willing to work said such measures would help them return to work.

**Conclusion:** There seems to be an incongruity in attitudes towards mental health problems at workplaces and concrete measures supporting the work ability. There is a need of anti-stigma measures at workplaces in order that employees could openly tell about their mental health problems and in turn get adequate support at their workplace. Employers also need more information on how to conduct workplace accommodations and how such measures support the remaining work ability of employees having MHDs and how such measures benefit the whole work organisation.

**P44: Proposals for Intervention to Minimise the Mental Suffering of Nursing Workers of Cardiology Hospital in Brazil**

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**Introduction:** In the last two decades, the process of nursing work has been considered as a generator of physical and mental harm. This is in part due to the increasing precariousness of working conditions and the rejection of workers’ subjectivity so that production is not affected. Adding to that context, there is the performance at critical units involving children, where the risk of death is imminent, and the direct contact with family’s pain and loss, which can intensify mental suffering at work.

**Objective:** To elaborate, with the nursing team, strategies to minimise workers’ psychological suffering at critical units.
Method: This is an exploratory cross-sectional study, with qualitative data approach, with 17 nursing workers of pediatric intensive care units of a Public Cardiology Hospital in Brazil. After approval by the Research Ethics Committee and the application of the Informed Consent Form, focus group sessions were held over a three-week period. The sessions were filmed and then transcribed. After the transcription, thematic analysis was conducted on the obtained content.

Results: From this analysis, three categories emerged: "Learning how to deal with a severe cardiac child", in which workers report the need for interventions aimed at the emotional preparation for dealing with the feeling that emerge from the care process; "Gaining professional recognition", in which they report the importance of being recognised by superiors, colleagues and children's relatives; and "Rethinking people management", in which workers highlight the need to review the quantitative and qualitative human resources to reduce workload. The categories were interpreted and related to literature.

Conclusion: the categories "Learning how to deal with the severe cardiac child", "Gaining professional recognition" and "Rethinking people management", show daily grueling work, with work overload, insufficient human resources, and lack of recognition by the institution and by the children's relatives, in addition to the unpreparedness to deal with losses, which are so recurrent in this scenario. These results point to the importance of taking measures to promote worker's health, such as psychological support, recognition of human resources, besides the development of further research, of interventionist nature, with a view to transforming reality and reducing mental suffering at work.

P45: Screening Mental Health Symptoms in Mining Industry Workers: Implications for Workplace Health Promotion Initiatives
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Background & Objectives: In Canada, about 500,000 people are unable to work in any given week due to mental health issues. The current project intended to estimate the prevalence of common mental health symptoms and the overall state of wellbeing in a large sample of workers in the mining industry, which is one of the major pillars of the Canadian economy and workforce. A better understanding of the association between various protective and risk factors related to mental health in this population may hold the promise of targeted mental health promotion activities.

Methods: Participants (n=2,224) were recruited from a large mining company in Canada. A detailed demographics section was developed and additional information on issues such as work schedule, commute time, health history, and health habits was collected. Psychometrically validated instruments including the PTSD Checklist, Beck Depression Inventory II; Beck Anxiety Inventory, Pittsburgh Sleep Quality Index; Alcohol Use Disorders Identification Test, and Drug Abuse Screening Test were completed by the participants.

Results: Of the respondents surveyed, 10.5% meet clinical cut-off scores for formal PTSD screening; 56.3% of respondents were classified as experiencing normal mood fluctuations and 18.7% were categorized as suffering from mild levels of depressive symptoms; 90.7% of mining workers were classified as having low anxiety; 73% had normal drinking habits; and 82.5% reported no drug-related problems.

Conclusions: There exists a relatively high prevalence rate of mental health-related symptoms, which in turn affects mining workers overall quality of life. Results will assist corporate and union leaders to formulate evidence-based health promotion strategies for this workforce.
P46: Work-related Stress and General Mental Health in the Study of Copper Mining Industry
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Background: Very few studies were conducted in the past two decades about work-related stress and mental health of miners. Less than 1% of all papers on job stress available in EBSCO databases refer to work related stress and psychosocial health of miners. Such a result was obtained with several combinations of the following keywords: job stress, occupational stress, workplace stress, work-related stress, with the collocations of mental health and miners. At the same time mining is recognized as highly hazardous and brings many fatalities due to occupational injuries and diseases, including cancers (Kramer et al, 2017). In Poland miners are psychologically tested prior to hire and also sometimes during the career. The main aim of the study is to examine general mental health state among blue collar workers in a copper mine and to verify any links between work-related stress and general health.

Materials and Methods: The study was conducted in a copper mine in Poland in 2016 among 1500 blue-collar workers (miners, blasters, machine operators, mine foremen and shift foremen). The research group consisted of 100% males, aged 27-59, whose work tenure varied from 1 to 29 years. They constituted 45% of all employees of the mine. Three questionnaires were used in the study. Work-related stress was measured using Job Content Questionnaire JCQ (Karasek, 1979), Occupational Stress Indicator OSI (Cooper, Williams, 1998), while mental health was measured with General Health Questionnaire GHQ-28 (Goldberg, 1990). Job tenure in the mine with respect to 2-year work adjustment period as well as age of the respondents were controlled.

Results: Reliability of JCQ support scales (supervisor and co-worker support), GHQ-28 and all OSI scales excluding “managerial role” scale were satisfactory (Cronbach’s α between 0.7 and 0.9), whereas other applied instruments failed (Cronbach’s α between 0.097 for JCQ job insecurity scale, 0.308 for JCQ psychological demands scale and 0.582 for JCQ decision latitude scale). Nearly half of the group (48.9%) showed positive screening result of GHQ-28, whereas only few statistically important correlations between work-related stress and health state has been identified. The strength of the links varied from -0.057 (p>0.05) for OSI relationships and JCQ co-worker support scale to -0.145 (p<0.001) for OSI home/work balance and GHQ-28 positive screening result. The data occurred not to be sufficient to support any predictive model.

Conclusions: Some instruments widely accepted to assess work-related stress (i.e. JCQ), might be not appropriate for mining industry and this may be the reason of such small quantity of published studies on miner’s job stress. Such a high rate of positive GHQ cases among miners should be an impulse for further studies on effectiveness of occupational health preventive examines for the industry as the scope of psychological primary interventions has not been controlled in the present study. These results might be also connected with the way of recruitment and search and selection processes which established a specific group of people who have high level of the coping with stress skills.

P47: Positive Mental Health at Work: Design, Validity and Reliability of the OPMH-40 Survey
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Objective: The aim of this study was to determine the validity and reliability of a survey designed for the measurement of the Occupational Positive Mental Health (OPMH). The instrument was designed based in a theoretical model grounded in the positive psychology, salutogenesis, humanism and ecological theory.
**Methodology:** Participants: A sample of 740 workers of different occupations, living in Guadalajara, Mexico, answered the survey. The selection criterion was having an active remunerated occupation, at least one year of working life, be present and agrees to participate at the moment of the data collection. Instrument: The Occupational Positive Mental Health Survey (OPMH-40), is a multidimensional instrument with a self-administer format, developed to apply to different occupational activities; evaluates positive aspects of mental health at work, such as the personal wellbeing at work, the positive interpersonal relationships in the workplace, the immersion at the task, the work empowerment, the working life philosophy and the personal strengths at work. The OPMH-40 includes 40 items divided into four subscales: cognitive, socioaffective, behavioural and spiritual, each one consisting of 10 items. All the items have a five-point Likert response option, going from “totally disagree” to “totally agree”.

**Results:** We developed a database at SPSS 22.0 programme. The data analysis included the test of sample adequacy conducted by Kaiser-Mayer-Olkin and the Barletts' sphericity test; exploratory factor analysis with the factorisation method of core components and Varimax orthogonal rotation for the determination of factorial validity; and Cronbach’s Alpha for reliability.

The Kaiser-Mayer-Olkin (KMO = .918) and the Barletts' sphericity test (X2 = 10755.47; gl = 780; p < .000) indicated that items intercorrelation was optimal for the development of the factor analysis. The results also indicated a four-factor structure that explains 43.55% of the total variance and a Cronbach’s Alpha of .923 for the whole instrument.

**Conclusions:** The OPMH-40 is a valid and reliable measurement instrument for the evaluation of the occupational mental health that can be used with subjects of different work occupations. The analysis developed allows us to conclude that the OPMH-40 has an acceptable construct validity. Among the instrument qualities are the high reliability and the short time of application. The SMPO-40 evaluates, from a positive approach, the occupational mental health, which can provide guidelines for the development of interventions strategies oriented for the authentic promotion of mental health at the work environment.

**P48: Psychosocial Risk Factors in Hospital Workers in Guadalajara, Mexico**
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**Background:** Occupational psychosocial factors are organisational conditions (Mintzberg, 1993) - work aspects that can be positive or negative (Kalimo, 1988). When they have the right conditions: being able to facilitate work, the development of job skills and levels of job satisfaction; business productivity and the state of motivation in workers achieve greater experience and professional competence.

**Objective:** To identify the psychosocial factors of hospital workers in Guadalajara, Mexico. **Methods:** The Guide to the Identification of Psychosocial Factors (IMSS, 1986) was applied in its English version to 455 workers. Descriptive statistical analysis was performed with the SPSS 21 computer programme.

**Results:** 455 surveys were obtained. Socio-labour variables: female sex, 65%; male 34%; mean age of 37 ± 8 years, with a mean age in the institution of 12 ± 8 years. Married: 54.5%, singles 37.8%, others 7.7%. The results of the identification of psychosocial factors in the workplace, the highest results with reference to the maximum possible, the conditions of the workplace (17/34 points) and labour requirements (16/28 points). The overall average rating of the instrument for this obligation was 67 points, from a maximum of 146 possible.
Conclusions: In this study population, it was identified that one of the most important psychosocial factors was work and career development, as well as with social interaction and organisational aspects. On the other hand, workload and the remuneration of performance, the significant levels of vigour, as well as work demands were all significantly associated with dedication.

P49: Investigating the Impact of Traumatic Event Exposure: Research to Enhance the Health and Wellness of Emergency Medical Professionals
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Employees within high-risk occupations, such as the emergency medical services (EMS) experience a wide array of unique challenges on the job, including consistent traumatic event exposure (Donnelly & Bennett, 2014). Up to this point, however, the existing research that investigates the impact of such event exposure is limited. My goal is to contribute to this literature by providing greater insight into the implications of such exposure. Specifically, my research investigates the mechanisms by which traumatic event exposure leads to strain. Further, I am also interested in understanding if (and why) certain individuals are more likely to experience strain after such events in comparison to others.

My most recent empirical investigation into these questions was my dissertation, which was a weekly diary design in which 200 paramedics completed surveys across ten weeks. The purpose of this specific study was to see if expressive suppression, which is a form of maladaptive emotional regulation, serves as one mechanism by which traumatic events lead to strain. Additionally, I investigated contextual factors that might serve to moderate this relationship. Overall, results showed that expressive suppression did in fact mediate the relationship between traumatic events and strain, such that on weeks when individuals experienced traumatic events, they engaged in more expressive suppression, and in turn experienced more strain (e.g., burnout, anxiety, depression). Further, one contextual factor, namely organisational constraints, moderated this within-person relationship. Specifically, when organisational constraints were high (versus low), the use of expressive suppression led to higher strain. Overall, these results provide important insights into the process that links traumatic event exposure to strain within the EMS profession. This research has numerous implications for organisations, as it examines various factors that may be addressed in order to ensure that EMS professionals are better equipped to deal with these unfortunate exposures. It is my hope that this research will serve as a springboard for successful interventions aimed at enhancing the wellbeing of EMS professionals in the wake of traumatic event exposure.

As I reflect upon my academic career thus far, I am proud to say that the effort that I put into my training and research has truly been “worth it”. By choosing this path as an occupational health psychologist, I am able to conduct research that allows me to have a positive impact on the health of countless employees. For instance, while I was conducting my dissertation (described above), numerous participants reached out to tell me how grateful they were that I was conducting the study. They noted that they were pleasantly surprised that someone was paying attention to their wellbeing, because they felt that their struggles often received minimal recognition. It was clear that these emergency medical workers were searching for a way to improve their workplace experience. This left a lasting impression on me, and serves as a reminder that my work is valuable and important. It is a true privilege to be an occupational health psychologist, and I look forward to continuing my research to improve employee health and wellbeing.
Job insecurity is reported to be related to a variety of negative outcomes, including poor wellbeing and increased levels of emotional exhaustion (e.g. Cheng & Chan, 2008). As decreased mental and physical health means significant costs for organisations, the mechanism of the insecurity-health relationship has gained considerable attention from researchers. One of the theoretical frameworks to view job insecurity and its outcomes is offered by social exchange theory (Cropanzano & Mitchell, 2005) that focuses on the imbalance in the exchange relationship between employee and employer (Shoss, 2017). From this perspective job insecurity is stated to lessen the rewards that employees receive for their efforts and is therefore likely to be perceived as unfair (Piccoli & De Witte, 2015). Social exchange mechanisms predict employees to respond to job insecurity with ill-being, lessened job attitudes, and lessened contributions to the organisation (De Cuyper & De Witte, 2006; Reisel, Probst, Chia, Maloles, & König, 2010). There are already a few studies focusing on perceived organisational justice in the context of job insecurity (e.g. Piccoli & De Witte, 2015; Piccoli, De Witte & Reisel, 2017), however, each of them is offering a different justice type as an explanatory mechanism. Some focus on the perceived fairness of the outcomes of organisational processes and decisions (i.e. distributive justice), while others employ organisational justice as the combination of procedural and interactional justice (i.e. fairness of the decision-making process and interpersonal treatment). In this study, drawing on social exchange theory (Cropanzano & Mitchell, 2005) and fairness heuristic theory (Lind, 2001) we suggest job insecurity may prompt employees to question not only the perceived justice of decisions and decision-making procedures, but the perceived justice of the very organisation (i.e. overall justice). More precisely, we assume overall justice of organisation may act as an explanatory mechanism between job insecurity and health outcomes. Consequently, we aimed to simultaneously test the indirect relationships between qualitative and quantitative job insecurity and indicators of mental health through distributive, procedural and overall justice.

In total, 133 employees were surveyed. To test the hypotheses, multiple mediation analysis using PROCESS macro was performed. The results supported our hypotheses. Namely, overall justice of organisation was found to mediate the association between job insecurity and exhaustion and subjective mental health, while indirect effects through distributive and procedural justice were found to be insignificant.

The study findings add to the literature, analysing the mechanism underlying the job insecurity-health relationship and highlighting the explanatory role of overall justice judgements.

**Background:** In view of the various demands and health risks German offshore workers face at work, health promotion for this working group seems particularly relevant. Still, to date, little is known about workplace health promotion within the German offshore wind branch, and the workers’ needs on this topic remain unclear. Such information is, however, vital to the design of interventions that can meet the workers’ specific needs and promote their health.

**Methods:** The sample consisted of employees working in offshore wind parks in the German exclusive economic zone in the North and Baltic Seas. A mixed-methods-design was applied:
semi-structured telephone interviews \((n = 21)\) and a web-based cross-sectional survey \((n = 303)\) were carried out, assessing the current state of workplace health promotion in the German offshore wind industry as well as offshore workers’ experiences and needs on this topic.

**Results:** The large majority of the offshore workers was not aware of any health promotion programs offered at their workplaces. Single health promotion offers were reported, with fitness facilities being the most common offer employees recognised and made use of. There was a significant association between employees’ work schedules and their participation in certain health promotion offers, with employees with irregular schedules making less use of fitness facilities and massages offshore. In terms of future programs, employees expressed various needs concerning behavioural and environmental preventive measures.

**Conclusions:** The results of our study demonstrate a clear need for the development of health promotion programs for offshore wind industry workers. Our findings can be used for the design and implementation of suitable interventions to foster offshore employees’ health and work ability.

**P52: Absenteeism among Male and Female Judiciary Workers in Brazil: Justicel Study**
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Absenteeism due to health problems depends on an intricate network of conditioning factors. First: workers need to be aware of their health condition (i.e., they need to perceive and recognise symptoms). Second: the sickness needs to be registered in a formal medical declaration. In consequence, sick individuals need to have access to a healthcare service. Third: the conditions under which workers may be granted leave until their recovery depend on the normative and legal frameworks of their jobs. In summary, the analysis of absenteeism in a specific group requires attention to individual and contextual variables. The aim of the present paper is to describe the prevalence of and analyse factors associated with absenteeism among judiciary workers from a Brazilian state, according to gender. Justicel Study has a cross-sectional design, and the target population comprised workers who acted within first-level services of the judiciary system in a Brazilian state. Stratified sampling with selection through simple random choice was conducted in the strata of interest: a) level of judicial service; b) current position; c) age groups; and d) sex. In the end, a sample of 1,005 workers was obtained. Data were collected over the telephone. The data-gathering instrument (Q-JUS) was developed specifically for the study. Multivariate binary logistic regression models were used to evaluate possible factors associated with sickness absenteeism. The prevalence of the outcome was 37.2% (32.7% among men; 39.8% among women). Age was associated to the outcome for both groups, but in opposite directions: higher prevalence among younger men; lower prevalence among younger women. Negative self-rated health and exposure to psychological harassment were also associated to absence from work in both men and women. Overweight was an associated factor only for men. Living with a partner, current abusive use of alcohol, perception of an inadequate relationship between efforts and income, and exposure to noise was associated factors only for women. Results reinforce the role of the social context in explaining gender differences. Brazilian judicial system is experiencing a profound reform. New formats and better quality are manager targets, although they are still not well-defined in relation to the administration model that is currently used. It would be beneficial to create strategies to support workers.
Implicit Leadership Theories (ILTs) are ideal cognitive models specifying what to expect from a leader in organizational settings. Previous studies have shown that the congruence between individuals’ ILTs and actual leaders’ behaviors impacts subordinates’ LMX, job satisfaction and wellbeing. Although ILTs are part of the second most studied research line in leadership, little attention has been paid to their antecedents. One theoretical claim related to ILTs is that they are shaped by people’s prior experiences with authority figures. Previous studies focused on the role of attachment styles developed during interactions with parents on individuals’ ILTs. In the present paper we propose an alternative framework linking parental models to leadership models. Thus, the aim of the study was to examine the predictive validity of the perceived parenting style on ILTs traits. We grounded our study on self-determinations theory and on Popper and Mayseless (2003) claim that good leaders are like good parents: they satisfy individuals’ basic psychological needs. As such, we expected that those who had been exposed to a controlling parenting style and therefore having their basic psychological needs unmet, feel more vulnerable at work, and as a consequence, they preference for a trustful leader increases.

Methods: A total of 138 working adults participated in the study. Participants were employed in a wide range of industries (e.g., banking, finance, IT, telecom, education, health, food). The study was conducted in Romania and data were collected online, on a volunteer basis. We measured ILTs with the short version of Offerman et al. (1994) scale, revised by Epitropaki & Martin (2004); perceived parental style was measured with the 24 items P-PASS (the Perceived Parental Autonomy Support Scale).

Results: Prior to hypothesis testing, we conducted confirmatory factor analysis (CFA) to assess if the data fit the assumed structures for P-PASS. In case of ILTs we opted for hierarchical ESEM, since all previous studies have been used the central-tendency version of ILTs (i.e., ILTs that measures typical leadership traits), while for the current study, we used the ideal versions of ILTs (i.e., ILTs that measures extreme, idealized leadership traits). Results for the CFA analysis employed for P-PASS and hierarchical ESEM employed for ILTs show adequate fit to the data. In order to test the unique contribution of each subscale of the P-PASS to each ILTs trait, we performed a hierarchical regression, in which we entered demographic variables, gender and age, in the first step and in the second step the perceived parental style subscales. The results of the regression analysis show that P-PASS dimensions taken together account for 10% of the variance in Sensitivity, one of ILTs traits (R2 change = .10, p < .05). Nevertheless, the only P-PASS subscale that brings a significant contribution in the prediction of Sensitivity is guilt inducing criticism (β = .32, p < .05).

Conclusion: Our study revealed a new distal antecedent for individual differences on ILTs. We showed that guilt inducing criticism used by parents, as measured in hindsight, predicts the subordinates’ desire for a sensitive leader.
organisations. The importance of individual resources to deal with involuntary as well as voluntary career changes is widely recognised. Career competencies such as career adaptability are acknowledged as helpful resources to build bridges over the breaches in the career path. Moreover, it is assumed that adaptability resources (concern, control, curiosity and confidence) predict agentic adaptive responses and allow for beneficial adaption results. One adaptive response might be career crafting which is defined within the framework of sustainable careers as agentic behaviour. Furthermore, beneficial adaption results are supposed to extend classic notions of objective career success in that meaning and not only money is measured. Yet the question remains of who is ready, willing and able to make use of career resources. Therefore, not only benefits but also socio-economic boundary conditions of career adaptability resources are investigated in this representative 2-wave panel study.

The aims of the study are three-fold, firstly to contribute to the missing knowledge of the prevalence and boundary conditions of career adaptability resources in different populations in regard to education, age, gender, education, income and sector. Secondly, to provide insights on how career adaptability moderates the effect of career crafting, towards serving as bridge over the breaches in the career path. Thirdly, the benefits of career adaptability on the relation between career crafting on subjective success will be investigated for simultaneous and time-lagged effects over the course of 15 months. Data for this representative study will come from a panel study with 1,200 employees in Germany. As measure for career adaptability the career adapt-abilities scale was chosen. Furthermore, two new scales were applied: the newly developed career crafting scale as instrument to measure agentic career behaviour and the new subjective career success scale as outcome measure for meaning.

As of today, only the first wave of the survey was conducted, we can present the full analysis just at the time of the conference. However, analysis of the cross-sectional data pointed in the direction of earlier voiced critique in regard to career self-management. Socio-economic factors might have a large impact on whether individuals can build bridges over the breaches on their career path: group comparisons showed significant differences of the prevalence of career adaptability resources in regard to age, gender, education and income. Yet as it is supposed that career adaptability resources are psycho-social competencies that can be developed, the possible changes over time will be investigated. Furthermore, the longitudinal data allows for testing of the assumption of a positive feedback loop between career adaptability, career crafting and subjective career success. To summarise, the study will contribute to research on career adaptability and the question of “who” and “how” these resources can help to transform new career demands into a sustainable career.

P55: Aspects of the Work-Family Relation and the Influences of this Dyad on the Wellbeing of Brazilian Army Military Personnel
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The concept of peace operations was created as soon as the UN was founded, as a consequence of the need to ensure international peace and security after the Second World War. Brazil has participated in more than 30 United Nations peacekeeping operations since 1948, having assigned a total of more than 24 thousand soldiers to them. The United Nations Stabilisation Mission in Haiti - MINUSTAH – is the mission which has more relevance to the research, due to the great number of Brazilian Army soldiers deployed in this mission. It is estimated that more than 23 thousand Brazilian Army soldiers engaged in MINUSTAH troops. The Brazilian peacekeeping operations in Haitian soil started in 2004 and finished in October 2017.
Numerous reasons justify a soldier's personal choice to volunteer to join a troop in a peacekeeping mission. To many of them, it represents a single opportunity to represent the country, to make a difference to a needy population (Mellagi, 2016). Moreover, it is an opportunity to develop competences and receive intrinsic rewards (Perrelli, Chambel and Tolfo, 2017). However, even though these motivations are recognised and legitimate, they do not cancel the risk factors which are present in a theatre of operations of a peacekeeping force. In fact, peacekeeping operations share many stressing factors with war, although the risk of enemy fire, death or personal damage is lower. Certain stressing factors, such as a lack of a clear definition of responsibilities or boredom, can be more problematic in humanitarian or peacekeeping missions than in combat ones. In addition, distance from home and family has been highlighted as a relevant stressing factor experienced by soldiers deployed in a peacekeeping mission (Britt, Adler, & Baritone, 2001). In the light of the above, the reasons which justify the scientific investigative efforts regarding the work-family (family-work) relation of this population who presents such a specific labour context become clear.

This study intended to analyze aspects of the work-family relation and the influences of this dyad on the wellbeing of the Brazilian Army military personnel who were part of troops in a peacekeeping mission through the United Nations in Haiti. The data were collected in two Brazilian battalions (25th and 26th Contingent) which accomplished a mission in Haiti. Using the data collected in a sample of 306 soldiers, married and/or with children, during the phase of employment of the troops, in Haitian territory, when the military personnel was between three and five months away from their families. Data analysis was performed using structural equations modelling.

We verified that the military's appreciation of the family's support for their participation during the mission had a positive relation with both Family - Work Enrichment and Work - Family Enrichment, and that Work - Family Enrichment totally mediated the relationship between the support of the family and the appreciation of health and general satisfaction with life by the same military personnel. Theoretical and practical implications are discussed and limitations and suggestions for future research are presented.

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In today's working world, many employees are members of dual-earner couples and face the challenge of simultaneously dealing with their own work stress and supporting their partner. The beneficial effect of social support has been widely studied in the last decades, but most research focused on the consequences of receiving support, but less attention has been paid to antecedents of providing support in general, and providing support to one's partner in particular.

To extend our understanding on the relationship between work stress and providing social support at home, we therefore conducted a study with 147 dual-earner couples. Based on the work of Bodenmann (1997), we differentiated between positive (e.g., signaling empathy and offering practical help) and negative (e.g., hostile and superficial) social support. We assumed that individuals facing high work stressors (time pressure, effort-reward imbalance) (a) provide less positive and more negative support and (b) receive more support by their partner. Based on previous research indicating that women tend to provide more social support than men, we also examined gender differences.
Results of the actor-partner interdependence model indicated that employee’s work stressors predicted employee’s negative support but not positive support (actor effects); in contrast, partner’s work stressors predicted employee’s positive support but not negative support (partner effects). No gender differences emerged. In sum, the current study suggests that both men and women facing high work stress tend to provide more negative support towards their partner (but not less positive support); at the same time, their partner seems to provide more positive behaviour to support them.

P57: An Examination of Flexible Work Arrangements and Workplace Wellbeing in Public Sector Employees in Canada
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Introduction: Flexible work practices are increasingly prevalent in today’s changing workplace and have been recommended for implementation in the contemporary workplace for more than a decade (Halpern, 2004). There is growing recognition of the challenges people can face while trying to achieve an optimal work and non-work life balance; juggling career aspirations, professional development, and family obligations alongside other competing priorities. Indeed, workplace flexibility has been generally defined as a set of practices that help personnel combine work and non-work obligations (e.g., Allen, Johnson, Kiburz & Shockely, 2013) and more broadly to include the ability for employees to make choices about core aspects of their working lives, such as when, where, and for how long they engage in work-related tasks (Hill et al., 2008). Recent literature on workplace flexibility (e.g., Allen et al., 2013; Bal & De Lange, 2015) has advocated for the importance of deconstructing flexibility into employee perceptions of the availability of flexible work practices and the self-reported use of flexible work practices as they can be associated with different facets of workplace wellbeing outcomes (e.g., Allen et al., 2013; Bal & De Lange, 2015). Specifically, the aim of this study is to examine:

1. to what extent employees make use of different forms of flexible work practices available to them;
2. to what extent employees perceive different forms of flexible work practices to be available to them; and
3. to what extent both self-reported use and perceived availability are related to various indicators of psychosocial wellbeing at work such as work-family conflict, employee engagement, morale, and burnout.

Study Design: This study is being conducted as part of a department-wide workplace wellbeing survey in a large public sector employer in Canada. Employees are asked to report on their use, and the perceived availability, of flexible work practices such as compressed work weeks, flexible working hours, job-sharing, part-time work and telecommuting. Employees also report on a number of workplace wellbeing indicators and outcomes such as work-family conflict (Netemeyer et al., 1996), work engagement (Rich, Lepine, & Crawford., 2010), morale (Britt & Dickinson, 2006) and job-related burnout (Demerouti et al., 2003). Relationships between the availability and use of flexible work arrangements and the psychological workplace wellbeing constructs will be reported.

Discussion: This study will provide insight into the self-reported use of flexible work practices and perceptions of availability in a large public sector organization. The results will also provide further insight into the relationships between flexible work arrangements and various antecedents and indicators of workplace wellbeing.

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This study investigates how daily job demands are related to anxiety, through daily work-nonwork conflict (WNWC; loss spiral process), and how job resources are related to flourishing through daily work-nonwork enrichment (WNWE; gain spiral process). Trait-like personal characteristics - workaholism and happiness - are analysed as moderators. A sample of 112 Spanish employees filled in a daily diary booklet for five consecutive working days (N = 560 occasions). Results show how WNWC acted as a mediator in the loss spiral process, whereas WNWE acted as a mediator in the gain spiral process on a daily basis. Workaholism and happiness are relevant key personal resources that moderate the relationship between daily job characteristics and WNWC and WNWE. Results contribute to the work-home resource model, work-family research and multilevel model of wellbeing by demonstrating that WNWC acts as an explaining mechanism in the loss spiral process and WNWE acts as explaining mechanism in the gain spiral process. Both processes occur simultaneously, yet independently, on a daily basis. Trait-like personal characteristics determine the way people perceive or formulate the environment and how they react to it. When planning interventions to improve employees’ wellbeing, organisations should focus on promoting WNWE by enhancing daily job resources in addition to reduce daily job demands that can minimize the experience of WNWC. This is one of the first studies to provide evidence of the loss spiral process and the gain spiral process on a daily basis and this is the first study in which that is done with the link of work-nonwork conflict and enrichment experiences and trait-like personal resources.

P59: Exploring the Paradox of Smart Technology in the Management of Work-life Boundaries

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Technology has always been driving changes in the workplace, this is not a novel concept. More recently, however the development of smart technologies has influenced the way we work and live our lives. The mobility of smart technology means that work can now be done anywhere and at any time, implying changes in the interaction between work and private life and a blurring of the boundary. This research was conducted to explore the views and experiences of knowledge workers and how they find smart technology to be helpful and unhelpful in the management of the boundary between work and life. For this MSc research project, twelve knowledge workers were interviewed, the recordings of these were transcribed and the transcripts were analysed using thematic analysis. The results of this study have shown that although some practices have primarily been seen as helpful such as the accessibility and customisation of the devices, it has been found that there is often an underlying negative and unhelpful component of these such as compulsive monitoring, highlighting the autonomy paradox. These practices have been found to be limited by the individual’s knowledge of how to customise the device to suit their preferences, raising the question of whose responsibility it is to ensure the individual is equipped to use the smart technology in a way that is helpful to them.

P60: Perception of Working Conditions and Mental Strain of Segmentors and Integrators

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Due to the use of digital media there is a higher availability for employees during their free time. Recent studies show that this extension of availability and accessability may lead to mental strain. Appropriate boundary management is supposed to improve the mental health of employees.
Therefore, some companies already have restrictions on accessibility of employees during their free time and working hours. However, it depends on the personality of the worker, whether a restriction applies. For one group, the so-called integrators, it seems to be less stressful to be reached at leisure time for their colleagues. The other group, called segmentors, is less stressed if they strictly separate work and private life. Comparing integrators and separators the least strain is to be expected from segmentors who are able to meet their accessibility and availability regulations. However, compliance with these rules is questionable, since individual regulations are difficult to communicate for all participants. This raises the question of whether rules to limit accessibility are associated with lower mental stress and if there are other factors that differ for integrators and segmentors.

Within the framework of a research project called RegioKMUnet, funded by the German Ministry of Education and Research, a psychological risk assessment has been carried out with 1028 employees of twelve small and medium sized enterprises. In addition to the usual elements of the psychological risk assessment some items relating to the perceived accessibility and availability by colleagues, superiors and customers were added. Furthermore one question covered the presence and use of e-mail regulations. We used a four-point response scale ranging from “always” (best value) to “never” (worst value). Data were analysed using IBM SPSS 24.

Within the companies there were no rules established restricting the availability during freetime or working time. Two groups were formed, comparing integrators (items: “no need to restrict accessibility during freetime” and “never thought about restricting accessibility during freetime”) and segmentors (“I have a rule to restrict accessibility during freetime” and “I do not restrict accessibility during freetime because I fear disadvantages”). The group of the segmentors showed significantly worse values for psychosocial conditions (n=961; mean rank integrators: 456; mean rank segmentors: 509, U=102.254), mental wellbeing (n=946; mean rank integrators: 448; mean rank segmentors: 502, U=98.898), perception of working time (n=972; mean rank integrators: 459; mean rank segmentors: 517; U=103.720) and availability of information for work (n=978; mean rank integrators: 515; mean rank segmentors: 512; U=108.823). Comparing the two subgroups of segmentors, there were only differences in perception of working time and information availability.

The results show that the boundary management does not help the segmentors to reduce mental strain significantly, no matter if the separation of work and private life is applicable for them or not. A possible explanation for that might be that there has been higher strain for these persons before, independent from permanent availability. Further research in this area is needed to develop and apply strategies for segmentors.

P61: The Effect of Division of Labour in Same-sex Marriages on Workplace Outcomes
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Numerous studies have highlighted the gendered division of household labor (Breen et al., 2005; Orloff, 2002); however, few (if any) have examined how same-sex couples divide household labor responsibilities and the effects that this division of labour at home has on workplace outcomes (i.e. work-family conflict and job burnout). The current study seeks to understand the division of household labor in same-sex couples through a time-lagged study where data collection was lagged by two weeks, with the division of labor and partner support being measured at Time 1 and Work-Family Conflict and Burnout being measured at Time 2. It is hypothesized that couples with a more egalitarian division of labour (i.e. where traditionally
segregated family roles are equally shared by partners and where specific tasks are not delegated on the basis of sex [Haas, 1980]) will report lower levels of work-family conflict and job burnout. Also, it is expected that partner support will moderate the relationship between the division of labour and the outcome variables such that, higher levels of partner support will have a buffering effect on work-family conflict and job burnout in that they will be lower. The sample consists of 88 gay and lesbian couples. Specifically, 53 of the couples were lesbian couples and 35 were gay couples. Participants come from several different occupations and across several industries. Results (not yet analysed) will be examined.

P62: The Benefits of New Ways of Working on Employees’ Wellbeing and Work-family Interaction: Gender Differences
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New ways of working (NWW) represent one mode of adaptation to rapid changes in today's workplace. Digitalisation allows employees to work more flexibly, i.e. to choose when, where, and by which communication tool to do their work. This flexible work design promises and already has showed advancements not only on work efficiency, but also on employees' wellbeing. However, mixed findings were reported on the impact on work-family interaction, calling for future studies to examine the consequences of NWW among persons varying in individual differences (Demerouti et al., 2014). Hence, this study aimed to examine the gender differences in the benefits that NWW have on employees’ wellbeing and work-family interaction.

We conducted an on-line survey on heterogeneous samples of 168 women and 100 men, employed in Croatian organisations in various sectors on various positions. Participants filled-in The new ways of working scale (including four subscales: 1. Control over work time, 2. Control over location for work, 3. Control over work content, 4. Control over communication used for work); The recovery experience questionnaire (1. Psychological detachment, 2. Relaxation, 3. Mastery experiences, 4. Control over leisure time); The Utrecht work engagement scale; The Job Affective Wellbeing scale (including Positive and Negative emotions subscales), Satisfaction in life scale; and work-family conflict scale.

The results of correlational and regression analyses showed interesting gender differences in the benefits that NWW have on employees’ wellbeing and work-family interaction. Regarding positive and negative emotions toward work, we found that NWW were more helpful for affective wellbeing of women compared to men. Similar patterns were found for work engagement. While NWW were positively related to control over leisure time in both subsamples, the correlation with mastery (recovery) experiences was again more pronounced in the women subsample. In addition, men who worked flexibly regarding time and location were less able to psychologically detach from work in their leisure time. However, NWW were positively related to men’s life satisfaction, while in women’s sample no significant correlation was obtained. Finally, a correlation between NWW and work life balance was found only in subsample of men with children, who had greater work life conflict when they could work flexibly, i.e. outside the office. In sum, we could say that these findings suggest that women enjoy more benefits from NWW, compared to men.

Even though this study design does not justify causal interpretation, based on findings we can suggest some practical interventions for encouraging NWW and enhancing employees’ wellbeing.
P63: A Systematic Review of the Effects of Interventions Targeting the Reconciliation of Work and Nonwork Demands
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The reconciliation of work and nonwork demands has recently gained in importance because of its extensive effects on individuals, companies, and the economy in general. Work-nonwork interactions are related to a range of personal (e.g. health, family satisfaction) as well as work-related outcomes (e.g. job performance, absenteeism). Accordingly, a growing body of literature describes intervention studies to support individuals in reconciling work and nonwork demands. However, existing intervention studies are diverse in terms of training contents and outcomes. To date, a comprehensive overview and integration of this literature is missing. Such an overview has the potential to identify key aspects of effective interventions and can therefore benefit both researchers and practitioners.

With this aim, we conducted a systematic review of interventions targeting the reconciliation of demands from work and nonwork roles. Based on the work-home resources model, we grouped studies according to whether they aimed at increasing contextual and personal resources and/or at decreasing contextual demands. Our systematic analysis of the literature showed that specific types of work-nonwork interventions are effective in reconciling demands of work and nonwork roles. We discuss the theoretical and practical implications of our findings and derive directions for future research.

P64: Psychophysiological Symptoms Predictive of Stress in Mexican Immigrants in Canada
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Emigration is a stress-related phenomenon that is manifested depending on the losses perceived when leaving one's own country of origin. This investigation reports the relationship between perceived stress and psycho-physiological symptoms of Mexican immigrants living in Edmonton, Canada. The study was transversal and analytical. To gather participants the Mexican society of Edmonton in Canada, that provides support for immigrants, was asked for the number of people registered over 18 a period of years. The inclusion criterion was: Mexicans with more than one year residing in Canada, regardless of their legal immigration status, resulting in a sample size of 237 participants. A survey was prepared and implemented during 2013. The survey was composed by two instruments. The Stress Profile of Nowack which request the experience of discomforts, and major and minor frustrations of daily life. For the psycho-physiological symptoms of stress the Inventory of Stress Symptoms of Lipp & Guevara was used. This survey has been adapted for the Mexican population and consists of 41 items in the form of a list to record psychophysiological symptoms.

Data analysis was based on multiple regression and Odds Ratio (OR) analysis. Results shown a relationship between perceived stress and physical symptoms (cold hands and feet, neck and backaches, and fatigue), psychological symptoms (feeling depressed, anxiety and insomnia), and gender. Assessing the symptomology of perceived stress in immigrants' health, work, finance, family and social and environmental settings may offer an opportunity for efficient intervention.
P65: Foreign-born Health Professionals’ Experiences of Stress related to Information Systems in Finland
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Introduction: The migration to Finland has increased recently and the number of foreign-born physicians and registered nurses (RN) has increased in health care. At the same time, challenges related to information systems have emerged among the most stressing factors for health care professionals. As part of the Competent Workforce for the Future (COPE, funded by the Strategic Research Council, project 303607) and Information Systems and Stress in Health Care (funded by the Finnish Work Environment Fund, project 116104) –projects, we examined stress related to information systems among foreign-born physicians and RNs in the Finnish health care; and how gender, age, country of origin, years from practicing license, employment sector, work ability, and job’s psychosocial resources (team climate, social support, and job control) were associated with this stress.

Methods: Data was gathered with a questionnaire in the end of 2017. Sample included foreign-born physicians in Finland aged between 26 and 65 (n=371, 65 % women) and foreign-born RNs aged between 24 and 66 (n=219, 94.5 % women). The analyses of covariance were conducted to study the associations of independent variables with stress related to information systems.

Results: The mean level of stress related to information systems was 2.6 (range 1–5, SD = 1.0) among physicians and 2.7 (range 1–5, SD = 1.1) among RNs. Among physicians years from practicing license (F= 4.03, p= 0.046), work ability (F= 9.86, p= 0.002), team climate (F= 4.41, p= 0.037), and social support (F= 4.74, p= 0.030) were significantly associated with stress related to information systems. Longer time from getting practicing license, low work ability, poor team climate, and low social support were associated with higher levels of stress related to information systems. Among RNs years from practicing license (F= 4.07, p= 0.045) and work ability (F= 13.98, p< 0.001) were significantly associated with stress related to information systems. Longer time from getting practicing license and low work ability were associated with higher levels of stress related to information systems.

Discussion: Our results suggest that work ability and job resources are important factors affecting how stressful foreign-born physicians and RNs experience their information systems to be. Moreover, it seems that those foreign-born health care professionals who have stayed longer in Finland have higher stress related to information systems compared to new comers. This may reflect that those who have stayed longer in Finland may have difficulties in adjusting to changing information systems, or that new comers are better supported in health care units by organizing the work in a way that they have less responsibility on difficult tasks such as dealing with complex information systems. Health care organizations with foreign-born professionals might benefit from paying attention to foreign-born employees work ability, good team climate and support opportunities.

P66: Spaniards in the United Kingdom: Psychosocial Risks in Skilled Emigrants
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In the last two decades Spain has experienced a substantial change in the flows of migrants. Whereas in the 90s and early 2000s migration was characterised by the arrival of foreign workers, in the last few years the situation has taken a turn, due to the financial crisis and the unemployment rate, which has made this flow go the other way round. Many of these emigrants have moved to other European countries, such as the United Kingdom, because of the
employment opportunities this country offers or because of the possibility of improving language skills. One of the main social groups that has gone through this process is the so-called ‘skilled migrants’, who have certain skills perceived as beneficial in the host country and as a way in which talent flows.

Although the work-related psychosocial risks that skilled migrants suffer do not differ widely from those experienced by native fellows, the situation of discrimination and rejection to which they are exposed for being foreigners represents an additional risk factor. Thus, we deem necessary to delve into the study of the psychosocial risks these skilled intra-European migrants face and the role of discrimination as another risk factor.

This is the reason why in this study we will conduct a qualitative analysis based on in-depth interviews with skilled Spanish migrants that are developing their career in the United Kingdom. From this perspective we will address topics related to the working conditions, the perception of their work environment, their personal experience at work, the idea of returning home as well as the different forms of discrimination they may be facing.

P67: Exploring Organisational and Social Safety Climate among First Line Managers in Municipal Elderly care in Sweden
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Previous research upon occupational health among first line managers is limited. The focus has been on the individuals’ capability and leadership skills to handle the job demands and related work stress in their work environment (Eklöf, 2017). In March 2017 a new legislation came into force regarding the occupational health in Sweden. The focus is turned away from an individual perspective to an organisational perspective, using the concept organisational and social work environment instead of psychosocial work environment (Swedish Department of Work Environment, Regulation AFS 2015:4).

Current research indicates high turnover among the first line managers in municipal human service organisations (HSO), high retirement and difficulty of recruiting the younger generation to the profession (Skagert, et. Al 2012, Ledarna 2011; 2012). These difficulties plus high pressure and stress within the occupation will affect the public sector in Sweden in a near future (Corin, 2016). The role as a first line manager in HSOs has developed to be a complex profession during the last decades (Holmberg & Henning, 2003) and the support from the top management becomes more important, to attain occupational health among its employees (Törner, 2010). The municipal elderly care sector is mostly operated by women (Regnö, 2013) and this implies to maintain a gender perspective throughout the research (Björk, 2013; Kankkunen, 2009;2014).

Aim: The aim of the upcoming study is to investigate the organisational and social safety climate among first line managers in municipal elderly care in Sweden. The results can contribute with knowledge for how the organisational and social work environmental risks can be prevented or minimised.

Research questions: (1) How do the first line managers experience their organisational and social work environment? Which work related risks can be identified and how can they be handled? (2) How do the first line managers handle competing demands and conditions between the organisational needs and economics settings? (3) How do first line managers reason about preventing actions in their work environment and how could the safety climate be organisational integrated? (4) When it comes to safety climate in the organisation, in what way will gender make a significance for first line managers work environment? Related to their manager and their employees.
Method: The study will be conducted by qualitative and quantitative methods. The participants are first line managers which have their occupation within the municipal elderly care in Sweden. The Job Demand Resources model (JD-R model; Bakker & Demerouti, 2007) will be used in the study for analysing the first line managers work environment.

Background: The study is a part of the research program, “Organisational and Social Safety Climate in Human Service Organisations – Developing Proactive Approaches and Tools for Research, Practice and Intervention” at Centre for Work Life and Evaluation Studies, Malmö University. The research program is funded by FORTE – Swedish Research Council for Health, Working Life and Welfare. Dnr 2016-07220.

P68: Cultural Conceptions of the Meaning of Fatigue of the Firemen in a Station of Zapopan, Jalisco, México in 2017
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Introduction: The control or reduction of fatigue in firefighters has not been fully achieved. Among several possible reasons for this is that too little consideration has been given to cultural aspects.

Objective: To explore the cultural conceptions of the meaning of fatigue in firefighters in a station in Zapopan, Jalisco, Mexico, with the plan to design and implement effective intervention plans.

Materials and Methods: A cognitive anthropological study (i.e., the reality perceived by the population under study, an EMIC point of view) was conducted in 2017. Twenty firefighters were selected through purposeful sampling and the free-lists technique was applied.

Results: The word tiredness with 75%, stress with 25% and weakness with 25%, were more frequently associated in the concept of fatigue generator.

Conclusion: For firefighters tiredness is the main symptom of fatigue. It is recommended to generate interventions based on a preventive vision of fatigue in firefighters to achieve an adequate control or a decrease in its incidence, taking into account the needs and resources available in this population. The technique of free-lists is proposed as an effective alternative for collect information about cultural conceptions related to fatigue.

P69: Organisational Citizenship Behaviours: Preliminary findings from Civic Skills, Social Justice, Political Efficacy and Political Behaviors in Chilean workers
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Background: Organizational citizenship behaviors (OCBs), as voluntary contributions that exceed the expected performance of a person in an organisation (e.g., helping new colleagues) (Smith, Organ & Near, 1983) have been of great interest to researchers for the last two decades. However, little is known about the beliefs (e.g., social justice), attitudes (e.g., political efficacy) and civic skills (e.g., contacting authorities) that would support those behaviours (Torney-Purta, Cabrera, Roohr, Liu & Rios, 2015). Labour and organisational psychology has studied citizenship in the workplace through OCBs, but less since formal studies of citizenship (Lobel, 2009). According to Stevenson, Dixon, Hopkins and Luyt (2015) and Torney-Purta et al. (2015), the lack of conceptual clarity about OCBs suggest the need to reconnecting the concept of OCBs with its theoretical individual citizenship origins.
Objectives: This study aims at evaluating if interest of the individual in common good (e.g.,
greater civic engagement) is associated with OCBs in Chilean workers. For example, Van Dyne
et al. (1994) studied OCBs as part of the active citizenship of individual by engaging him/herself
to her/his workplace. The active citizenship has been studied in political and community
psychology as civic engagement (Flanagan & Faison, 2001), which refers to beliefs (e.g., social
justice), behaviours (e.g., voting, protesting), knowledge (e.g., democratic institutions) and skills
(e.g., organise a meeting) that benefit society that derive from the interest of the individual in
contributing to the common good (Lenzi, 2011).

Method and results: Preliminary findings from a multiple regression analysis on a sample of
Chilean workers (N = 270; 48% females; Mage = 37.6 (11.7)) using SPSS statistical software,
provided partial support to the relation between civic engagement's dimensions (e.g., civic skills,
social responsibility, social justice, political efficacy, political behaviours) and global OCBs (e.g.,
3 items per each dimension; altruism, civic virtue, conscientiousness, courtesy, sportsmanship).
Although civic skills (r = .283; p = .000), social responsibility (r = .196; p = .001), political efficacy
(r = .168; p = .006) and unconventional political participation (r = -.218; p = .000) correlate with
global OCBs, the predictors were civic skills (β_CS = .121; p = .001), conventional political
participation (β_PP = .065; p = .021) and unconventional political participation (β_UP = -.135; p =
.000). The explained variance was moderate (e.g., R² = .173). All the scales under study had
good reliability estimated by alpha the Cronbach between .71 to .88.

Discussion: Different to what was estimated, social justice and political efficacy do not explain
OCBs. The senses of social justice and political efficacy had been described as central beliefs
associated to civic engagement (Crocetti, Jahromi & Meeus, 2012; Watts & Flanagan, 2008),
and this suggests the need to clarify under which theoretical perspective could consider OCBs
as an expression of active citizenship. This study suggests that OCBs would be less associated
with civic beliefs (e.g., social justice, political efficacy) and more with civic competencies (e.g.,
civic skills, political participation). Future studies should estimate the association between OCBs
and civic engagement, in different national and organisational contexts.

P70: Applying Models of Behaviour Change to Overcome Organisational Conflict and
Increase Collaboration in the Oil and Gas sector
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In order to adapt to the rapidly changing situation facing organisations operating in the UK
continental shelf (UKCS) the authors propose a range of theoretical approaches to increase
organisational collaboration within the Oil & Gas industrial supply chain, to unlock small pools (a
fields of resource defined as less than 50 million barrels of oil equivalent (BOE) technically
recoverable).

The gross value of undeveloped discoveries in small pools in the UKCS is estimated at $175bn
to the UK economy. Small pools tend to attract a wide range of organisations across the supply
chain, of varying sizes. However, collaboration between these organisations has historically been
limited and has led to a range of bespoke equipment and processes, rather than agreed
standards; which reduces the efficiency of subsea infrastructure as a whole.

The research project described in this poster, funded by the Oil and Gas Technology centre,
uses an ethnographic approach, embedding the research team in two competing organisations
to understand the barriers to collaboration and may use an action research approach to facilitate
organisational change.
This poster provides an discussion of the application of theoretical approaches from occupational health psychology to implement behaviour change in the oil and gas sector. Taking both an inductive and deductive approach. These models may include stages of change, the continuous improvement cycle and elements of game theory and rational choice theory (in addition their theoretical critiques). To unlock the value of undeveloped resources in small pools of the UKCS requires not only technological innovation but also, behaviour change in the industry at large, moving towards more collaborative and cooperative modes of interaction.

**P71: An Optimized Measure of Human Resource Management Practices**  
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In order to adapt to rapid change in today's workplace human resource management (HRM) practices are key managerial tools in enhancing employee motivation and psychological wellbeing. They refer to organizational activities directed at managing the personnel and ensuring that the resources are employed efficiently towards goal attainment (Armstrong, 2014). For this purpose, validated and reliable measures of HRM practices using employees as the source of data (employee-level) are needed (Gerhart, Wright, & McMahan, 2000). However, current measures do not include a complete set of HRM practices (e.g., Huselid, 1995) or are showing poor psychometric properties (e.g., Fabi, Lacoursière, & Raymond, 2015). To address this concern, this study aims to propose an optimized measure of HRM practices, which is exhaustive, yet concise. This is achieved through the re-evaluation of the factor structure of a measure developed by Geringer, Frayne, and Milliman (2002) and adapted in French by Fabi, Lacoursière and Raymond (2015). The initial version consisted of 73 items measuring the degree of importance employees place on ten HRM practices: work-life balance, leadership, communication and participation, performance appraisal, selection, socialization, training and development, compensation, benefits, and work design. Although this measure offers a large set of HRM practices, its factor structure has never been adequately examined.

To address this issue, we build on recent development in exploratory structural equation modeling (ESEM) theory (Marsh, Morin, Parker, & Kaur, 2014). Specifically, we investigate the factor structure of the scale using ESEM. Data were collected through a survey distributed to 979 employees of Canadian organizations (48% men, average age of 33.48 years). Confirmatory factor analysis (CFA) and exploratory structural equation modeling (ESEM) were conducted in order to examine the factor structure of the measure. The optimized measure consisted of 38 items assessing the degree of importance employees place on HRM practices. Results show satisfactory psychometric properties (factor structure, measurement invariance across gender and years of experience in the organization). The findings also illustrate the relevance of using ESEM to test factor structure, instead of CFA. Indeed, ESEM analysis showed an overall better adjustment ($\chi^2(382) = 834.143 \ (p < .01)$, CFI = .96, TLI = .92, RMSEA = .02) and there were no problematic cross-loadings ($\geq .30$). Theoretical and practical implications will be discussed in the light of ESEM theory and research directions on HR practices will be outlined.

**P72: Configural, Metric, and Scalar Invariance of Colquitt’s Organisational Justice Scale Across Workers Belonging to Different Industrial Sectors in Chile**  
Viviana Rodríguez, Karla Carvajal  
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Organisational Justice (OJ) has been studied in various job contexts and related to different organisational outcomes such as Performance, Withdrawal and Counterproductive Behaviours. At the same time, in a psychosocial risks context, OJ has been related to Mental Health, Work-
Related Stress, Work-Family Conflict, Job Satisfaction and Sleeping Problems, proving the importance of OJ research. Likewise, the most used measure to test the workers OJ perceptions is the scale developed by Colquitt (2001), which consists in 20 items distributed in four sub-dimensions: procedural, distributive, interpersonal and informational justice. The aim of this study is to examine the measurement invariance of Colquitt’s Organisational Justice Scale across samples of workers that belong to four different industrial sectors in Chile: Mining (n = 418), Retail (n = 266), Health (n = 269) and Education (n = 159). Multigroup confirmatory factor analysis was used to estimate a measurement model of the OJ construct and its measurement equivalence across Chilean workers. The results confirm configural, metric and scalar invariance of this scale. These results can allow researchers to make more valid inferences about the differences in the Organisational Justice scores, both for Chilean workers and workers from countries where this scale has been validated.

P73: Socio-Economic Factors of Safety Climate
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Safety climate research most frequently focuses on individual, team, or organisational-level factors that influence safety climate. Our study takes a macro view in investigating safety climate using economic archival data. Particularly, we are interested in economic attributes that may indicate available resources, policies, markets, or range of industries and their association with safety climate. Previously, global safety research indicated that GDP was meaningfully positively associated with country-level serious occupational injury rates (Stoffregen, Giordano, & Lee, 2018). Therefore, examining economic variables and their effects on safety climate based on prospective/longitudinal framework is of interest. Our study examines the economic variables of: GDP, average annual wage, inflation rate, corruption index, total gross debt, budget deficit/surplus, GINI index, cost of living, household debt, unemployment rate, and purchasing power parity for 2010, 2011, and 2012 respectively and their association with 2013 psychosocial safety climate.

We adopted PCA to reduce the data of economic factors as well as to address the potential multicollinearity issues given that some economic variables are likely to be highly correlated. Based on PCA, the PC scores were introduced as predictors for safety climate score for 2010, 2011, and 2012 data respectively. PCA results from 2010 indicated two factors explaining 64.89% cumulative variance of the entire economic factors. Principal component regression was conducted using the two factors in predicting 2013 safety climate. Results indicated the two factors are significantly associated with safety climate ($F(2, 27) = 9.39, p = .001$, adjusted $R$-squared = 36.65). Next, PCA results from 2011 indicated two factors explaining 60.07% cumulative variance of the entire economic factors. Principal component regression was conducted using the two factors and 2013 safety climate. Consistent with 2010, 2011 results indicated the two factors significantly predict safety climate ($F(2, 27) = 8.42, p = .001$, adjusted $R$-squared = 33.85). The final PCA conducted with 2012 data also indicated two factors, explaining 63.47% cumulative variance of the entire economic factors. Principal component regression was conducted using the two factors and 2013 safety climate. Results indicate the two factors significantly predict safety climate ($F(2, 27) = 10.02, p = .001$, adjusted $R$-squared = 38.35).

PCA results for three respective years, 2010, 2011, and 2012, consistently indicated two latent economic factors. When these factors were regressed they were consistently significantly associated with 2013 psychosocial safety climate at the country-level. The variance explained in each model is substantial, suggesting that economic factors play a key role in the country’s safety climate. It is impossible to separate economic factors and safety policies/regulations. Health and
safety policies are expensive; however, they promote safer working environments (Van den Bergh, 2009). Countries face challenges in balancing competing values for resources. This proposes a need for a new paradigm of OSH which is less reliant on economic factors. For example, open-source safety training could be a valuable alternative for countries/organisations that are concerned with saving costs yet promoting safety.

**P74: Psychosocial Safety Climate and its Assessment in Germany – Preliminary Results**

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Psychosocial safety climate (PSC) is conceptualized as a specific dimension of organizational climate and describes “shared perceptions [of workers] regarding policies for the protection of worker psychological health and safety” (Hall, Dollard & Coward, 2010). It is assumed to cover four distinct, yet related domains, two referring to senior management (support and commitment for stress prevention; priority to psychological health and safety) and two to the organization as a whole (communication; participation and involvement). For assessing this construct, a 12-item questionnaire exists that has been used in various studies.

However, as of today, no established instrument for assessment in Germany - e.g. in the context of workplace risk assessment and national surveillance - is available. Moreover, the postulated four-factor structure of the instrument raises the question of whether it is justified to solely calculate a mean score over all items – as has been done so far in many cases – or whether separate mean scores for the factors should be used in the future.

Hence, the objective of our project is i) to translate the English PSC items into German and test their comprehensibility in a German context, considering national legislation, possibly resulting in revising items, ii) to put the instrument’s structure to a test and iii) to investigate the instrument’s association with other psychosocial working conditions as well as work- and health-related outcome measures.

A two-stage procedure is applied to fulfill these aims. In stage I, the pretest, after translation and adaption of items, cognitive interviews with 25 employees were conducted to identify items that are difficult to understand for workers, leading to a revision of items. This process made clear that a definition of “psychological health” is needed to ease understanding among workers.

In stage II, the quantitative main study currently ongoing, the revised PSC questionnaire is applied among around 2000 employees from different organizations. Based on this data, the instrument’s internal consistency, structure and associations with other measures (psychosocial working conditions, health- and work-related outcome measures) can be assessed.

Our presentation first provides a summary of results from the cognitive interviews. Based on the first wave of data collection from the main study, results on the instrument’s quality (e.g. number of missing answers per items, frequency of the items’ answering categories, internal consistency) as well as on the instrument’s assumed four-factor structure will then be presented.

These results allow us to identify those aspects of the PSC instrument which will require further investigation on the data from the second wave of data collection that will be available by the end of the year, when associations with relevant outcomes will also be assessed. The final results will be the basis for a revised version of the PSC instrument ready for application in the German context.
P75: Card Sorting: A New Method of Measuring Perceptions of Safety Culture
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Safety culture has been both theoretically and empirically tied to a variety of safety-related outcomes. The purpose of this study was to determine the predictive validity of a safety culture card sorting exercise as an alternative measure to traditional Likert-type measures of safety culture. The card sorting exercise in this study asked participants to choose the best descriptor for their organization in sets of five cards in ten different categories. Specifically, participants were given a set of five cards and chose the one that best described their organization. This process was repeated for each card category. The 10 card sorting categories were: leadership, supervisor visible commitment, production pressures, organizational learning, communication, resources, rules and procedures, trust levels, training, and workforce involvement. Three hundred and forty-two employees were asked to complete the card sorting task as well as Likert-type scales of organizational safety climate and safety behaviours (e.g., “If I see someone breaking safety procedures I confront them”). Using multilevel modelling, we found that the card sorting total predicted safety behaviours above and beyond traditional measures of organizational safety climate and group-level safety climate. On average, safety behaviours were positively related to group-level safety climate and the card sorting total. However, organizational safety climate did not significantly predict safety behaviours over the card sorting total and group-level safety climate. These findings lend support to the use of the card sorting exercise to measure safety culture.

P76: The First Steps of Adaptation and Validation of Psychosocial Safety Climate for Use in Sweden
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Background: New provisions on Organisational and Social Work Environment have contributed to more attention being paid to the role of organisational conditions for a healthy work environment in Sweden. This highlights the relevance of Psychosocial Safety Climate (PSC) which according to Dollard and Bakker (2010) can be defined as the employees’ shared perceptions of the organizations’ guidelines, practices and procedures to protect the employees’ psychosocial health and safety. A scale for PSC has been developed (Hall, Dollard & Coward, 2010) and validated for use in an Australian context, primarily. The PSC measures how employees perceive that the senior management 1) engages, 2) prioritizes, 3) communicates and 4) involves employees in psychosocial workplace safety issues. The aim of the presentation is to present results from a cognitive interview study used in the first steps of the process of adaptation and validation of PSC for use in Sweden.

Method: We selected informants in order to obtain variation regarding age, gender, level of education, type of sector, and size of workplaces. Ten personal interviews using a think aloud procedure in combination with probing questions were conducted based on an interview guide. Data collection went on until saturation of data was obtained. The interviews were audio-recorded and verbatim transcribed. The interviews were done in three rounds, each round followed by an initial analysis leading to adjustments of the questionnaire. The initial analyses were based on a predetermined coding scheme in order to gain insight in informants’ understanding of key concepts, intended shift of referent from individual to organizational level, and their use of response options. Finally, we analyzed the remaining data by applying an inductive approach.
Results: While the translation of a central concept of psychological health showed to be unproblematic, the term senior management resulted in inconsistent interpretations among the informants. Most often, the informants referred to their immediate manager rather than senior management. The informants perceived it as difficult to respond to the statements that concerned the whole workgroup rather than themselves as individuals. They also commented that responding to statements was more difficult than responding to questions. Informants who had trouble responding were inclined to choose the middle response option. In addition, a number of informants found some statements to be redundant regarding the 12-item version.

Conclusion: The initial process including use of cognitive interviews showed to be valuable for the adaptation of the questionnaire for use in a different context than where it originates. The results support content validity of the Swedish adapted translation of PSC-12.

P77: Intricacies of Virtual Teams: An Insight into the Performance and Wellbeing of Virtual Employees in the IT sector
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Virtual teams provide important ways to conduct business. A virtual team consists of team members working on a specific project who are physically dispersed and who collaborate with each other through the use of information technologies. However, challenges arising from specific employee characteristics with regard to lack of information system self efficacy, weak team identity and insecure attachment style within a team may pose a significant impact to the individual performance and employee wellbeing. The current research aims to look into factors that may facilitate or act as a barrier towards outcomes such as performance in terms of employee role breadth (how much an individual contributes to their described in-role and extra-role responsibilities) and wellbeing (how an individual’s level of work engagement is affected by specific factors) through its effect on collaborative job crafting.

The data were collected at three time points through an online survey, with the outcomes including both the employee role behaviour and individual wellbeing measured twice. The study employed latent change score modelling on the collected multilevel data to measure change in employee role behaviour (in-role and/or extra-role behaviours) and wellbeing (work engagement). A total of 125 virtual teams from five multinational IT organisations participated in the study. The results were analysed using Multilevel Structural Equation Modelling (MSEM) to understand the association between variables and explain their role in individual performance and employee wellbeing.

The results indicates that high information system self efficacy in a team have a positive impact on individual performance (in-role and extra-role behaviours) and employee wellbeing (work engagement) through collaborative job crafting. Additionally, strong functional background social identity in a team is negatively associated with individual performance (in-role and extra-role behaviours) and employee wellbeing (work engagement) through team job crafting. The final results are presented as well as the main practical implications derived from the study.

P78: The Effects of Organisational Downsizing on Surviving-Employees' Mental Health
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This work summarises the results of the PREISAP-project, in which the effects of restructuring on employees' work-related and mental health were investigated in Spanish companies. This work received the award for the best oral communication in the X Spanish Congress of Nursing
and Occupational Medicine. The PREISAP study aims to measure the impact of altered psychosocial risk factors on the level of perceived mental health, following the restructuring suffered by two Spanish companies in the period 2007-2014.

The psychosocial risk index (IFRP-Q) was evaluated and the presence of traumatic events was considered. The level of Mental Health (GHQ12), Perceived Health (SF36), Stress Level (FOIH), General Discomfort Index (IGM) and Paranoid Suspicion (IFC) were considered. The association between the personal / work characteristics and the type of restructuring with the welfare index is studied, indicating the p-values of each test, using Pearson’s Correlation Coefficient, Student's t and Anova. Odd Ratio (95% CI) was calculated for the multivariable analysis. The results show altered values of psychosocial factors according to the type of restructuring, a worsening of general health and mental health, higher levels of stress and IGM; With significant differences according to gender, age and occupation.

P79: The Importance of Workplace Climate for Workability
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There is an established body of research that has explored workability (Ilmarinen, Tuomi & Seitsamo, 2005) in relation to health factors, such as musculoskeletal problems (e.g., Tuomi, Ilmarinen, Martikainen & Klokars., 1997). Although important for work capacities and outcomes, the role of the work environment has received little, if any, research attention in relation to workability. It has been suggested that the overall workplace climate or environment should also be considered (Seitsamo, Tuomi, Ilmarinen & Gould, 2008). Therefore, the aim of this study was to examine the effects of workplace climate on individuals' workability. To understand workplace climate we use the Workplace Characteristics model (WPC; Karanika-Murray & Michaelides, 2015) which, based on self-determination theory, describes the characteristics of the shared workplace that have the potential to impact on individuals' motivation and wellbeing: autonomy, competence and relatedness-supportive climates. The model has received support in relation to intrinsic motivation and job satisfaction (Karanika-Murray, Michaelides, & Wood, 2016). There is some evidence that some aspects of the workplace including climate dimensions, for example, community, demands, and leadership, can affect workability (Ilmarinen & Tuomi, 2004). Using survey data from 633 employees in the civil service we tested the effects of three climate dimensions on workability using hierarchical linear modelling while controlling for general health and age. The analyses supported effects of all three types of climate on workability. These findings extend the literature by providing an understanding of the role of the workplace on individual workability. In practical terms, they also have implications for how aspects of the workplace climate can be modified and interventions implemented in order to bolster workability.

This work is supported by the European Union Programme for Employment and Social Solidarity - PROGRESS (2007-2013)

P80: Work Self-redesign: Interactive Effects of Task Autonomy, Job Crafting, and Idiosyncratic Deals on Quality of Working Life and Occupational Health
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Control and influence at work are established crucial factors in occupational health. In addition to classic constructs of job autonomy, proactive perspectives in work design emphasize self-initiated, change-oriented behaviours through which employees expand their zones of self-determination. Two suggested ways are unauthorized job crafting and interpersonally negotiated
idosyncratic deals (i-deals), special work arrangements authorized by supervisors or other senior managers. Integrating these perspectives, we propose a tripartite model of work self-redesign, comprising: a) exercise of task autonomy; b) task-focused job crafting; and c) negotiation of task i-deals. We base our model on theory regarding the centrality of work tasks, growth-oriented activities by the individual, ongoing reciprocal influence between person and environment, the social embeddedness of work, and emergence of new task configurations based on cumulative multimodal modifications. We then empirically investigate direct and interactive effects of the three components on indicators of individual quality of working life and occupational health.

Analyses are based on survey data of an occupationally heterogenous sample of N=279 German-speaking employees. Task autonomy, task crafting, and task i-deals were each measured using sets of four reliable (α(4)=.81/.89/.88) and previously validated items. Exploratory and confirmatory factor analyses fully supported the distinctness of these constructs. Their main and interactive effects were examined in seven moderated multiple regression models (M1-M7); outcomes reflected positive health (M1: affective commitment, α(5)=.88; M2: meaning of work, α(6)=.94; M3: wellbeing, α(5)=.87), work-home interactions (M4: enrichment, α(4)=.78; M5: conflict, α(6)=.83), and negative health (M6: emotional exhaustion, α(5)=.80; M7: psychosomatic complaints, α(12)=.86). Controls were gender, age, and additional work characteristics of task complexity (α(3)=.78), task interdependence (α(4)=.81), and time pressure (α(2)=.79).

Evidence for main and/or interactive effects was found for all outcomes. Whereas task autonomy showed beneficial relationships with most criteria (M2, M3, M5, M6, M7), task i-deals exerted selective main effects only on positive indicators (M1, M2, M4). The role of task crafting was ambiguous with an unexpected positive association with work-home conflict, possibly indicating over-engagement, yet favourable implications in conjunction with i-deals. Synergistic 3-way interactions were found with respect to affective commitment (M1), meaning of work (M2), and work-home enrichment (M4); 2-way interactions between i-deals and crafting explained additional variance in affective commitment (M1), wellbeing (M3), emotional exhaustion (M6), and psychosomatic complaints (M7).

This study extends work design research by investigating the interplay of work characteristics, job crafting, and idiosyncratic deals on occupational wellbeing and health. Results suggest a complementary role of task i-deals and task-focused job crafting, especially when flanked by high task autonomy. By itself, task job crafting may resemble self-hazardous work behaviour or maladaptive coping to compensate work goal conflicts or ambiguity. Attention is called to differential result patterns pertaining to quality of working life, the work-home interface, and health impairment. Methodological limitations, further research needs, and implications for practice are discussed.

P81: Employee Authenticity: The Roles of Job Crafting, I-deals and Satisfaction of Basic Psychological Needs
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Employee authenticity has been gaining increasing research attention recently. Authenticity concerns acting in line with one’s true self (Harter, 2002; Van den Bosch & Taris, 2014). Being authentic at work is positively related to employee engagement and performance as well as job satisfaction (Metin, Taris, Peeters, Van Beek, & Van den Bosch, 2016). In order to act authentically, employees can adapt their work situations to their needs, personalities and values by means of i-deals and job crafting (Grant & Parker, 2009). To our knowledge, studies have not yet addressed these proactive behaviours as possible antecedents of employee authenticity.
Based on self-determination theory (Deci & Ryan, 2008), we hypothesized positive relationships of dimensions of I-deals and job crafting with employees’ authenticity. Moreover, we hypothesized that satisfaction of employees’ basic psychological needs for autonomy, competence and relatedness would mediate these relationships.

Data for this cross-sectional study were collected among employees using an online questionnaire (\(N = 270\)). All concepts were measured using validated scales. Principal component analyses indicated that the scales represented different constructs. Regression and bootstrap analyses were performed to test the study hypotheses. The results provide support for a positive and significant relationship between relational crafting and authenticity that was mediated by satisfaction of the need for connectedness. Moreover, there was a positive and significant relationship between I-deals regarding work- and task-responsibilities and authenticity that was mediated by satisfaction of the need for competence. Overall, the study results provide partial support for our hypotheses. Implications for research and practice are discussed.

**P82: Nudging and Acceptance-commitment Therapy: Cognitive Aspects of a Mobile Application for Stress Management**

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The negative effects of stress at work in terms of emotional disorders and organisational difficulties have urged the need for new solutions and especially direct-to-user tools such as mobile applications. While new technology can support the architecture of such tools adaptive coping behaviours have also been identified as an important factor for promoting new strategies to cope effectively with stress at work. A study being reported in this paper investigates how technology has been used to influence adaptive coping behaviours and synthesize the key aspects into a conceptual model for creating a new mobile application. A literature review concerning coping behaviours and technology was conducted to gather evidence for the foundation of the conceptual model. The empirical findings of the research will be tested and verified against the theoretical framework consisting of the “Nudging theory” and the “Acceptance and Commitment Theory –ACT”. Particularly, ACT is an empirically-based psychological intervention that uses acceptance and mindfulness strategies mixed in different ways with commitment and behaviour-change strategies, to increase psychological flexibility. In our study, ACT resulted predominant to design the App’s solutions to cope with stress.

Other aspects used to design the mobile application were: the customisation to the user, the use of relevant and tailored information and feedback, the use of positive reinforcement, and indirect suggestions. The conceptual model provides further knowledge of key aspects to be considered when developing persuasive tools that aim to encourage more efficient ways of coping with stressful events.

**P83: The Health Help-point for Managing Work-related Stress Risk in Complex Health Facilities**

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In post-industrialized countries, traditional occupational diseases are decreasing while aspecific and multifactorial stress disorders increase. The Health and Safety Executive in 2016 found that the number of work-related diseases, depression and anxiety in 2015/16 was 468,000 with a prevalence of 1510/100,000 workers. EU-OSHA has recently published a summary of the 2016 annual report describing the activities planned for the analysis and management of psychosocial
risks and occupational health and safety. In Italy, several universities and local health authorities have provided specific psychological listening points for employee stress. However, there is no scientific evidence proving the effectiveness of these activities and/or a synergy between different professional figures in the use of this tool.

In our hospital we have developed a path of psychological support for employees, the so-called health Help Point to deal with individual discomfort. This tool is an integral part of the activity plan identified by the Working Group for wellbeing at work, and coordinated by Occupational Medicine. The intervention is part of the organic plan of the improvement actions resulting from the assessment of work-related stress risk pursuant to the Legislative Decree 81/08.

This project aims to prevent work discomfort and, through active listening, make workers capable of analysing the contexts objectively, express their own thoughts to colleagues or superiors, and face stressful situations. The Help Point through the synergistic action between Occupational Doctor and Psychologist consists of six phases: demand analysis, assessment, pre-post evaluation, psychological interviews, feedback and monitoring.

The demand analysis allows to ascertain the motivation that induces a subject to require the psychological intervention, and the Assessment phase, performed by the multidisciplinary team, reconstructs the processes underlying the problems and complaints reported. The psychological support interviews include 15 individual meetings in which the subject acquires functional coping strategies and more appropriate intervention modalities to deal with problems efficaciously. The effectiveness of the psychological intervention is evaluated through the administration of GHQ-12 questionnaires on health in general, and of SF-36 on quality of life, in the pre and post-intervention phase.

At the end of the path, a feedback interview will be carried out to analyse the data collected. If necessary, indications will be provided in order to set a psychiatric and/or pharmacological support on the territory and, according to the timing agreed between team and patient, a periodic monitoring.

The analysis of the Help Point pilot experience demonstrated a reduction of the work discomfort. The administration of GHQ-12 and SF-36 questionnaires showed an improvement in the scores after the intervention. The mean post-intervention value reported in GHQ-12 is in fact in the score range indicating an "adequate functioning" compared to the average pre-intervention value which reported an "alteration of the psychological state of health". Furthermore, the values shown in the 8 scales of the post-intervention SF-36 indicate a marked QoL improvement. The Help Point can be considered an individual protection device able to mitigate the risk of WRS, a risk that however cannot be completely eradicated.

**P84: Coaching as a Leadership Development Tool in a Multicultural Organisation in the GCC: A Practitioner’s View**
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Leadership Coaching has been utilized in organisations in the west for approximately 2 decades, and is regulated by the International Coaching Federation (ICF- established 1995), and the European Mentoring and Coaching Council (EMCC). However, in the Gulf Cooperation Council (GCC), the concept of Leadership Coaching is fairly new, and organisations have a challenging time introducing it as a "tool" for leadership development. The purpose of this paper is to present the ‘Coaching Journey’ of an organisation in the GCC, and share challenges faced.
Over a span of 3 years, coaching was introduced in a telecommunication organisation based in the GCC. Its workforce consisted of approximately 1,600 employees (65 nationalities), and 26% of executives received Leadership Coaching. Coaching effectiveness was gathered qualitatively and quantitatively. Initially, the results indicated that executives shared feelings of scepticism, and were unsure of their nomination for coaching, as they felt that ‘training’ courses would suffice. Over a period of 6 months, the perception changed, and positive feedback was received from the coachees and their teams. The organisation has trained internal employees (executives and managers) to be coaches, creating a coaching culture.

A limitation is that the project is ongoing, and the next phase consists of utilizing the trained coaches across the organisation. The practical implication of this paper is understanding the challenges organisations face where coaching is concerned, in particular as the population is culturally diverse. This paper is unique, as limited research is available on the efficacy of Leadership Coaching in the GCC, in specific when dealing with a multi-cultural workforce.

P85: A Play at Work Intervention: What Are the Benefits?
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Introduction: Organisations are investing time and resources in implementing play at work. However, the possible effects of play at work as an organisational intervention is largely unknown.

Research purpose: This study aimed to determine the effect of a play at work intervention on psychological detachment, work enjoyment, employee performance, and workplace boredom of work teams.

Research design, approach and method: A longitudinal, three-wave intervention study design was followed. The sample consisted of two workteams from a tele-sales company in the North West province in South Africa, divided into the experimental group (n = 9) and the control group (n = 17). A play-at-work intervention consisting of different single- and multi-player games was developed. The experimental group were given the opportunity to play the provided games during their lunch break for two consecutive weeks. The control group played during their lunch break only during the second week of the intervention. Paper-and-pencil-based questionnaires were used to collect data prior to introducing the intervention, after one week of play, and again after the second week of the intervention. Independent sample t-tests were utilised to test for statistical differences between the mean scores, and an effect sizes were calculated with Cohen’s d value.

Results: The results indicated that the play at work intervention positively influenced employees’ psychological detachment during their lunch break. Team performance also increased when the play at work intervention was introduced.

Practical/managerial implications: Employees who participates in play at work during their breaks are likely to find it easier to psychologically detach from their work compared to other employees. According to previous research on psychological detachment, play at work may thus potentially affect employee-workplace relationship conflicts, wellbeing, anxiety, role conflict, job demands and work engagement. Additionally, organisations who implement play are likely to have higher team performance compared to others, thereby improving the profitability of organisations.

Contribution/value-add: This study contributes to the limited research on play at work and its effects on organisational outcomes. This study provided more insight into the effect of play at work on psychological detachment, work enjoyment, team performance, workplace boredom and turnover intention.
Continuous quality improvement is a structured process for involving organisational members in planning and performing continuous improvement (McLaughlin & Kaluzny, 2004). It can be traced back to pioneers as Shewhart, Deming and Juran in the 1900s (Bergman & Klefsjö, 2010). A main feature of continuous quality improvement is its systematic approach and the use of improvement tools and methods. Examples of quality improvement tools and methods are process mapping, the study of variation, test in small scales and the PDSA cycle (Bergman & Klefsjö, 2010).

In previous research scholars have studied relationships between continuous quality improvement and, for example, the work environment. However, it has to our knowledge not been examined how continuous quality improvement tools and methods can be beneficially integrated into a systematic work approach to improve the work environment.

**Purpose:** The purpose of this study is to examine if and how tools and methods of continuous quality improvement can support systematic work environment management.

**Design/methodological approach:** This is a theoretical exploratory study with an interdisciplinary approach. First one of Sweden’s most experienced teacher and practitioner in systematic work environment management will describe the concepts and models in systematic work environment management. Secondly, a researcher anchored in improvement science will describe the concepts and models of continuous quality improvement. Together the practitioner and the researcher will theoretically examine if and how the concepts and models intersect, and how continuous quality improvement tools can be beneficial for systematic work environment management. The researcher will report these findings in a research paper.

**Findings:** This study is now being planned and there are no results to report. However, the future findings will be helpful in fulfilling the objectives of the Work Environment Act, to prevent ill health and accidents at work, and to achieve a good work environment (SFS 1977:1160).

**Originality:** The methodology of combining an interactive and interdisciplinary approach enables an exploration of how continuous quality improvement tools and methods can be used in systematic work environment management. This can be beneficial for workplaces adapting to rapid changes.
P87: No Leader is an Island: Contextual Antecedents to Line Managers’ Constructive and Destructive Leadership during an Organisational Intervention

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Line managers can make or break organizational interventions (Nilesen, 2017), yet little is known about what makes them turn in either direction. As leadership does not occur in a vacuum it has been suggested that the organizational context plays an important role for line managers’ behaviours (Johns, 2006). Building on arguments and empirical findings from both the intervention and leadership literature, we examine if span of control and employee readiness for change are related to line managers’ leadership style during an organizational intervention. Leadership is studied in terms of constructive, as well as passive and active forms of destructive leadership behaviours. As a sample we use employees (N=172) from 37 groups working in a Swedish process industry plant. Multilevel analyses over two time points, using both survey and organisational register data, revealed that span of control was negatively related to constructive leadership and positively related to passive destructive leadership during the intervention. Employee readiness for change was positively related to constructive leadership, and negatively related to both passive and active destructive leadership. Our findings suggest that we need to assess and consider contextual factors if we wish to facilitate line managers efforts to engage employees with constructive rather than destructive leadership during interventions.

P88: Experiences of Decision Making and Incentives to Use Stamina – An Organisational Model Focusing on Systematic Work Environment Management

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Background: The European directives and the Swedish national legislations focusing on work environment are quite extensive. Even though, there are a large number of businesses that do not fulfill their obligations. There seems to be several incentives that influence the decision to engage or not in work-environment interventions, some related to the characteristics of the suggested intervention and others to laws and legislations. However, previous research on incentives have had a broad focus on interventions targeting workplace health promotion and occupational health and safety in general. Furthermore, there is limited knowledge on how these incentives influence the implementation of an intervention. This study is the first of several in the large Stamina project in order to identify factors that promote implementation as well as to investigate effects on work groups. The aim of this particular study is to explore and describe the perspective of the management group regarding how they reasoned when deciding to engage in the Stamina model and what incentives that influenced their decision.

Method: This study is a qualitative study with semi structured interviews. Eighteen representatives from the management groups in 18 municipalities participated in the study. All have been involved in the decision of start using the Stamina model in their municipalities. Data have been analysed with a constant comparative method.

Results: The findings indicate that the participants had various mandates for making the decision however it was found that all participants still described it as important to anchor the decision in the organisation before making the final one. Furthermore, the participants also described how
they put energy on finding strategies to legitimise the decision in their organisations. The participants highlighted several incentives. An important incentive identified in this study was the structure of the intervention which could provide usable support to the first-line managers. Other incentives were about; decreasing sick leave rates, fulfilling legal requirements, and to be part in research.

**Conclusion:** Anchoring was brought up as an important aspect before making the decision and such anchoring of contracts in health promotion activities have previously been shown to increase the possibilities for a successful implementation. This study also indicated that fulfilling legal requirements and provisions is of higher priority than the intervention itself. The participants expressed that it is feasible to use an intervention that is easy to supply in order to fulfill the requirements. This indicate that the modelling of the intervention is not the most important ingredient in order to achieve effective systematic work environment management. However, the findings identified some general characteristics of the interventions that was described as important. Thus, it might be beneficial to highlight a combination of high quality implementation strategies and an intervention that promotes employee and management participation in order to create effective systematic work environment management at the workplaces.

**P89: The Role of Workaholism in the Relationship Between Daily Workload and Strain Experiences**

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Workers face numerous pressures and job demands in today's fast-paced economy. Prior research has shown that daily workload can negatively affect employee’s strain experiences at home that evening (e.g., Ilies et al., 2007). Strain at night has been also shown to influence affect the following morning (e.g., Wang et al., 2013). The present study draws on the effort-recovery model (Meijman & Mulder, 1998) and the stressor-detachment model (Sonnentag & Fritz, 2015) to examine the relationship between daily workload, affective and strain experiences at home, as well as recovery the following workday. Additionally, the present study contributes to the understanding of individual factors that can further hinder the recovery process by examining the role of workaholism in the stressor-detachment process. Daily workload is hypothesised to relate to increased anxiety and strain-based work-family conflict in the evening. These relationships are expected to be further heightened if the individual is high on workaholism. We will then examine the extent to which negative experiences in the evening hinder recovery experiences (e.g., sleep duration, next day mood) and next work day effort, as well as the possible negative crossover of employee strain experiences to one’s spouse. A total of one hundred six employees and their spouses completed self-report surveys for ten consecutive work days (Monday through Friday). Although we have finished data collection, we have not yet analysed the data. Data will be analysed using hierarchical linear modeling.

**P90: Effect of Cognitive - Emotional Training on Labour Satisfaction and Occupational Wear of Nursing Staff**

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**Introduction:** Job satisfaction is one of the variables studied in the burnout relation; it is defined as a positive or pleasant emotional state resulting from a subjective perception of a person’s work experience. Nevertheless, some studies conclude that the relationship between these variables is negative; therefore, the goal of this investigation was to assess the effect of cognitive-emotional training in improving job satisfaction and in reducing occupational burnout of the nursing staff in a social security hospital.
Material and Methods: A two-phase quasi-experimental study was made of pre- and post-testing of random groups. The first phase obtained a level of job satisfaction and occupational burnout of full-time morning shift personnel at a hospital in Guadalajara. Information was gathered from 100 nurses using the MSL35 Job Motivation and Satisfaction and the Occupational Burnout Scale (OBS).

The second phase dealt with the intervention of a cognitive-emotional training program to increase the level of job satisfaction and reduce occupational burnout levels. Two groups were chosen, one for intervention and the other a control group, each with 18 randomly chosen participants.

Results: Significant differences were found in increased job motivation and satisfaction and in the reduction of burnout and depersonalization between the experimental and the control groups post-test. The size of the effect observed in the treatment group was medium for the motivation dimension \((d = .68)\) with a 32% increase while the burnout reduction dimension \((d = 0.52)\) showed a 25% reduction, and the depersonalization dimension \(d = 0.70)\) was 33%. The satisfaction dimension was small \(d = 1.46)\) although the improvement percentage was 59%.

Conclusion: The training proved to be adequate for improving job motivation and satisfaction levels as well as for reducing emotional burnout and depersonalization.

P91: Collaborative Supervision of One-time Telephone Counseling in a Japanese EAP
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The present study aimed to investigate the tasks and problems regarding one-time telephone counselling by professionals in a Japanese EAP (Employee Assistance Program) by means of individual supervision. The significance of collaboration among 2 supervisors and 26 supervisees and actual functioning of the two different supervisions were discussed through the investigation. Supervision was conducted annually for 2 years by supervisors, including a clinical psychologist outside of the EAP, and a psychiatric social worker inside of the EAP. The two supervisors and the three supervisees analyzed qualitative data collected during supervision. These data were analyzed according to similarity and frequency and classified into categories.

The tasks revealed during supervision by the internal supervisor consisted of 3 categories such as case formulation, intervention, and keeping framework. Sub-categories indicated the necessity of the assessment of clients according to clients’ needs, and interventions based on agreements with clients. The problems presented to the external supervisor consisted of 3 categories such as ambiguity, embarrassment, and stress. Subcategories indicated the difficulty to confirm facts in clients’ statements, and difficulty in having empathy.

These results indicated the respective function of each supervisor. The internal supervisor engaged in managerial supervision that advises practical skills, and the external supervisor engaged in clinical supervision that deals with the supervisees’ affection and attitude. These results imply the significance of complementary differentiation of each supervisor. The present study implies the possibility of collaboration between 2 supervisors in charge of instructing counselling skills and support to cope with emotional problems of supervisees, respectively.
P92: Results of a Web-based Stress Management Training: A Randomised Controlled Pilot Study
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With stress-related health problems being associated with costs for individuals, organisations and societies, prevention becomes an important means for the early targeting of such problems. In view of the many individuals experiencing stress, it seems valuable to develop easily accessible programs that allow individuals to develop their skills in how to think and act around various daily life stressors. Such programs can be delivered through internet by the use of computers or smart phones to individuals in their work-life settings, that is, within an organisation, or made available to any adult who would want to develop various ways of dealing with daily life stress. However, such programs need to be carefully evaluated. Previous findings suggest that stress-management programs delivered using information- and communication technological devices can reduce stress. This means that preventive efforts to reduce stress through information- and communication technology have the potential to reach many at a relatively low cost, and also have positive effects.

The present pilot-study investigated the feasibility of a newly developed online stress management program and also investigated its effects on stress-related health outcomes in a convenience sample of working adults. Working adults were invited to the study (n=138) and were told that they would be randomised to one of two conditions: an intervention group (n=58) getting immediate access to the online program once they had completed an online questionnaire, or to a wait-list control group who was to get access to the online program once the study period had been completed. The online stress management program consisted of seven parts, with each estimated to take a week. Each part included sound-clips and film-clips along with exercises. All participants were asked to provide self-report data on stress and stress-related health complaints, including anxiety and symptoms of depression, along with demographics, at two points in time: 1) before getting access to the program and 2) after finalising the program. A time limit was set for access to the program. At the follow-up, participants in the intervention group (responders: n=25) were asked about factors hindering and facilitating their participation. Despite all individuals volunteering participation and signing up because they expressed an interest in stress management, the results showed poor adherence in the intervention group. This seemed partly related to technological solutions within the program versus participants’ user preferences. The analyses of self-ratings showed no statistically significant effect for any of the outcome measures. However, there was a significant effect showing that perceived stress and stress-related complaints decreased over time in both groups. This finding may relate to the relatively poor adherence in the intervention group, but may also result of few participants completing the follow-up. Additionally, seasonal variations in occupational stress and family life along with factors hindering and facilitating the use of leisure time to participate in a stress management program may be factors explaining the findings. Future studies should strive for improving adherence, for instance by delivering similar stress management programs during working hours within specific organisational settings.

P93: Internet-delivered Treatment for Work-related Stress (iMARS)
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Introduction: Since the 1990s work-related stress has received increased attention in Denmark. Meta-analyses find medium–large effect sizes (Cohen’s d=0.68–1.16) for stress management interventions. At the Dept. of Occupational Medicine we carried out the randomized, controlled
MARS trial in 2007-10 and found a large effect size ($d=0.92$) using cognitive behavioural group therapy in a sample of predominantly middle-aged urban female workers with medium-length education. Internet-delivered stress management may reach a broader population of workers and studies outside of Denmark have demonstrated large effect sizes ($d=0.83–0.96$). However, the effects of stress management interventions are sensitive to the country-specific labour market context. Thus, we aim to adapt the MARS manual to an internet-delivered format, iMARS, and pilot test the intervention and the user experience.

**Methods:** For iMARS we will develop 9 modules containing video, text/figures, and assignments, using an established IT-platform that has been successfully employed at the Dept. of Functional Disorders, Aarhus University Hospital. Patients referred to MARS will be offered iMARS as an alternative. Those consenting will complete questionnaires about work, symptoms, and work ability before and after the intervention, and provide feedback on the user experience.

**Results:** For the conference we will present challenges from developing iMARS, e.g. whether the identification and normalisation process that the MARS group format offers can be emulated by presenting patient stories video-narrated by actors. Also, as participants have decreased concentration and memory span due to their stress condition, striking the balance between information density and presentation through video, text and figures will be crucial to the user experience.

**Discussion:** The iMARS intervention holds promise as a flexible treatment format that may have effects similar to the established MARS group intervention. The internet-delivered format may help alleviate current inequalities in health by reaching groups less likely to receive or seek psychological treatment, i.e. young persons entering the job market, those living outside of the major cities, those working in predominantly male professions, or those working in crafts or lower skilled jobs.

**P94: An Assessment to Solutions Approach to Workplace Wellbeing in a Large Public Sector Organization**

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Recent efforts in organisational research and practice have underscored the importance of psychological health and safety in the workplace, triggering action in public and private organisations. As an example, the Canadian Standards Association and the Bureau de normalisation du Québec (CSA Group/BNQ, 2013) published a national standard on psychological health and safety in the workplace, which helps organisations identify, control and, where possible, eliminate hazards that threaten psychological wellbeing, and to proactively set the conditions for psychological health and safety in the workplace.

Learning from the achievements in science and best organisational practices in the domain of workplace wellbeing, we developed a framework of workplace wellbeing that nests the key risk and resilience factors identified in Canada’s national standard based on the Job Demands-Resources (JD-R) Model (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004). Applying the JD-R Model and introducing organisational outcomes into our workplace wellbeing framework allows for analysis on how various workplace factors relate and interact to affect workplace wellbeing. We assembled a measurement tool to (a) assess the components of the framework, (b) test the effects of the demands, risk and resilience factors on individual and organisational wellbeing outcomes, and to (c) inform interventions aimed at positive change.
This paper presentation will convey our workplace well-being framework, our workplace well-being model, and highlights from recent findings. It will demonstrate how the theoretically established, and empirically tested, paths and relationships can inform action strategies rooted in science. Our occupational health/organisational psychology approach is one of primary intervention at the group level or higher. It emphasises establishing the workplace conditions that help prevent foreseeable psychological injury, foster optimal individual and group functioning, and provide the psychosocial resources necessary to cope with work demands.

P95: Writing Exercises Between Coaching Sessions to Support Psychological Capital
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Coaching practices are increasing worldwide and, according to the meta-analysis by Jones and coauthors (2016), have significant positive effects on job attitudes, motivational outcomes, performance, and well-being. However, many differences exist across coaching practices with respect not only to who acts as coach (external, internal, self-coaching) but also features of the coaching delivery. In particular, the literature offers little guidance on specific techniques to use during or between sessions.

Our aim in this study is to explore how writing exercises, assigned as homeworks between coaching sessions, can address and support individuals’ psychological capital, a critical resource for self-development. Psychological capital (PsyCap) is an individual’s positive psychological state characterised by self-efficacy, hope, optimism and resilience (Luthans et al., 2007) and is positively associated to well-being and positive work behaviours (Luthans & Youssef-Morgan, 2017). Therefore, PsyCap may be considered an outcome of coaching interventions in its own regards, and also an individual resource that makes coaching effective.

We collected data from a sample of 27 employees working in a marketing company in Portugal, who were involved in a coaching program. Thus, this study is part of a larger project but here we focus on one specific technique used.

Participants were asked to fill in three writing exercises (inspired to the reflective writing practice) in between one coaching session and another. They were required to reflect about: a) events that happened to them in relation to their developmental goals, since the last session, and their own behaviours, feelings and thoughts (1st exercise); b) positive events that happened to them in relation to their goals, since the last session, and their own behaviours, feelings and thoughts (2nd exercise); and finally c) overall progress towards their goals (3rd exercise). The texts were analysed using NVIVO Software and coded following thematic analysis within the PsyCap framework.

The results showed that the reflective writing exercises activated and likely strengthened the four PsyCap dimensions as internal resources for pursuing developmental goals.

All three exercises targeted one or more of the PsyCap dimensions. The first exercise, compiled after the first coaching session during which development goals are set, therefore when individuals start acting toward their goals and are likely to have setback, was especially relevant for resilience (the ability to sustain and bounce back when facing obstacles). The second exercise, focusing on the positive episodes, was particularly relevant for self-efficacy (the confidence to take on and put effort to succeed), hope (the perseverance finding the paths toward goals) and optimism (the ability to make positive attributions). The third and final exercise, asking about progresses on one’s goals, targeted all four dimensions and the findings supported this.
The small sample size suggests caution in reading these results, and yet they have further implications for coaching practices since the exercises could be fruitfully adopted in traditional but also online and self-coaching programs (Losch et al., 2016).

**P96: Stress Management Training for Law Enforcement Professionals**

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To maintain high standards of organizational performance requires not only suitable technical support, but more importantly, an innovative management of human resources. Tactical jobs such as law enforcement, firefighting and military are fast-paced, psychologically intense and failure can have tragic consequences.

Psychological assessment in this case is an important HR procedure, as the information being provided is in many cases decisive for employment decisions. It is known that in high-risk activities are recommended people who assesses properly stressful event and typically use problem-focused strategies. But the research conducted in this area has shown that only half of the variant of coping strategies can be explained by the characteristics of personality. In this context, the selection process is not enough to ensure the successful of employees in these activities.

Considering this, it is necessary to implement programs designed to increase stress resilience. Learning how to manage stress is critical for police officers who work in highly volatile and dangerous environments. High levels of stress can adversely impact an officer's professional performance and personal life. There is no one-size-fits-all solution to manage stress, so individuals must experiment and determine which techniques and strategies work best for them.

Stress Inoculation Training is a multifaceted type of cognitive-behavioral therapy designed to help individuals cope with stress. This specific training have several goals: to help people recognize and understand their own natural stress responses; to help them learn to control these responses when they emerge; to gradually increase the level of difficulty and challenge; and to do this in a controlled, relatively safe training environment (e.g., simulator) before exposing to real-life and more dangerous situations.

This paper aims to present how all of these pieces were combined in a demarche in Romanian Police whose goal were to create resilient and tough tactical personnel, who are built to succeed under stress.

**P97: Investigating the Contributions of Compassion Fatigue, Compassion Satisfaction as Predictors of Burnout: A Cross-Sectional Study with Theatre Nurses**

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Nursing is described as a highly stressful occupation with high levels of burnout (Demerouti, Bakker, Nachreiner & Schaufeli, 2000) with studies reporting its national and international prevalence. The emotional content in nursing, the caring for others, is associated with compassion, a core value of these healthcare professionals (Von Dietze & Orb, 2000) and, as proposed by Sinclair et al (2017) a foundation of quality healthcare. Compassion satisfaction regards the positive work experience resulting from the empathetic connection with the patients when providing care. This enhanced work experience is associated with more positive emotions
and an increased meaning at work (Hegney et al., 2014). Although the provision of care to those in need is described as a positive facet of nursing and its main professional value, the negative facet described as compassion fatigue is also considered and refers to the nurses’ “lack of sympathetic reaction to others suffering” (Figley, 1995, p. 7). The literature underlines that the harmful effects of compassion fatigue on wellbeing varies in different nursing specialities but it is experienced by all nurses (Bride et al., 2007; Austin et al, 2009).

The main goal of the study was to explore the contributions of compassion satisfaction, compassion fatigue to burnout in theatre and recovery nurses. As proposed in the literature, the study also considered job related factors as the length of nursing service and control over working time patterns.

A total of 80 nurses from the theatre and recovery department in a major UK hospital participated in the study. A cross-sectional online survey was designed and included two scales of the Professional Quality of Life Scale covering compassion satisfaction and compassion fatigue (also referred to as secondary traumatic stress) and the Maslach burnout inventory scale. The questionnaire also included work-related factors as length of service in clinical nursing, length of service in the hospital, and control over the working time patterns.

A low level of compassion fatigue, moderate level of emotional exhaustion and the high levels of compassion satisfaction and personal accomplishment were reported by theatre nurses suggesting an encouraging scenario for this nursing speciality. The results contrast with the existing literature that consistently report high levels of burnout in nursing (e.g., Demerouti et al, 2000; Heinen et al, 2013) thus supporting the need for further research into the different areas of nursing. Results also suggest that the professional quality of life is a significant predictor of burnout in theatre nurses. Compassion fatigue revealed its negative repercussions on emotional exhaustion and an increased sense of personal inefficacy. Compassion satisfaction of theatre nurses was strongly associated with increased feelings of personal accomplishment.

A greater input in the definition of the number of hours worked had a positive impact in all dimensions of burnout, i.e., lower emotional exhaustion and depersonalisation and higher work self-efficacy. These findings validate the relevance of participative management practices as greater perceived control may lead to higher job satisfaction and lower burnout (Boamah & Laschinger, 2015; Laschinger, Finegan, Shamian & Wilk, 2001; Sarmiento, Laschinger & Iwasin, 2004).

P98: The Effects of Employee Burnout on Customers: An Experimental Approach

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In this within-subject vignette study (i.e., policy capturing, Aguinis & Bradley, 2014), we focused on the interpersonal nature of employee burnout and studied the effects of burnout on customers. Previous studies (e.g., Garman, Corrigan, & Morris, 2002) did not answer the question of what it is about burnout that affects customers and did not take into account possible mediaters. Moreover, because of their correlational nature most of the existing studies could not discuss causal inference. Our study aims at closing this gap and addressing these unanswered questions. In order to better understand which specific aspects of burnout affect customers, we took an innovative approach and studied the different effects of employee burnout dimensions (depersonalization and emotional exhaustion) separately. We hypothesized that for customers, depersonalization symptoms (e.g., callous and mechanic behaviour) will be the most important aspect of burnout. Consequently, customers who interact with depersonalizing employees will perceive the service they receive both from the employee and from the organization less
favourably. Drawing on affective events theory (Weiss & Cropanzano, 1996), we suggested an affective process in which interacting with a depersonalizing employee is the event that triggers customer anger and hostility, which in turn evoke an evaluative judgment (i.e., customer service perceptions).

Referring to attribution theory (Aquino, Douglas, & Martinko, 2004), we hypothesized that emotional exhaustion attenuates the indirect effect of employee depersonalization on customer service perceptions via anger and hostility. Customers may perceive emotional exhaustion as a reason for depersonalization, as opposed to an intended mistreatment towards them. Thus, customers were expected to attribute less blame to the employee, feel less angry and hostile, and perceive the service they receive less negatively. In sum, we proposed a moderated mediation model, in which employee depersonalization is the predictor of lower customer service perceptions. Anger and hostility are the mediators, and emotional exhaustion is the moderator that buffers the negative indirect relation.

In the study, 156 participants read 12 vignettes in which university employees (i.e., lecturer, secretary, and technician) displayed depersonalization and emotional exhaustion symptoms. In the 2x2 within subject factorial design, depersonalization cues (displayed versus not displayed) and emotional exhaustion cues (displayed versus not displayed) were systematically manipulated. Multilevel analysis showed that employee depersonalization negatively affected customer perceptions of employee service and organization service. Customer anger and hostility mediated this effect. Employee emotional exhaustion moderated the indirect effect such that when employees in the vignettes displayed both depersonalization and emotional exhaustion, the negative effect of depersonalization on service perceptions via anger and hostility was weaker. Our findings regarding the different, non-trivial effects of depersonalization and emotional exhaustion on customers, highlight the importance in studying the effects of burnout dimensions separately and in taking into account possible interactions between these dimensions (Demerouti, Verbeke, & Bakker, 2005). Furthermore, our experimental design allowed to disentangle the burnout dimensions and to take an important step towards causality. Thus, our study emphasizes the advantages in incorporating experimental designs into the burnout literature.

P99: Prevalence of Burnout and Risk Factors in Public Bank Employees in Bursa
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Introduction: With globalization and a fast developing technology, high-quality performance of workers and high productivity gain importance in work life. The demands on the performance and efficiency of the employees increased and employees had to intensify their efforts in order to meet the high expectations. The dimensions of mental health problems among public bank employees caused by risk factors in the workplace are not well known in Turkey. Therefore, the study objective is to investigate the consequences of exposure to psychosocial risk factors for the mental health of public bank employees in Bursa province in Turkey.

Methods: 202 bank employees were assessed from seven public banks. We performed a cross-sectional study using a questionnaire on socio-demographic characteristics, risk factors at work, work and health history. We used the Maslach Burnout Inventory to definition for the participant burnout, insensitivity and personal success.
Results: 61.6% of the participants were male, 38.4% were female, 29% were emotionally exhausted, 7.1% depersonalized, 22.9% had low personal achievement. The findings showed a positive correlation of burnout and insensitivity with long working hours, unwilling career choice and emotional exhaustion.

Conclusion: Long working hours and unwilling career choice in bank employees can cause burnout and desensitization. If this study is conducted in a larger population and region, different risk factors for burnout and depersonalization may be identified.

P100: Good or Bad Demands: Is One Man's Meat Another Man's Poison?
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Many job stress models assume that a particular job demand (such as time demands, emotional demands, etc.) is experienced in the same way by all workers. Conversely, building on appraisal theory, we explore (a) how individuals appraise different types of job demands (i.e. as a challenge or as a hindrance) and (b) how these cognitive appraisals affect the relationship between selected job demands and job engagement/burnout. In our study (n=527, China, multi-occupations), the hypotheses were largely supported. Most interactions between job demands (time urgency, role conflict, emotional demands) and challenge appraisal were significant. Specifically, high job demands were associated with high levels of burnout, but this association was weaker if these demands were appraised as a challenge. Conversely, job demands were negatively related to engagement, however, when challenge appraisal was high, the relationship between job demands and engagement was less negative. Implications for future research are discussed.

P101: The Perception of Occupational Burnout From the Perspective of Employers From The Education, Higher Education, Medical Care Sectors in Poland
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Contemporary conceptions of occupational burnout define the phenomenon of the burnout as a disturbed relation between an employee and their professional environment (Maslach, Leiter, 2010, 2011, Santinello, 2014). Extensive literature on the subject and a huge social and organisational interest in explanation of the processes and phenomena influencing employees’ performance and wellbeing prove the importance of this issue. Unfortunately occupational burnout is still a taboo in Polish reality, and the situation when an employee has admitted that they suffer from it, is perceived as a indication of weakness, and not of organisational maturity or of awareness of personal and institutional consequences. “Time2Grow (Poland)”, POWR.04.03.00-00-W300/16 is co-financed by the European Union within the European Social Fund (the partners: Trendhuis CVBA (Belgium) and South–Eastern Finland University of Applied Sciences – Xamk, Finland). The main goal of the project is designing, testing and implementing new solutions for the prevention of occupational burnout. The Model Time2Grow, which is the project result, applies the idea of lifelong learning to prevent occupational burnout mainly through strengthening one’s soft skills. Quantitative research was conducted in the project, using an original questionnaire of social perception of burnout and the Link Burnout Questionnaire by M. Santinello (153 employees). Additionally two types of qualitative primary research were carried out: in-depth interviews (IDI) among the representatives of employers in the education, higher education, medical care areas and of occupational medicine doctors and focus group interviews in each of these groups. There were 26 IDIs. The secondary sources and the results of our
research show that occupational burnout in the medical health, education and higher education sectors in Poland is present among the employees and, unfortunately, is characterised by a growing tendency. This was indicated in the IDIs of most employers participating in the study. The employers were aware that the existing organisational solutions did not match the abilities and needs of their employees, and that because of this stressful situations were accumulating, leading especially engaged persons to occupational burnout. The problem of burnout is mostly ignored in the higher education sector. There are no strategies supporting higher education employees, who on the one hand are responsible for fulfilling their educational and organisational duties, on the other hand are supposed to be involved in scientific research. The foundation of the Time2Grow Model is treating burnout as a common, multi-aspect and multidimensional problem for both an employee and an employer. The results were used to design a complex preventative program which is being tested in three professional groups.

P102: Burnout Among Portuguese, Spanish and Brazilian Nurses
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Introduction: Globally, nurses face increased demands to cope with more exigent patients, more tragic events such as disasters, multi-victim situations, and a lack of human and material resources. Being in this occupation is considered stressful (Khamisa et al., 2016; Sun et al., 2017). Despite their engagement and emotional commitment with the profession (García-Sierra et al., 2016; Santos et al., 2016), nurses are vulnerable to job stress, especially burnout. The literature shows that they have high levels of emotional exhaustion (Martinez-Inigo et al., 2018). Besides prejudicing individual health, nurses' burnout can affect quality of care provided to patients as well as the organizational climate (Giorgi et al., 2016; van Bogaert at al., 2017).

Aims: Being part of the international research project INT-SO (From work contexts to occupational health of nursing professionals, a comparative study between Portugal, Brazil and Spain), this study aims to compare burnout levels among three samples of nurses (Porto-Portugal, Oviedo-Spain, and São Paulo-Brazil), and to identify the relationship between burnout and some sociodemographic characteristics, namely age and gender.

Method: A brief sociodemographic questionnaire and the Maslach Burnout Inventory (Maslach, Jackson & Leiter, 1996; Marques-Pinto & Picado, 2011) were voluntarily and anonymously filled in by 260 Portuguese nurses, 256 Spanish and 356 Brazilian). Age varied between 26 and 55 years (M=37.7, SD=7.81), while job experience varied between 1 and 34 years (M=12.54, SD=7.89). The sample was composed by: 84% women, 76% graduated, 60% having a partner and 58% having children, 62% working at hospitals and 29% at health units (9% at private clinics), 48% working by shifts, and 43% having institutional definitive job contract. After formal institutional authorizations, nurses were invited and voluntarily participated in the study using printed questionnaires returned anonymously to researchers.

Results: We found 56% of nurses with low burnout (using categories of Maroco et al., 2016), 33% with moderate burnout and 11% with high burnout, professional accomplishment being the higher dimension (M=4.52 on a 0-6 scale), followed by emotional exhaustion (M=2.63) and depersonalization (M=1.34). No gender differences were found and only depersonalization presents a positive (weak) correlation with age. Comparative analysis revealed no differences for burnout levels between countries, despite depersonalization being significantly higher in Spain and lower in Portugal. Different country patterns were found, with Portugal showing negative correlations between age/job experience and depersonalization/burnout, while Spain had no significant correlations, and Brasil showed a positive correlation between age and
professional accomplishment. Gender differences revealed Portuguese men nurses with more depersonalization than women. Professional characteristics explained 8% of burnout among Portuguese nurses, while individual characteristics explained 4% of burnout among Brazilian nurses.

Conclusions: Results are in line with other studies that found nurses with moderate/higher burnout (Albedin et al., 2016; Sun et al., 2017) and reinforces the need to study burnout separately within each country, since comparative analysis revealed different patterns which can be due to cultural differences. However, because nurses play a crucial role in society, it is important to promote their occupational health and wellbeing (Brennan et al., 2017; Jager et al., 2016).

P103: The Impact of Humor Styles on Adaptive Performance via Burnout
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Purpose: To survive environmental unpredictability, organizations have to come up with innovative ways of solving problems and find creative solutions. This study focuses on the impact that subordinate humor, which serves adaptive/detrimental functions (Martin et al., 2003), has on adaptive performance (Charbonnier-Voirin et al., 2012), which integrates five dimensions: creativity, interpersonal adaptability, management of stress, dealing with emergencies and training effort, as mediated by burnout.

Design: We tested our hypotheses with a sample of 145 employees from multiple organizations that completed two surveys (t1 and t2), separated by a six-week time lag.

Results: Self-defeating humor was positively related to disengagement, damaging the five dimensions of adaptive performance (six weeks after). It was also positively related to emotional exhaustion, damaging dealing with emergencies and enhancing interpersonal relations. Affiliative and self-enhancing humor were negatively related to disengagement, improving the five dimensions of adaptive performance, while they were also negatively related to emotional exhaustion, improving dealing with emergencies (six weeks after) and damaging interpersonal relations.

Limitations: Our mortality rate between t1 and t2 was rather high (43%) and performance was self-rated (although with a six-week leg).

Research/practical implications: It demonstrates the importance and differential effects of subordinate humor styles for adaptive performance, providing a new behavioral tool that can be developed in the workplace.

Originality/value: It is the first study to examine how the different types of humor can damage or enhance organizations’ adaptation capacity, as measured by adaptive performance; while extending humor research in the workplace by including both its positive and negative facets.

P104: The Reliability and Validity of the Burnout Clinical Subtypes Questionnaire (BCSQ-36) in Latvia
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Background: The aim of the study was to clarify the internal consistency, factorial and convergent validity of the Burnout Clinical Subtypes Questionnaire (BCSQ-36) for Latvian language version, regard to a standard burnout criterion Maslach Burnout Inventory - General
Survey (MBI-GS), and to evaluate possible differences related with age, sex and other socio-demographic factors. BCSQ-36 helps differentiate burnout on three subtypes “Frenetic”, “Underchallenged” and “Worn-out” according of the level of dedication with which individuals cope with work-related tasks. This approach is crucial for the development of more specific and effective interventions for burnout treatment and prevention (Montero-Marin & Garcia-Campayo, 2010).

**Method:** Voluntary internet-based approach was used on a multi-occupational sample of adult Latvians (n=394). The reliability of the scales was assessed with Cronbach’s alpha, convergent validity in relation to the Maslach Burnout Inventory General Survey with Spearman's r. Also, confirmatory principal component analysis with varimax rotation was used to explore burnout types model in Latvian cultural setting.

**Results:** The internal consistency of the Latvian version of the BCSQ-36 showed good results. Cronbach α-values exceeded .89 for all three scales and .75 within subscales level. Correlation analysis showed expected results alike original sample - “Underchallenged” and “Worn-out” subtypes correlated with all MBI-GS scales, but “Frenetic” subtype didn’t correlate with MBI-GS “Cynicism” scale.

Confirmatory principal component analysis with 3 fixed components explained 55% of variation. The component structure of subscales showed that “Underchallenged” and “Worn-out” types are very similar in the “Lack of acknowledgement” subscale level in Latvian sample. Model did not perfectly fit according CFI (.77). Results are better on subscales level, than on subtypes level (CFI=.89). Men showed slightly higher lack of development and boredom in the “Underchallenged” type subscales (p<.05). Weak correlations were found with age in “Frenetic” and “Underchallenged” profiles - younger employees showed higher rates in ambitions, lack of development and boredom, but older employees - higher overload.

**Conclusions:** Research results provide reliable data for validation purposes and allows to continue discussion on construct validity of burnout subtypes and relationship with other variables. The general theoretical proposition of the BCSQ-36 is supported. Model fit results could be improved by sample variation.

**P105: Cognitive Difficulties at Work and Exhaustion: Do Job Demands Play a Role?**
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In the literature, there is a broad agreement that burnout has negative effects on important domains of one’s life, especially in terms of mental health and work efficiency. Despite the fact that individuals with burnout often report troubles with concentration and memory in everyday life, the effect of burnout on cognitive functions is poorly researched and gained the attention of researches only in the past few years. In fact, in the review by Deligkaris et al. (2014) only 15 studies were identified that addressed cognitive difficulties in burnout using performance-based measures. The overall results indicate a negative association of burnout with measures of memory, attention and executive functions. Nevertheless, these results were mostly obtained using small samples, often including burnout outpatients, being on sick leave during the time of the study. It, however, remains unclear, whether an otherwise healthy population, still actively involved in work, with first symptoms of burnout reports cognitive difficulties and how the relationship between burnout and cognitive difficulties is influenced by job demands.

Burnout is often considered as a process, where the feeling of exhaustion is viewed as one of the first stages, resulting from the combination of high work demands and low job or personal resources. Therefore, our aim was to investigate how exhaustion relates to self-reported
cognitive difficulties and performance-based neuropsychological tests. To address this question, we conducted a study including over 200 employees of various professions. Self-reported cognitive difficulties were assessed using the Cognitive failures at work questionnaire, whereas the neuropsychological testing included paper pencil D2 test of attention and computer based flanker and go no go task, where accuracy and reaction times were estimated. Preliminary results showed that after controlling for depression, gender, age and education, only weak correlations with objective measures emerged and generally did not reach statistical significance. On the contrary, the correlation with self-reported cognitive difficulties, was considerably high. Moreover, the relationship was moderated by job demands: for those with high job demands the relationship was weaker compared with those with lower job demands, indicating that in low exhaustion, only those with higher job demands are more prone to cognitive failures, whereas high exhaustion is associated with more cognitive failures, regardless of the level of job demands.

In sum, the results showed that for otherwise healthy working population, exhaustion and cognitive difficulties are related only on a self-reported level, while objective performance remains intact. Findings of this study contribute to a better understanding of cognitive aspects in burnout development. However, longitudinal studies are need to better understand how burnout progression is associated with executive functioning.

P106: Burnout in Portuguese Veterinary Doctors
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The world of work has undergone major changes, particularly in regard to mental health. We see the growth of psychosocial risks, psychological disorders and factors that affect the health and wellbeing of a person and a group (Dextras-Gauthier et al 2016, Leka & Cox, 2008; Riedl et al, 2012). These changes affect a large number of professions and have a particular impact on health professionals. Veterinarians are particularly vulnerable to burnout (Kipperman et al., 2017; Rohlf, 2018) and are four times more likely to commit suicide than the general population (Bartram & Boniwell, 2007), and two times more likely than other health professionals. This study aimed to analyse the prevalence of burnout in Portuguese veterinary doctors and to verify if they vary according to sociodemographic and professional characteristics. A socio-demographic questionnaire and the Oldenburg Burnout Inventory (Halbesleben & Demerouti, 2007; Campos et al., 2012) were distributed online through the National Union of Veterinary Doctors and Veterinary Doctors College. A total of 1425 veterinarians, 33% males, aged between 24 and 88 (M=37.4), of which 50% between 24 and 35, 56% with a partner, 55% without children, 81% graduated after 1997, 69% with a gross income up to 1500 euros, 98% work as employees, 67% are employed in pet clinics, 57% work up to 40 hours per week and 52% have an indeterminate employment relationship. Moderate levels of exhaustion (M=3.19) and disinvestment (M=2.81) were found, with 14% of the sample presenting high values of exhaustion (4 or higher) and 7% of disinvestment. Exhaustion results from prolonged exposure to certain work-related demands and is manifested by intense physical, affective and cognitive tension. Disinvestment refers to a detachment from work, to disengagement due to the lack of identification and willingness to carry it on (Bakker & Demerouti, 2008; Demerouti & Mostert, 2010). In order to analyse the prevalence of exhaustion and disinvestment, a multiple linear regression analysis was performed (Maroco, 2000), the significance levels of the F test presented values lower than 0.05 for exhaustion in the personal variables (sex and number of children) and organisational and labour variables (main time, work situation, main area of activity, work regime and workload). Disinvestment, in turn, is predicted exclusively by organisational and labour variables (main time, labour situation and labour regime). These results are very high, although there are no national studies to compare them. However, if we consider that 38% of the subjects claim to receive a gross salary of up to
1000 euros and that 82% graduated after 1997, we conclude that this professional group perceives their professional situation negatively in financial terms and professional stability, since 57% work for others and 34% are in a regime of provision of services, for a fixed or uncertain term. Although European reports state that about a quarter of workers feel stressed most of the time because of high work intensity, tight deadlines and imbalance between work and family life; this study points to other factors, such as low wages and job instability.

**P107: Nursing Workers’ Burnout in Cardiac Pediatric Intensive care**

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**Introduction:** Burnout Syndrome is characterised by workers’ physical and emotional exhaustion, with consequences in their professional, familiar and social relationship, and may result in the professional renunciation as response to stressors arising from work. The intensive care of cardiopathic children requires significant demands related to its work process. In addition to this, numerous losses generate intensified emotions in workers. This study aimed to identify the presence of burnout in nursing workers in a pediatric and neonatal cardiology care unit.

**Method:** This is an exploratory cross-sectional quantitative study. The research was conducted in a Cardiologic University Hospital in São Paulo - Brazil. The target population was 92 nursing workers of the pediatric and neonatal intensive care unit, after considering the exclusion criteria. For data collection, two instruments were used: socio-demographic characteristic questionnaire and Maslach Burnout Inventory (MIB). The internal consistency of the MIB was assessed by Cronbach's alpha. Statistical analysis was performed, using chi-squared test.

**Results:** The population was composed mostly of women (93.5%), mean age of 31.0 years old (SD = 8.4) and an average of a 10-year period of professional experience. No association was found among socio-demographic variables and burnout. The findings highlighted that burnout syndrome occurred in 8.7% of nursing care workers, considering high levels in all dimensional areas of the MIB (exhaustion, cynicism, and inefficacy), while 50% presented high levels in at least one of these three areas.

**Conclusions:** The nurse and the hospital should recognise the stressors that are present in the workplace and seek mechanisms and coping strategies for individual and group to reduce the occurrence of occupational stress. These findings highlight the need to monitor workers’ behavior to prevent the installation of the syndrome, as well as the need to implement intervention measures that promote the mental health of nursing workers who assist children with heart disease in critical care units.

**P108: The Effect of Training in Psychosocial Factors on Occupational Burnout and Stress at a Government Institution in Mexico**

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According to transactional theory, cognitive and emotional evaluation intervenes in the interaction between employees and their environment. Thus, if employees evaluate working conditions as being inadequate, it could create stress and occupational burnout. Therefore, if an employee is trained in protective factors and the psychosocial risks to health, indicators of occupational burnout and stress symptomology may improve.
Objective: To determine the effects of a training course in psychosocial factors regarding occupational burnout and stress symptoms in employees at a government institution in Mexico.

Method: Out of a population of 156 tenured employees who serve the public at a government institution, 54 were selected randomly to form two double-blind groups. Twenty-eight employees attended the course and 26 were in the control group. Both groups were evaluated before and after the course with the following tests: EDO for exhaustion, depersonalization and dissatisfaction with accomplishments (Uribe-Peña, 2010), and a questionnaire on mental and physiological symptoms brought on by work stress (Yates, 1979). The training course was participative and encompassed five topics; work stress, healthy lifestyle, emotional coping, quality of life at work and healthy planning, during six sessions for two hours a week. The protocol satisfied ethical codes and Mexico’s General Health Law applicable to research with human beings. Data were analysed with an ANOVA. SPSS Version 21 was used.

Results: Participants of both groups showed similarities of age (M = 40.33; ± 7.65 years), schooling (M = 14.7; ± = 2.51 years, equivalent to middle school), years working (M = 22.35; ± 8.4), seniority at the company (M = 14.8; ± 6.36) and job seniority (M = 11.46; ± = 6.34 years). Six men participated in each group as well as 22 women in the training group and 20 in the control group. The ANOVA analysis of variance determined a significant difference between the post-evaluation of the training group and that of the control group with regards to stress-related symptomology (physiological F = 5.6 p = .001 and mental F = 5.6 p = .001) and in the depersonalization dimension of occupational burnout (F = 5.6 p = .001). Marginal differences were reported in the emotional exhaustion dimension (F = 2.55 p = .059). Generally speaking, the 25% of employees with high or very high levels of exhaustion dropped to 7% after the course; depersonalization went from 26% to 14% and dissatisfaction at 14% lowered to a medium-term level. Thirty-nine percent of participants presented stress symptoms prior to the course while afterwards, only 25% showed physiological symptoms while just one person had mental symptoms.

Conclusion: Knowledge about protective psychosocial factors and health risks as well as coping techniques enables a significant reduction of some occupational burnout and work-related stress symptoms.

P109: Emotional Exhaustion in Professionals of a Health Institution in Guadalajara, Mexico
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Introduction: Transactional theory (Lazarus and Folkman, 1986) establishes that the balance between working conditions and emotional response favours the satisfaction or response of psychological tension and avoidance coping.

Objective: To compare the emotional exhaustion at work among dentists, nurses and doctors of a health institution in Guadalajara, Mexico.

Material and methods: 149 dentists, 253 nurses and 170 physicians were surveyed with informed consent with the "Labour Emotional Exhaustion Scale" (AEL: Preciado et al., 2007) which assesses: job satisfaction, relationships with peers, psychological tension and avoidance coping.

Results: The analysis of variance (ANOVA) determined significant difference (F2,569 = 7.09, p ≤ .001) in the dimensions of relationship with peers, psychological tension and coping avoidance.
Scheffé post hoc test showed that the nursing group had the most negative aspect. However, when classifying the groups with respect to the dimensions of the AEL, 10% of the physicians were associated with high levels of Labour Dissatisfaction ($X^2 = 5.55, p = .05$); while 17% of the nurses had high Psychological Stress ($X^2 = 6.97, p = .03$).

Discussion: The AEL in nursing staff can be attributed to overload, difficulties in the relationship with colleagues and in dealing with users of the service.

Conclusion: A significant difference in AEL was determined in nurses when compared with doctors and dentists of a health institution.

P110: Med-Stress: Internet Intervention Aimed at Reducing Job Stress and Job Burnout Among Medical Professionals.

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The goal of the study is to design and test the efficacy of the online intervention dedicated to medical professionals and aimed at reducing their work–related stress and job burnout (primary outcomes) as well as decreasing depression, secondary traumatic stress, and increasing their work engagement (secondary outcomes). The content of the intervention is focused on enhancing personal resources: self–efficacy and perceived social support, and is based on the theoretical framework of cultivation and enabling hypotheses. According to the cultivation hypothesis, people with higher self–efficacy are more likely to reach out and obtain social support when needed, whereas enabling hypothesis suggests the reverse relationship: using members of social network as models—in particular those that are similar and/or face similar situations—or benefiting from their verbal assurance can increase the sense of efficacy. This study will allow for an experimental verification of these hypotheses through testing the efficacy of evidence-based, CBT–framed internet intervention.

This is a randomised controlled trial with two experimental conditions and two active comparators: 1) self–efficacy and perceived support sequential enhancement (cultivation hypothesis), 2) perceived support and self–efficacy sequential enhancement (enabling hypothesis), 3) self–efficacy enhancement (active comparator), and 4) perceived social support enhancement (active comparator). The exercises comprising the intervention are designed based on evidence-supported strategies to strengthen self–efficacy and perceived social support, and additionally, users are able to benefit from optional content: relaxation, mindfulness, cognitive restructuring, and lifestyle modules; all designed within the framework of cognitive-behavioral therapy. We expect self–efficacy and perceived social support to mediate the relationships between condition assignment and given outcomes, and for these relationships to be moderated by participants' expectations about the intervention. The efficacy of the intervention will be assessed at baseline (T1), post-intervention (T2), and six and twelve months after baseline (T3 and T4 respectively). We plan to recruit a total of $N = 400$ participants.

Verifying the efficacy of Med-Stress intervention will allow for the experimental test of the cultivation vs enabling effects of self–efficacy and perceived social support on work-related stress and its consequences.
P111: I am... unemployed! Stress, Coping and Employment Expectations Related with Self-Categorisation of Unemployed
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The aim of the study was to explore the role of social categorisation in stress appraisal and coping among unemployed in Latvia. Relationship among self-categorisation, perceived stress, coping strategies and self-reported employment expectations was examined. The participants were 102 unemployed men and women in age 20 – 55 years. There were five questionnaires used in current study: Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983); The COPE Inventory (COPE; Carver, Scheier, & Weintraub, 1989); self-reported employment expectations scale (Mantler, Matejiecek, Matheson, & Anisman, 2005; Wanberg, 1997); two self-categorisation measures; and a questionnaire for demographic data and unemployment experience. Expected correlation between self-categorisation, perceived stress and self-reported employment expectations were found. Both measures of self-categorisation as unemployed predicted higher perceived stress and lower self-reported employment expectations; but were not related with coping strategies. Self-categorisation of unemployed explained perceived stress better than duration of unemployment. Results highlight necessity to include social categorisation approach into the research of stress and wellbeing.

P112: Technostress: A Conceptual Model to Help Understand, Reduce and Prevent Technology-related Stress
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Introduction: Technological disruptions keep advancing, with almost unlimited applications for our daily and working life. Associated with this development is the increasing opposition of criticasters, pointing out that technology may have enabled us, but it has also enslaved us. A broad understanding is needed on how to manage technology, communication, and the changing demands this poses on workers’ availability and capacities. Therefore, this exploratory study aimed to (1) describe a relatively new construct named technostress and (2) to assess the impact of “technostress” on the Dutch working population.

Methods: This study used several methods to gather information. After an apprehensive literature study, interviews were conducted with a group of employees. During the interviews, participants were asked about their knowledge of technostress, the effects of technology on their daily lives and how they used technology in the workplace. Lastly an interview with a group of Dutch experts on the subject of technostress was broadcasted live to raise awareness.

Results: During this study, it became clear that technostress is an intricate construct, manifesting itself in various ways depending on the situation and use of technology. Therefore, to describe technostress as a whole, not one but multiple themes were extracted from the data. These themes describe the different ways in which technostress can be experienced by individuals. The themes are mentioned below, including a short explanation.

- **Dealing with technology**: Stress that arises from dealing with faulty technology or being unable to keep up.
- **Distractions, stimuli and the fear of missing out**: Stress that results from the constant use of a smartphone and missing certain messages or events.
- **Work-life balance**: Stress that results from being able to work at any time or place.
- **Expectations and organisational culture**: Stress that arises as a result of not being able to set boundaries and being available at all times.
The first theme describes what most individuals associate with the term technostress. However, when participants in our study were asked to more thoroughly describe other instances of feeling stressed due to the use of technology, the other themes were always mentioned.

The latter three themes seem to influence our stress-levels in a more detrimental way. However, this influence is often less noticeable and not immediately associated with use of technology.

Conclusions and/or implications: The majority of the participants in this study were either (1) not aware that technostress existed or were (2) under the impression that technostress referred to stress that arises from working with faulty technology (telepressure). This, as we now know, is only the tip of the iceberg. Therefore, the most important finding is that, first of all, more awareness on technostress is needed. In addition, interventions on technostress are required, particularly in the areas of:

1. developing ways of dealing with the constant stream of distractions and stimuli,
2. maintaining a good work-life balance despite being able to work everywhere and at all times, and
3. changing the organisational culture surrounding the need for constant availability of employees.

P113: Psychological Flexibility Moderates Between Professional Isolation and Cognitive Weariness among Early-career Psychologists and Social Workers
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Both social workers and psychologists are exposed to emotionally demanding situations in their work life – even from early on. The focus of this paper falls on social workers who start their first position after their studies, and psychologists who start their first position after their one year of practical training, following completion of their studies. Early on in a new career would typically be when a new employee experiences the least ability to influence their work situation – for example, whom they work with and what kinds of tasks they work on. Also, this may also very likely be the time such an employee is vulnerable if professionally isolated, at a time when crucial skills and competencies are formed – one is typically employed for one’s unique skills, but works with other professionals, with different skills sets. Lastly, how successfully one perceives oneself to have transitioned from academic to professional life may be an influencing factor.

A postal survey was sent to 5213 (respondents=2514, not target group=103, response rate 49%) psychologists and social workers in Sweden who had graduated within three years of the spring of 2017. In the analysis, graduate psychology students who had not yet reached independent registration as a psychologist were excluded (Final sample=2224: 642 psychologists; 1582 social workers).

The central hypothesis was that emotional demands, perceived influence at work, and experienced isolation at work may contribute to burnout-related symptoms (as indicated by the dimensions of cognitive weariness and physical fatigue) among psychologists and social workers at the beginning of their careers. We set out to investigate a regression model where work-related variables relate to two dimensions of burnout (physical fatigue and cognitive weariness). The work-related variables were: self-rated transition from studies to work, emotional demands, influence at work and professional isolation, and work-related psychological flexibility was considered as a moderator.
The results indicate that females and younger employees, in general, rated higher on physical fatigue (34% explained variance). Working as a psychologist vs. as social worker was not a significant predictor. In terms of the independent variables, a deemed-as-unsuccessful transition between studies and work (self-rated), high emotional demands, low influence at work, experienced isolation at work and lower psychological flexibility all made significant direct contributions to physical fatigue. No evidence of moderation was found.

Regarding cognitive weariness, the results (35% explained variance) show that females scored higher. Age and line of work were not significant predictors. In terms of the independent variables, a deemed-as-successful transition between studies and work (self-rated), higher emotional demands, lower influence at work, higher isolation at work and lower psychological flexibility all made significant direct contributions to cognitive weariness. A test of interaction showed that there is a positive relationship between cognitive weariness and isolation at work, for individuals who also score low on psychological flexibility.

Our results are informative for early career management of psychologists and social workers.

P114: Illegitimate Tasks and Wellbeing at Work: The Power of Job Resources
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A recently defined stressor related to improper use of work time, termed ‘illegitimate tasks’ (Semmer, Jacobshagen, Meier & Elfering, 2007; Semmer, Tschan, Meier, Facchin, & Jacobshagen, 2010) have shown to be related to work motivation and wellbeing at work (Aronsson, Bejerot, & Härenstam, 2012; Björk, Bejerot, Jacobshagen, & Härenstam 2013; Madsen, Tripathi, Borritz, & Rugulies, 2014; Stocker, Jacobshagen, Semmer, Annen, 2010; Semmer et al., 2015). Illegitimate tasks, defined as work tasks that are not associated with the core of one’s occupation or perceived as inappropriate and waste of time, are an emerging issue in occupational stress research (Semmer et al., 2010, Semmer et al., 2015). Some studies have showed that illegitimate tasks act as stressors that can have implications on a variety of health outcomes (Sonnentag og Frese, 2013), for instance exhaustion (Aronsson et al., 2012; Fila & Eatough, 2017; Semmer et al., 2015). Performing illegitimate tasks requires emotional and physical effort and may induce symptoms of strain (Semmer et al., 2015). Illegitimate tasks represent an aspect of job design that deserves more attention in research as it has shown to result in resentment towards one’s organisation, irritability and burnout (Semmer et al., 2015). The job demands-resources model provides (Bakker & Demerouti, 2017; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) a theoretical framework of why illegitimate tasks can be associated with exhaustion and work motivation. Illegitimate tasks may be considered, as job demands as it require effort to carry out and be demanding on the individual (Semmer et al., 2015) and be negatively related to wellbeing at work, in this case job engagement, job commitment and meaning at work. According to the job demands-resources theory it is assumed that job resources will have implication on the relationship between illegitimate tasks and wellbeing. For many years, efficiency has been a key policy goal in many Western countries and increased knowledge about the extent and content of illegitimate tasks that academic professionals undertake would help to improve the efficiency of the university sector. To our knowledge, there has not yet been any systematic investigation of the proportion of academics’ workload that is made up of illegitimate tasks and its consequences for wellbeing at work. A cross-sectional study of 12170 university employees was conducted in 2014. Preliminary results confirm the unique negative contribution of illegitimate tasks to wellbeing at work (meaning at work, commitment and job engagement), beyond the effects of other predictors. However, goal clarity moderated the relationship between illegitimate tasks and meaning at work, adjusted for
role conflict, time pressure and job resources such as autonomy, team cohesion, and autonomy. Autonomy moderated the relationship between illegitimate tasks and job engagement, adjusted for role conflict, time pressure and job resources such as autonomy, team cohesion, and goal clarity. Team cohesion moderated the relationship between illegitimate tasks and commitment, adjusted for role conflict, time pressure and job resources such as autonomy, team cohesion, and autonomy. Role conflict and time pressure, were chosen as control variables because of their conceptual overlap with illegitimate tasks. Implications of these findings are discussed in the poster.

P115: Decision Made, Good Feelings Fade? Effects of Noise and Multitasking on Decision Confidence and Wellbeing
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Noise and multitasking are two of the most prevalent disturbances of work and wellbeing in offices. For both stressors, detrimental effects such as annoyance and performance decrements have been documented, although the latter mainly involved basal cognitive abilities (e.g., memory tasks or mental arithmetic). Decision making constitutes a crucial part of work tasks and is not confined to executives and knowledge workers. At the same time, the potential effects of noise and multitasking on decision making received only little attention so far. Employing three testing conditions (N = 109), we investigated these potential impairments, focusing on post-decision evaluation in terms of decision confidence, satisfaction, and wellbeing. A varied set of trivia questions served as decision tasks. In the noise condition, subjects performed the decision tasks while an office noise with a sound pressure level of 60 dB(A) was present. Compared to the control condition, subjects in the noise condition stated increased decision confidence. However, they also reported a significantly lower level of wellbeing than the control group. In the multitasking condition, people performed an email sorting task as the primary task and completed the decision exercises as a secondary task. Results showed that decision confidence increased in the multitasking situation as well, while wellbeing was not significantly affected. Although increased confidence appears desirable prima facie, we also discuss its negative implications. One example might be the groupthink phenomenon, describing inferior decision making in groups as a consequence of unduly increased confidence. Explanatory mechanisms as well as further implications will be discussed.

P116: Linking Quantitative Demands to Offshore Workers’ Stress: The Role of Personal and Job Resources
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Background: Employees in the offshore wind industry are exposed to various job demands, increasing the workers’ risk of experiencing stress. However, personal and job resources might also play a role in the stressor-strain context. The aim of our study was to examine the link between employees’ quantitative demands and stress, and to investigate the role of personal resources (psychological detachment from work) and job resources (social support, and influence at work) in this context.

Methods: 250 offshore wind industry workers responded to an online survey from September 2016 until January 2017, assessing the workers’ job demands and resources, stress, and psychological detachment from work. Descriptive statistical analyses, confirmatory factor analysis and structural equation modelling were applied to analyse the data.

Results: Correlation analyses revealed substantial associations between the job demands, resources, stress, and psychological detachment from work. Results of structural equation
modelling indicated a good fit of the hypothesized model ($\chi^2 = 295.051$, df = 205, $\chi^2$/df = 1.439, $p < .001$, CFI = .96, RMSEA = .04, SRMR = .06). Quantitative demands were significantly and positively related to stress ($\beta = .38$, $p < .01$), and psychological detachment from work partially mediated this relationship (indirect effect: $\beta = .17$, $p < .001$). Social support was significantly and negatively related to stress ($\beta = -.21$, $p < .01$), while influence at work was not ($\beta = -.07$, $p = .30$).

Conclusions: The results indicate that especially psychological detachment from work and social support constitute resources for offshore workers that might be beneficial for reducing their stress levels. Health promotion interventions should be carried out that focus on strengthening these resources among offshore staff.

P117: Propensity for Presenteeism and Sickness Absenteeism in Nurses Working with Older Adults
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Introduction: Presenteeism is usually defined as attending for work whilst ill and contrasts with sickness absenteeism, where individuals do not attend work when ill. Whilst sickness absenteeism is often health promoting, presenteeism has been linked with lost productivity, increased sickness absence, and can be costly for organisations. Findings that presenteeism was highly prevalent in healthcare workers led to several studies that analysed the predictors of presenteeism frequency in this sector. Very few studies however, have studied the reasons why some healthcare workers exhibit presenteeism more frequently than sickness absenteeism and vice versa.

Aim: To investigate the correlates of propensity for presenteeism (engaging in presenteeism more frequently than sickness absenteeism) and propensity for sickness absenteeism (engaging in sickness absenteeism more frequently than presenteeism) in a sample of ward-based nurses working with older adults in Malta.

Methods: Multinomial logistic regression was used to determine the correlates of propensity for presenteeism and propensity for sickness absenteeism in a cross-sectional survey of ward-based nurses working with older adults in Malta ($n = 270$). The investigated predictors were informed by an earlier qualitative study and included: illness perceptions during participants’ last episodes of presenteeism and sickness absenteeism; work engagement; adjustment latitude; replaceability; work demands; co-worker support; supervisor support; workplace relationships; the Big Five personality factors; work attendance attitude; general health; emotional exhaustion; and demographic information.

Results: Compared to those with a propensity for sickness absenteeism, those with a propensity for presenteeism were significantly more likely to have: attributed the cause of their illnesses during presenteeism to organisational factors; held expectations that had they stayed home during their last presenteeism episode it would not have benefitted their illness; reported lower levels of workability during their last presenteeism episode; reported greater levels of work demands. Compared to those who reported equal presenteeism and sickness absenteeism, those with a propensity for presenteeism were more likely to have: reported greater emotional representations during sickness absenteeism; and greater levels of work engagement. Compared to those who reported equal presenteeism and sickness absenteeism, those with a propensity for absenteeism were more likely to have: attributed their illness to a non-organisational cause; held expectations that staying home during their last presenteeism episode would have benefitted their illness; reported lower levels of work demands.
**Discussion:** In this sample, propensity for presenteeism was influenced by work demands and illness attributed to organisational factors, as opposed to non-organisational factors. Furthermore, propensity for presenteeism was linked with both poorer levels of occupational health and with positive attitudes towards work. The findings indicate that workplace interventions which reduce exposure to organisational causative factors and make work demands more manageable might lead to reductions in presenteeism frequency. Study limitations, are that findings might not apply to nurses working in areas other than the care of older adults, or to similar nursing populations in other countries. Large-scale replications in other healthcare contexts are needed.

**P118: Organization-Based Self-Esteem (OBSE): A Buffer or Amplifier of the Job Insecurity-Health Association?**
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**Background:** One of the current priorities of occupational health psychology is to explore particular personal resources that have the potential to decrease the deleterious effects of job insecurity in the workplace. This study intends to examine the moderating role of organization-based self-esteem (OBSE) as a potential personal resource of the association between job insecurity and health outcomes. The health outcomes were divided into general (mental & physical health) and job-related (job satisfaction & emotional exhaustion) outcomes. Hypotheses were developed according to the predictions of Conservation of Resources theory and Social Role theory.

**Method:** To test our hypotheses, we sampled nurses who worked in two large Iranian hospitals. Respondents were divided into males (N=187) and females (N=369). Participants completed scales on job insecurity, job satisfaction, emotional exhaustion and organization-based self-esteem.

**Results:** The moderation test suggested that OBSE differently influenced the association between job insecurity and health outcomes in male and female groups. More specifically, OBSE buffered the association between job insecurity and job satisfaction and emotional exhaustion in females, however, OBSE did not moderate the association between job insecurity and any of the health outcomes in males.

**Conclusion:** OBSE has a more buffering role in reducing the job insecurity-health link in females than in males.

**Impact:** OBSE has a buffering role in this association; however, this impact can vary based on the gender.

**P119: Qualitative and Quantitative Job Insecurity: Testing the Building Blocks Approach**
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In the turbulent world of work, job insecurity has become one of the major stressors, with compelling evidence of its far-reaching detrimental effects on employee health and wellbeing (De Witte, Pienaar, De Cuyper, 2016). An increasing number of studies thus aim to identify the mechanisms through which job insecurity unfolds. In doing so, it is necessary to account for the multidimensional nature of the construct, as different dimensions may produce different effects that remain largely underexplored.
One of the most widely used definitions of job insecurity distinguishes between its qualitative and quantitative dimensions (Greenhalgh & Roseblatt, 1984; Hellgren, Sverke, & Isaksson, 1999). Qualitative job insecurity refers to the perceived threat of losing valued features of the job, whereas the quantitative dimension pertains to the anticipated loss of the employment situation as a whole. Hence, conceptually, quantitative job insecurity is somewhat larger in scope. Moreover, many empirical studies have shown higher mean levels of qualitative than quantitative job insecurity. This suggests that qualitative job insecurity may be more widespread and, potentially, serve as a building block in the experience of quantitative job insecurity. Unfortunately, despite some recent attempts to test an integrated model encompassing both dimensions (e.g., Chirumbolo et al., 2017), information about the ways qualitative and quantitative job insecurity may combine is scant. Additionally, the vast majority of studies exclusively rely on a variable-centered approach, thus missing out the possibility that different profiles of job insecurity may exist across individuals. This is a significant gap that needs to be addressed for it may provide important implications concerning the negative outcomes of different job insecurity patterns on employee health and wellbeing.

The present study has a twofold aim. First, it adopts a person-centered approach to test whether different combinations of quantitative and qualitative job insecurity (i.e., job insecurity profiles) are empirically justified. Second, it aims to test whether these profiles differ in terms of sample background characteristics and health and wellbeing outcomes (specifically, work engagement, exhaustion, and mental health complaints).

The study was carried out in two samples. The initial sample consisted of 1077 employees, representing different sectors. The cross-validation sample consisted of 608 employees from public sector organizations. Latent profile analyses were conducted to test the hypotheses.

The findings from both samples supported a three-profile solution, revealing different combinations of qualitative and quantitative job insecurity (low-low, high-low, and high-high, respectively). This is an intriguing result for it provides evidence that high qualitative job insecurity may co-exist with low quantitative job insecurity, but not the other way around. Hence, the experience of quantitative job insecurity may indeed build upon qualitative job insecurity. As expected, the “high-high” job insecurity profile occurred more frequently among temporary employees and those experiencing organizational change, and was characterized by the highest levels of exhaustion and mental strain. Such findings call for more attention to the complex nature of job insecurity, indicating the possibility of a cumulative negative effect that seems to be the most severe when high levels of both job insecurity dimensions are observed.

P120: Examining the Relationship Between Job Insecurity Today and Financial Insecurity in Retirement: The Moderating Role of Caregiving Responsibility
Samantha Lacey, Janet Barnes-Farrell, Ragan Decker, Alec Calvo, Sarah Berger, Alicia Dugan
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Amid uncertain economic times, with retirement age, life expectancy, and healthcare costs rising, and traditional pension plans disappearing, it is no wonder retirement preparedness and job insecurity have become some of the most pressing concerns in contemporary working life. In fact, the 2012 Retirement Confidence Survey reported that, “Americans’ confidence in their ability to retire comfortably is stagnant at historically low levels.” Preoccupation with “more immediate financial concerns” such as job uncertainty may account for this gloomy projection. In line with conservation of resources theory (COR), job insecurity, which includes uncertainty about the continuity of one’s current job situation (cognitive job insecurity), as well as perceptions about the importance of maintaining those features (affective job insecurity), poses a threat to an
individual's resources. This threat should be exacerbated for a large and potentially more vulnerable population of individuals: caregivers. Individuals who balance work with caregiving responsibilities, whether it be for a child and/or an adult, experience increased demands on their physical, mental, and financial resources. Such demands may increase the influence of job insecurities on projections about future financial resources. Thus, in this study we explore how job insecurity and caregiving responsibilities, which both represent threats to immediate financial resources, threaten more distal resources such as perceptions of financial security in retirement. Furthermore, it is predicted that caregiving responsibilities moderate the impact of job insecurity on perceptions of post-retirement financial security.

To examine these questions, we used data from wave three of a multi-wave data collection investigating work capacity and aging. Participants (n = 762) recruited from six manufacturing organisations in the northeastern U.S. completed surveys that included measures of: confidence in ability to meet financial needs in retirement, cognitive and affective facets of perceived job insecurity, and caregiving responsibilities. We used hierarchical moderated regression analyses to test our hypotheses. Controlling for age, gender, and income, the results indicated a significant direct effect of perceived cognitive job insecurity (β = -0.442) and caregiving responsibility (β = -0.284) on perceived financial security in retirement. Further, having or not having caregiving responsibilities moderates the magnitude of these relationships. Although affective job insecurity also predicted perceived financial security in retirement (β = -0.181), it did not interact with caregiving responsibilities. As hypothesised, the results imply that those currently feeling job insecure report a more dim forecast of their financial resources in retirement. Likewise, current caregivers reported less confidence in their financial resources after retirement than non-caregivers. Furthermore, the presence of caregiving responsibilities affects the strength of the relationship between cognitive aspects of job insecurity and beliefs about future financial security. Based on these findings, we are conducting additional post hoc analyses to determine if this relationship depends on the type of care responsibility one has: only childcare, only adult-care, both child/adult-care. Because perceptions of future financial security are an important driver of retirement timing decisions, it is important to have an understanding of workplace and non-workplace factors that influence these perceptions. Our findings shed light on such issues.

P121: Exploring the Nature and Consequence of Leader and Work Group Actions in the Face of Understaffing

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In the face of mounting economic pressures, stiff business competition, and tight margins, many organisations have sought to “do more with less”. Thus, complaints of understaffing are increasingly common in the workplace. Despite this, psychological research on understaffing remains rare.

Although understaffing is often purported to be the cause of myriad problems, empirical research linking understaffing to outcomes has shown detrimental, null, and beneficial effects (Hudson & Shen, 2015). Further, research on understaffing tends to portray workers as passive and subjected to these conditions, rather than acknowledging that they are active agents who may seek to actively cope with this stressor. Thus, the overall purpose of the study was to explore how leaders and work groups cope with this stressor and the efficacy of their actions in mitigating poor group performance and burnout, as this may explain some of the prior inconsistent understaffing effects found in the literature.
Our sample consisted of 96 work groups drawn from four technology organisations in Taiwan. At Time 1, participants rated their work group’s level of understaffing, their leader’s behaviours, and TMX. At Time 2, approximately 3 months later, participants rated their work group’s level of burnout and supervisors rated work group performance. All constructs were aggregated to the group level-of-analysis.

Recently, Hudson and Shen (2018) demonstrated that understaffing is a multi-dimensional construct; manpower understaffing refers to have insufficient personnel to complete group tasks, while expertise understaffing refers to have insufficient knowledge, skills, or other capabilities to complete group tasks. Therefore, we explored whether reactions to these two different forms of understaffing may vary. In fact, manpower understaffing was associated with greater leader initiating structure, while expertise understaffing was associated with greater leader consideration and TMX. Further, leader consideration negatively predicted group burnout. Thus, understaffing may not always be associated with negative outcomes as this stressor may trigger some effective leader reactions that mitigates negative results.

Although understaffing may tend to consistently elicit some types of actions, another possibility is that work groups vary in their response, leading to different experienced outcomes. Supporting this latter perspective, leader consideration moderated the relationship between manpower understaffing and group performance, such that there was no relationship when leader consideration was high and there was a negative relationship when leader consideration was low. We also found that the relationship between manpower understaffing and group burnout depended upon both leader consideration and TMX. Specifically, high quality exchanges between team members buffered against group burnout from manpower understaffing, regardless of the level of leader consideration. However, leader consideration affected the relationship between manpower understaffing and group burnout when TMX was low. Overall, this research suggests that leader and work group coping behaviours play complex and important roles in shaping consequences of workplace understaffing.

P122: Environmental Hazards and Work Outcomes in the Shipyard? A Study among Shipyard Workers in Spain
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Introduction: Organisational commitment is the psychological link between employees and their organisation. According to Dhaenens et al. (2018) it is even a core consideration of human resource management and is related to other outcomes like job satisfaction. Job satisfaction is a fundamental determinant of one’s behaviour in an organisation, some research supports the hypothesis that job satisfaction predicts organisational commitment.

On the other hand, psychosocial factors at work are not given the same attention in legislation and by health and safety inspectors as physical hazards. Moreover, existing research focuses almost exclusively on physical hazards as predictors of worker outcomes instead of a combination of physical and psychological hazards (Zadow et al., 2017). The purpose of the current survey study was to analyse the relations between environment hazards and worker outcomes (e.g, normative and continuance commitment as well as job satisfaction) among a unique sample of workers who work in different private companies of the auxiliary shipyard military industry in Navantia (a Spanish public company in Ferrol, Spain; Salanova et al., 2011).
Based on earlier research we expected: negative relations between environmental hazards and worker outcomes (commitment, job satisfaction (H.1), and to find a moderating effect of level of education in these relations (e.g. that lower education would strengthen the negative relation between hazards and outcomes, H.2).

**Method:** Data was collected of 573 shipyard workers in Ferrol, Galicia (Spain); 472 men and 95 women with an average age of 38 years and work experience of 14 years, from a population of 1,538 people who belong to 33 companies of the auxiliary industry, providing services in the main shipyard military industry. Hierarchical regression analyses were conducted to test the hypotheses.

**Results:** Our results revealed strong negative relations between environmental hazards and continuance commitment ($\beta= -.22; p<.01$), as well as with normative commitment $\beta= -.20; p<.01$), and job satisfaction $\beta= -.15; p<.01$) (confirming H1). Furthermore, significant moderating effects were found for level of education (confirming H2). We will end our presentation with discussing the conclusions and practical recommendations of our research.

**P123: Human Factors and Ergonomics in Health Care: A Review of Literature and New Lines of Research**

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The healthcare field is increasingly expanding its possibilities through the continuous introduction of new technologies and medical devices characterised by a growing complexity in the interaction with users, healthcare workers and patients. The research is focusing on the evaluation of the man-machine and man-technologies models able to guarantee an efficacious, safe and successful introduction of the new technologies. The aim of this study is to design a preliminary state of art on this issue.

A literature research was carried out on PubMed database. The key terms “human factor” OR “ergonomics” AND “medical device” OR “health technology” AND “healthcare” AND “review” were used to appropriately address the topic. A “lateral search” was also performed to identify other relevant papers and documents (international reports, congress proceedings, etc.).

The most used terms to describe the topic are “human factor and ergonomics” and “human factor engineering” (HFE or HF/E). The term “ergonomics” is intended to indicate the different domains and human aspects as physical, cognitive and organisational ergonomics. After the process of selection four recent systematic reviews, eight studies and documents were chosen. Long-tradition general studies on the topic were found. Conversely, difficulties finalising the research were met for the partial scarcity of surveys on the topic concerning healthcare. The studies highlight that poor attention to HFE in the design and implementation of healthcare technologies can result in scarce quality of care and patient safety. In this regard, special attention was paid to the undesirable employee and organisational outcomes, such as job dissatisfaction, burnout, injuries and turnover. Since 2005, both the Institute of Occupational Medicine and the National Academy of Engineering highlighted HFE as a key system engineering approach to improve healthcare outcomes. Although HFE is now recognised as an essential issue in the healthcare field, there are few data on HFE applications in healthcare system design and redesign. Some of the sources selected define the necessity of scientific and standardised guidelines regarding how HFE should be implemented and the importance of a wide application of HFE and integration into “the design, implementation of social-technical systems in healthcare”. Finally, some studies are concentrated on the most adequate methods to study HFE, such as mixed method research and qualitative research.
This review highlights the potential central role of HFE in the process of design and implementation of new technologies in the healthcare field. In fact, there is a growing acknowledgement of the importance of HFE-based healthcare system redesign to improve quality of care and patient safety among management, healthcare professionals and researchers. Further research on the topic is needed to continue developing the empirical evidence on the impact of HFE in healthcare system redesign and to disseminate HFE in healthcare.

P124: A Meta-Analytic Examination of Curvilinear Workload-Strain Relationships
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Workload is a central component of workers' jobs. However, the nature of its relationship with strain is both theoretically and empirically debated. The dominant approach conceptualises excessive workload as a stressor and theorises that workload is linearly related to strain. In contrast, a second perspective draws upon theories of activation to predict that both lack of stimulation (i.e., underload) and excessive stimulation (i.e., overload) should result in strain (Gardner, 1986)—positing a curvilinear relationship.

The purpose of this study was to examine the empirical evidence supporting a curvilinear workload-strain relationship using meta-analytic methods. Detecting higher-order interactions require large sample sizes to ensure sufficient power. Thus, meta-analytic methods that allow us to take advantage of the existing body of literature is particularly well-suited to this task. A prior meta-analysis has examined linear relationships between workload and indicators of strain, generally finding moderate relationships (Bowling, Alarcon, Bragg, & Hartman, 2015). In fact, the authors of this prior meta-analysis themselves acknowledge that, “The relatively weak results for some wellbeing indices (e.g., job satisfaction) could have occurred because workload may sometimes yield non-linear rather than linear effects” (p. 106).

To conduct our meta-analysis, we used the reference list from the Bowling et al. (2015) meta-analysis and contacted authors for additional information. Specifically, for each sample, we requested the output of hierarchical regression analyses that consisted of two steps: (1) the linear workload component and the associated r-squared and (2) the squared workload term representing the curvilinear effect and the associated change in r-squared. We received this information for 47 samples.

Our bare-bones meta-analytic results indicated that although evidence of curvilinear effects was weak for most outcomes (e.g., depression, somatic symptoms, and life satisfaction), there was evidence that workload and job satisfaction was related curvilinearly. On average, the curvilinear term explained an additional 1% of the variance in job satisfaction (k = 34, N = 14,293), similar to other meta-analytic curvilinear effects found in the literature (e.g., Grijalva, Harms, Newman, Gaddis, & Fraley, 2015). Further the directionality of the curve was as theorized in 76% of samples. Although the full U-shape was sometimes observed, when it was not, the typical pattern was a null relationship with satisfaction at low to moderate levels of workload and an exponential negative relationship between workload and job satisfaction at high levels of workload. Future research directions involving the measurement of workload, issues of sampling, and differentiating between various strain outcomes will be discussed.
The Numbing Effect of Experience in Hazardous Work among Temporary Workers

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Temporary work is often categorised by having distinctly negative health outcomes in comparison to non-temporary work (Benach & Muntaner, 2007). Temporary workers also tend to be more vulnerable as they lack economic support, in the form of health benefits and adequate pay, as well as a lack of organisational support, such as job control, job security, and training (Lewchuk, de Wolff, King, & Polanyi, 2003; Lettourneux, 1986). This may be exacerbated by their frequent shift in job environment, as temporary workers have to meet the demands of their agency and of the job market as a whole. While the adverse physical environment offered to temporary workers has been noted, there may be negative psychological outcomes due to frequent experience in multiple job contexts, such as an altered risk appraisal and willingness to engage in hazardous job opportunities.

Temporary worker risk-benefit appraisal and willingness may be affected by their broad experience due to frequent shifts in job context. This process may result in undesirable outcomes, since temporary workers scrape the surface of many different jobs while lacking sufficient training and organisational support. Based on situated rationality and social action frameworks, temporary workers may assume that hazard is inherent in their line of work and may never experience the benefits of a stable work environment, which facilitates the learning of safety behaviors (Rhodes, 1997). Temporary workers typically experience much less organisational support in terms of preparedness as well as their perceived job control (PJC) and perceived job security (PJS), which could affect how worthy they believe their pay is as well as their willingness to engage in a particular job (Borstoff et al., 1997; Tung, Worm, & Peterson, 2008). Together, this can result in altered risk-benefit appraisal patterns and inflated willingness to engage in tasks due to the fact that they perceive themselves as having adequate experience to perform successfully and avoid injury.

This study aims to observe if experience in a particular job context is associated with temporary workers’ perception of risk at work, benefit from their salary, and willingness to engage in varying job contexts. 158 temporary and 158 non-temporary workers were presented 11 job vignettes based on information from O*NET. PJC, PJS, family income, and wage were introduced as control variables, as these variables represent support that has been shown to differ significantly between temporary and non-temporary workers. Multiple regression results display that perceived risk (t = -4.16), perceived benefit (t = 2.11), and willingness (t = 9.84) were significantly associated with experience. These findings suggest that simply having experience in a job may numb temporary workers to hazards, increase their satisfaction with their pay, and ultimately inflate their willingness. Without proper training, this unchecked experience can do more harm than good among temporary workers. Further research displaying the depth of experience and its relationship to willingness and performance would also be useful in examining the disparity between temporary and non-temporary worker perceptions.

Knowledge Work Characteristics Are Positively Related to Proactive Work Behaviour - But Only for Employees With Low Sensory Processing Sensitivity

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The changing nature of work requires employees to become proactive. Proactive work behaviour refers to self-initiated and future-oriented action to change either the environment or the self. To be able to engage in proactive behaviour, work-related attention and energy resources are required. In this study, we examine the knowledge work characteristics of job complexity (i.e.,
the level of stimulating and challenging work demands) and information processing demands as antecedents of proactive work behaviour. Previous research revealed positive relationships between these concepts. Yet, some research suggests potential detrimental effects of high knowledge characteristics on work outcomes, as they are associated with greater challenges and employee resources are less likely to be invested into self-initiated and change-oriented behaviour. We assume that the favourable effects of knowledge characteristics are not equally prevalent among all employees. In line with a person–environment fit approach, which emphasises the congruence between employee characteristics and the demands of their job, we argue that the favourable effects of knowledge characteristics for proactive work behaviour among employees depend on inter-individual characteristics.

In particular, we investigate the trait of sensory processing sensitivity (SPS) and how it interacts with knowledge characteristics to predict proactive work behaviour. SPS depicts inter-individual differences in people’s sensory awareness and the cognitive processing of environmental stimuli. People with high SPS are characterized by deeper cognitive processing and are more prone toward being overwhelmed by a variety of internal and external stimuli such as noises or bright light. We hypothesize that for employees with high SPS, job complexity and information processing demands are less functional in terms of their motivational impact for proactive behaviour. Highly sensitive people are more vigilant to environmental stimuli and tend to engage in constant self-regulation to prevent over-arousal. Less attention and energy may remain to be invested in proactive behaviour once job complexity and information processing demands are high. In contrast and in line with a job enrichment approach, we expect a positive relationship between knowledge work characteristics and proactive behaviour for employees with low SPS.

To test our hypothesis, we conducted a field study among a heterogeneous sample of 217 employees. Based on a principal component analysis and a confirmatory factor analysis, two main dimensions of SPS were identified. One dimension referred to sensory discomfort and distress to overstimulation. A second dimension referred to sensory environmental awareness. In line with our assumption, job complexity and information processing demands were found to be positively related to proactive behaviour for employees with low SPS. However, the relationship was nonsignificant for employees with high sensitivity. Our findings have implications for research on proactive work behaviour, the role of individual differences in SPS at work, and job enrichment approaches. Providing jobs that are high in knowledge characteristics does not necessarily mean that all employees will benefit in terms of being engaged in proactive behaviour. The results emphasize the need to integrate person-centred approaches into work design, which are oriented to individual characteristics to ensure that employees fit the job requirements.
The initiatives implemented to support healthworkers are at national level. The National Agency for Regional Health Services has promoted interventions in critical departments aimed at improving quality of life of patients, as well as detecting family and professionals' needs. Conversely, there are only a limited number of studies reporting the effectiveness of support groups. Johns Hopkins Children's Center has implemented support interventions for healthworkers assisting children, and the study by Pahlavanzadeh et al reports the effectiveness of a stress management program on the quality of nursing care in ICU.

Our hospital has therefore started the so-called *Professional Empowerment* which provides psychological support for people working in critical areas. This tool is an part of the activity plan identified by the Working Group for work wellbeing coordinated by Occupational Medicine. The intervention is part of the organic plan of the improvement actions resulting from the assessment of work-related stress risk pursuant to Legislative Decree 81/08.

The aim of the project is to prevent work discomfort and develop helping relationships and teamwork. Workers increase their own skills to face situations of conflict and stress and face emotional experiences.

The project includes an initial phase of sharing, carried out by the multidisciplinary team, of purpose and method with the person in charge, the supervisors and workers of the Operative Unit, as well as an educational session on the working discomfort. It then provides a pre-intervention assessment phase, through the administration of the general health questionnaire GHQ-12, and 8-10 group meetings for a maximum number of 10 workers, which last 1.5 hour each, and are conducted twice a month by a psychotherapist. At the end of the cycle of meetings, the project foresees a post-intervention evaluation phase through GHQ-12, a meeting with the competent doctor to address the organisational problems encountered, and a feedback meeting for drawing up an improvement plan, as well as fixing monitoring time.

The analysis of the pilot experience has shown a decrease in working discomfort. The administration of GHQ-12 before and after the intervention has highlighted an improvement of the scores after 5 months. The mean value after the intervention is situated in the score range indicating an "adequate functioning", compared to the value recorded in the first survey which reported an "alteration of the psychological state of health".

We believe that the Professional Empowerment project is a collective protection tool that mitigates WRS risk, a risk which however cannot be completely removed as personal discomfort has repercussions on the workplace and its root cause cannot be entirely removed.

**P128: Overlooked Voices: The Relationship Between Job-demands, Satisfaction and Commitment of NHS Scientists and Technicians**

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*Objectives:* NHS scientists and technicians are part of the Professional Technical and Scientific job family within the NHS, but to date, little is known about their experiences at work. The need to retain skilled and highly qualified laboratory staff in hospitals around the UK is just as essential as maintaining staff levels in medicine, nursing and professions allied to medicine. Given the size of this group (50,000 Biochemists, Haematologists, Cardiac physiologists etc.) and the key role that they play within the NHS, it is perhaps surprising that there has been very little research about the quality of the working lives and job satisfaction of NHS health scientists, despite job satisfaction dominating the work and organisational literature for more than 50 years. This professional group have been neglected at a time when we are witnessing unparalleled rises in
demands for health care services, cutbacks and restrictions on budgets, and major reforms in the National Health Service (NHS). This paper will report on a subset of findings from our Medical Research Council funded project extending working lives – challenges and prospects. Specifically, it will report how restricted flexibility and autonomy is harming job satisfaction among this professional group, as these shortages can only get worse, given that international recruits into the NHS is dropping year on year.

Methods: A survey gathered the data. The sample comprised of 100 females (mean age 47) and 58 males (mean age 51). A moderated mediation analysis will characterise the relationships between commitment to the NHS, job demands, job satisfaction and flexibility and control.

Results: A number of key findings will emerge; lack of flexibility and autonomy significantly predicted job satisfaction, but commitment reduces these negative influences.

Conclusions: Labour shortages in the NHS are well known and the current crisis is causing significant concern among the senior executives responsible for managing the NHS. These new findings demonstrate that these shortages mean that very specialised and small groups of scientists have less flexibility in their working day and this is harming job satisfaction. Commitment to the NHS is for the time being is acting as a buffer against these harmful effects on job satisfaction. An arising and unclear issue relates to the impact of progressive privatisation of scientific services and associated enforced NHS staff migrations are having on the detected buffering effect. Implications for health policy and research are discussed.

P129: Relationship Between Organisational Climate and Job Satisfaction in Workers of a Furniture Company in Jalisco, Mexico
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Objective: To determine the relationship between organisational climate and job satisfaction in employees of a furniture company located in Jalisco.

Materials and Methods: The study was observational and cross-sectional. 90 workers were evaluated (census) with the following questionnaires: a) Organisational climate (Koy & DeCottis, 1991) in autonomy, cohesion, trust, pressure, support, recognition, equity and innovation; and b) Motivation and job satisfaction (Garcia Peña, 2006).

Results: 42% (38) of the participants were women and 58% (52) men. The perception of the organisational climate was reported to be adequate. However, 13% (12) felt uncomfortable due to lack of trust and support among their co-workers, as well as not feeling their innovations were well accepted. In terms of motivation, 18% (17) had low motivation for the activities they perform at work; 7% (4) expressed lack of satisfaction towards the hierarchical position of their work which meant they perceived confusion in the immediate command, little positive recognition about what they do and consider that they are not properly assigned to their work. The pressure in the organisational climate showed not a significant relationship with the three job satisfaction scales. It obtained a moderate and significant direct correlation with autonomy ($r = .45$), cohesion ($r = .32$), and confidence.
P130: Compensation Schemes and Motivation: An Integrative SDT-based Investigation of the Relation Between Financial Incentives, Autonomous Motivation, and Employee Wellbeing
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During the last decade, there have been many calls for more research on compensation. Indeed, academics generally agree that compensation is unduly neglected in management research. To this day, researchers are debating about the role of financial incentives, such as bonuses, in work settings. With regards to financial incentives, years of research, including in SDT, yield the consistent finding that offering money does not constitute the optimal way to increase the quantity and quality of individuals' motivation (Deci, 1971; 1972; Ryan & Deci, 2011; Vansteenkiste, Neyrinck, Niemiec, Soenens, Witte, & Broeck, 2007). On the contrary, researchers find, for example, that cueing individuals with money leads them to work in isolation, without asking or providing help to their colleagues (Vohs, Mead, & Goode, 2008), while withdrawal of such cues leads them to be less motivated to invest effort in their work (Murayama, Matsumoto, Izuma, Matsumoto, 2010). It would thus appear that using money as incentive can backfire and bring unwanted consequences, such as diminished autonomous motivation, as individuals come to believe that their main source of motivation is money (Cerasoli et al., 2014). Hence their motivation would appear to shift from being autonomous and driven by internal factors like authentic enjoyment, to being controlled and driven by external factors like financial incentives (Krug & Braver, 2014; Ryan & Deci, 2000).

Our goal was to contribute to our current understanding by considering the role of basic needs satisfaction & autonomous motivation in the relation between financial incentives & distributive justice and work outcomes such as wellbeing, innovative work behavior and performance. Based on self-determination theory, we hypothesized that when employees perceive their compensation as fair, perceiving financial incentives at work makes them feel more competent and autonomous, which in turn fosters stronger autonomous motivation and thus enhanced wellbeing, performance and innovative work behavior better. Results from analyses in a cross-sectional survey of sample of 265 Greek employees (N=265) from diversified employment sectors suggest that the effect of financial incentives is contextual, and that compensation plans using financial incentives and bonuses can be effective if managed properly. Practical implications of the research will be provided and proposals for future research will be made.

P131: Work Engagement in Hospital Workers in Guadalajara, Mexico
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Background: Work engagement or work engagement is the positive antipode of burnout (Schaufeli, Bakker & Salanova); it has been related to positive attitudes towards work, individual health, proactive behaviours and good performance, as well as greater commitment towards the organisation. Engagement is "... more than a specific and momentary state, it is a more persistent affective-cognitive state and not focused on a particular object, event or situation" (Colunga, Ángel & Sarabia, 2017). Work engagement is a positive motivational construct related to work, characterised by vigour, dedication and absorption.
**Objective:** To estimate the work engagement in the workers of a public hospital in Guadalajara, Mexico.

**Methods:** The Utrecht scale of Work Engagement (UWES) was applied in its Spanish version to 455 hospital workers; besides a scale of socio-labour data. A descriptive statistical analysis was carried out with the SPSS 21 computer program.

**Results:** 455 surveys were obtained. Socio-labour variables: female sex, 65%; male 34%; mean age of 37 ± 8 years, with average seniority in the institution of 12 ± 8 years. Married: 54.5%, singles 37.8%, others 7.7%. Regarding the score of work engagement, the average of the participants is at 81.83, with a standard deviation of 14.38. As for the dimensions explored, high frequency is described by a high score for vigour (89%), dedication (95%) and ion (73%).

**Conclusions:** A large proportion of the population presented a high level of vigour, absorption and dedication, dimensions evaluated in the UWES instrument. This may be because providing a possibility to improve health, can give workers a positive sense of their work, regardless of negative situations found in work environments.

**P132: Engaging Leadership and Work Engagement: The Mediating Role of Job Resources and Basic Psychological Need Satisfaction**

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The current study is guided by Self-Determination Theory (SDT) and investigates the link between supervisor’s engaging leadership and employees’ work engagement mediated by job resources and basic psychological need satisfaction. This study focuses on a novel leadership style namely engaging leadership, which is firmly rooted in SDT in the sense that engaging leadership is assumed to satisfy the basic psychological needs for autonomy, competence, relatedness, and meaningfulness. A survey was conducted among Indonesian employees working in one of the largest state owned companies in agricultural industry. Data were analysed using Structural Equation Modelling and revealed, as expected, that basic psychological need satisfaction as well as job resources mediated the effect of engaging leadership on work engagement. However, instead of full mediation only partial mediation was observed. Specifically, each of type of job resources (i.e., organisational-related resources, work-related resources, social-related resources) plays a mediating role as well as the satisfaction of each basic psychological needs (autonomy, competence, relatedness, and meaningfulness). Overall the results confirm the positive impact of engaging leadership on job resources and need satisfaction, which in turn, due to their motivational quality, are associated with higher levels of work engagement.

**P133: Employee Engagement: A Re-look for Content and Measurement**

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Employee engagement has been implemented in organisation lexica and has generated a great interest among Human Resource Development scholars over the past few years (e.g., Rana, Ardichvili, & Tkachenko, 2014). Over the past two decades, significant efforts have been made by scholars to study engagement and by practitioners to develop organisation development related interventions to raise the levels of engagement among organisational members. In scientific literature we found several definitions and measurement instruments. Despite this
trend, a debate still exists among engagement scholars over the operationalisation and measurement of the construct. We conduct a comprehensive literature review of the major instruments used to measure employee engagement. We present a new measure for assessing employee engagement based in three of the most used scales. The first measure is Rich, LePine, and Crawford’s (2010) Job Engagement Scale based on Kahn’s (1990) conceptualisation of engagement. The second measure is Mone and London (2009). The third measure is Soane et colleagues’s (2012) Intellectual, Social, Affective Engagement Scale (ISA Engagement Scale).

This paper presents 2 studies. The first study is based in 277 employees. It has compared these three scales and through exploratory factorial analysis, we achieve to one version that combine dimensions from the other scales. This scale presents six dimensions: affective engagement, social engagement, intellectual engagement, cognitive engagement, emotional engagement and physical engagement. Also in this study we have concurrent measures (works satisfaction, affective commitment, work engagement and subjective wellbeing) that tested the validity of this new scale.

The second study is based in 605 employee responses, which allows confirming the factorial structure through confirmatory factorial analysis. Associations were found with task performance, organisational citizenship behavior and turnover intentions. Implications are provided for academic enquiry into the engagement process, and for HRD practices that enhance the experience of work. Data from two studies showed that the scale and its sub-scales have internal reliability.

P134: Do Mental Health Workers Have a Risk Type, and Is There a Link with Resilience?
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Mental health services are under greater demand than ever before, with the number of mental health nurses continuing to fall and increasing prevalence and complexity of mental health illnesses. In order to ensure that mental health workers are able to continue to provide a good level of care, their own mental health needs to be considered and cared for. In the field of mental healthcare, managing a patients’ risk of e.g. self-neglect, self-harm, violence towards others, and ultimately, suicide, are at the forefront of care. The proposed research aims to explore how mental health workers’ personality traits, in the context of risk, affect their resilience. In addition, the research will explore whether a mediating factor exists.

The aim of this research is to gain a measure and examine personality traits, expressed in the context of risk, that support resilience. In particular, the research aims to identify if there is a dominant risk type for mental health workers, and if there is a link between this and resilience. In addition, the research will explore whether a mediating factor exists. This is in the hope that appropriate interventions could be developed to assist in increasing the resilience in this group, in turn decreasing absenteeism, stress-related illnesses and burnout, while increasing workplace wellbeing, engagement and potentially recruitment.

My research goal is to explore the risk type of mental health workers, narrowing this down as much as possible. I'll first start with one of the eight types from the report of the compass, and then go more in depth to Calm: Emotional and Daring: Measured. I want to then see if there is a link between this and their resilience scores. Since risk type is fixed, it'll help people considering going into this field as well as employers during the selection process. Looking at resilience, it'll help identify if these risk types are high in resilience, and where discrepancies lie, it'll give me room to make recommendations to increase this to, in turn, increase retention and engagement, while decreasing burnout and absenteeism.
Hypotheses:
H1: A lower disposition to Calm: Emotional risk types will link to greater resilience.
H2: A greater disposition to Daring: Measured risk types will link to greater resilience.
H3: A greater variability in risk attitude will link to greater resilience.
H4: Greater resilience will link to greater recovery and adaptability.

The researcher will be adopting a quantitative approach in order to establish the direction and strength of any relationships, whether these are direct or mediatory. Three online questionnaires will be used: Demographics, Risk Type Compass, and CD-RISC 25.

Independent variables: Risk Type subscales: 1) Calm: Emotional and 2) Daring: Measured; 3) Risk Attitude variability. Dependent variables: 1) Resilience; 2) Recovery & adaptability; Risk Type will be explored as a between participants design whilst Risk Attitude and Tolerance is a within participants design.

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The overall goal of the meta-analyses was cleaning up the number and overlap on human energy constructs within the occupational context. Therefore, we provide a nomological network on human energy at work. While integrating as many work-related concepts as possible we collected a total of 126 studies, resulting in 7 meta-analyses with a total of 236 independent samples (N = 122730). The meta-analyses found a significantly positive correlation between human energy and positively connoted work-related concepts, such as performance, organizational resources, wellbeing and affective-motivational states and a significantly negative correlation between human energy and negatively connoted work-related concepts, such as stressors, negative behaviour and negative psychological consequences. Furthermore, our results do not indicate a variance between each of the human energy constructs used, which is discussed to be able to give future implications. Other interesting results, such as the non-existent correlation of human energy and work pressure as well as the highly positive correlation between human energy and positive affect, are discussed in detail.

P136: Positive Thinking and Wellbeing or Why It May Be Harmful to Promote Optimism: An Integrative Literature Review
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The positive psychology (PP) movement (Seligman, 2010) and positive organisational scholarship (e.g. Luthans, 2002) have perpetuated a range of positively focused organisational activities including strength-based appraisals, strength-focused feedback assessments and strength-focused development activities including coaching, career management practices, performance and development sessions, strenghtfinder assessments, leadership development and learning programmes etc. Yet, one may contend that practice precedes research evidence. In this context, the current paper presents a critical integrative review of the literature on the effects of Positive Thinking (PT) on wellbeing. It is a part of a research project exploring motives and effects of PT on employee wellbeing and performance. The review, taking a qualitative approach, is based on examination of primary and conceptual literature sources. It is discussing theoretical and methodological problems inherent to PT as well as practical implications of PT promotion in workplaces from the wellbeing perspective.
PP traditionally links PT to improved wellbeing. However, on closer inspection, this position raises a number of questions. Firstly, conceptualisation issues around PT make it hard to determine what is actually measured. It is also not clear whether the studies measure improvements in wellbeing or changes in perceptions of wellbeing. This is aggravated by methodological issues as evidence linking PT to wellbeing is found mainly in cross-sectional studies, held in clinical settings, or in brief interventions causing immediate shifts in wellbeing without much information about their sustainability. Furthermore, the evidence does not demonstrate a clear direction of causality. At the same time, non-PP literature provides accumulating evidence of negative consequences of PT and its adverse long-term effects on wellbeing. However, it is not clear why and how the effects may develop. The theoretical framework of PT practice is underpinned by activity (flow concept (e.g. Csikszentmihalyi & Csikszentmihalyi, 1992), self-determination theory (e.g. Deci & Ryan, 2008), goal (broaden-and-build theory (Fredrickson, 2004)), and neutrality (adaptation theory (Brickman & Campbell, 1971)) approaches as well as bottom-up vs. top-down philosophical perspectives.

The pro-PT position is largely constructed on the broaden-and-build theory, which is criticised for a number of aspects:

1) conceptualisation issues;
2) creating the false positive-negative dichotomy and focusing on positive emotions;
3) ignoring motivational effects of ‘non-pleasant’ emotions;
4) neglecting social environment and context paradigms;
5) promoting cultivation of positive emotions, while it would have made more sense to cultivate prerequisites of wellbeing and mental health;
6) ascribing adaptive functions to positive emotions, while biology and evolutionary psychology suggest the contrary;
7) weak evidence base.

The findings are deemed important in light of PT promotion in modern organisations. The review concludes by proposing that the neglected aspects of PT effects on wellbeing should be taken into consideration by contemporary PP to re-adjust its position on the promotion of PT and reflect it in the design of interventions aimed at employee wellbeing. Further research avenues reflecting conceptualisation, methodological, and theoretical issues are suggested.

P137: Does Team-level Social Capital Predict Work Performance, Work Engagement and Psychological Wellbeing in Industrial Settings?

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In this study we investigate whether social capital measured at the level of work teams predicts self-reported work performance, work engagement and psychological wellbeing among industrial workers. The analyses are based on longitudinal survey data on 538 participants in 68 work teams from an intervention study on workplace social capital in the Danish Dairy industry.

Workplace social capital has its’ focus on the potential resources in the cooperative relations between employees in a workplace. Recent conceptual developments point towards four types of social capital in contemporary workplaces: Social capital within work teams (Bonding), Social capital between work teams (Bridging), Social capital between employees and their immediate manager (Linking), Social capital between employees and the workplace as a whole (Linking). Workplace social capital can be considered a job resource as workplace social capital may facilitate 1) the completion of work tasks and 2) employee wellbeing. We therefore expect social capital in the workplace predict outcomes related to task efficacy and employee wellbeing.
The aim of the study was to investigate whether any of the four types of social capital measured at the level of work teams predicted self-reported work performance, work engagement and psychological wellbeing among workers in the dairy industry.

Six Danish dairy companies counting 68 work teams participated in the project. Intervention mapping workshops were completed in 38 teams. Each workshop lasted two hours and in the workshops, participants were asked to discuss team-specific results from a survey on social capital and work engagement to 1) identify aspects of social capital that the team wished to improve and 2) to develop action plans outlining how they would improve the chosen aspect of the social capital.

Intervention mapping workshops were conducted in the winter of 2015-16 and we conducted surveys measuring social capital and work engagement before and after the intervention mapping workshops. The follow-up period was approximately 20 months.

When looking at the entire study population, results showed that none of the types of social capital predicted self-reported work performance, work engagement and psychological wellbeing in longitudinal analyses where we adjusted for outcome at baseline. Further analyses showed, however, that different subtypes of social capital predicted the three outcomes in the intervention group but not in the control group, while adjusting for outcome at baseline.

Accordingly, in the intervention group:

- Work performance was predicted by social capital between employees and their immediate manager
- Work engagement was predicted by social capital within work teams, and
- Psychological wellbeing was predicted by social capital within work teams, social capital between work teams, and social capital between employees and their immediate manager.
- No statistically significant associations were found in the control group.

Overall, the results indicate that participation in participatory intervention processes may influence the association between workplace social capital and relevant outcomes among employees in industrial settings.

**P138: What Matters While Striving for Night Work Engagement: A Motivational Resources-Based Approach**

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Night work is both an economic and a social reality. In the European Community (28 different countries) 6.1% of the total employment force works at night (Eurostat, 2017). Populations involved cover all kind of occupations, typically in sectors including construction, manufacturing, transportation, food service, and production (Golden, 2015). Interest in the topic, however, stems overwhelmingly from a defensive agenda that considers nocturnal stints more as a source of pain than of bliss. It thus draws either from restrictive labor standards and regulations (e.g. the American Fair Labor Standards Act, the Night Work Convention from the International Labor Office), or from occupational health research that regularly denounces disruptive impacts of night work on health and social wellbeing (Harrington, 2001; Price, 2011; Vicente-Herrero et al., 2016). Nevertheless, night work remains a necessity and from a managerial perspective, a challenge to attract, retrain, and motivate workers to perform during the symptomatically labeled “graveyard shift”.

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The following study explores this difficult issue by testing such motivational underpinnings that lead individuals to endure, if not to enjoy, working at night rather than during the day. Commonly, research focuses on the positive impact of compensating extrinsic factors that facilitate individual acceptance. These usually include overtime pay, flexible/extra breaks, or compensatory rest days. Little research, however, has been devoted to the role and mechanisms of intrinsic motivational factors that are essential to individual commitment and energy. Yet anecdotal reports suggest that individuals may indeed enjoy the night work experience (King, 2010).

The role of psychological resources has been recently explored from different perspectives and has been tested on various samples ranging from nursing practitioners (D’Emiljo, Du Preez, 2017), entrepreneurs (Laguna et al., 2017), and academicians (Isa, Othman & Alzyoud, 2015). Different techniques have been used, including self-reported surveys and diary studies comprising cross-sectional as well as longitudinal designs. Some of the studies focused on analysing the role of job resources on work engagement while others show that personal resources can be crucial. However, how psychological resources can be useful in elevating one’s motivational level during stressful conditions of night work has been overlooked. To fill this gap, the current paper explores the role of psychological resources in the work engagement of night shift employees. It explains how job resources (supportive organizational climate), psychosocial resources (family support) and personal resources (self-efficacy) can be significant predictors of employees’ work engagement in night shifts. It reviews the literature to discover the relationship of various psychological resources with engagement in the context of conservation of resources theory (Hobfoll, 1989). Through analysing the statistical data obtained from night shift employees (n=208) performing duties in U.S, U.K., and Canada, this paper shows the correlations of supportive organisational climate and self-efficacy with work engagement directly, as well as through the mediation of ego-resilience and positive affect. Family support appeared to be positively related to work engagement indirectly only. The findings validated that psychological resources have a significant impact on engagement, whether those come from job, the environment, or one’s self.

P139: Antecedents of Daily Engagement in Actions That Go Beyond Basic Professional Duties
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Modern organisations are looking for employees who are energetic, dedicated to work, show their own initiative and are therefore engaged in work (Bakker and Leiter, 2010). Hence the growing interest of researchers in the phenomenon of engagement and the factors that affect it on a daily basis.

The aim of the paper is to present the construct of engagement in actions that go beyond basic professional duties, the way of its measurement and relationships with personal variables and positive work variables such as sense of autonomy, sense of competence and feedback from others. Presented information are based on the study using the daily diary method. The research was carried out among 62 working students of humanities and social studies at four Polish universities (49 women and 13 men) between 19 and 47 years old (M = 27.46, SD = 6.90), studying in the daily or extramural system, working full time or part time. Participants completed a daily survey over a period of 5 consecutive work days. To measure the dependent variable, a modified Polish version of the 9-item UWES questionnaire (Schaufeli et al., 2006) measuring work engagement was used, prepared on the basis of the adaptation of Breevaart et al. (2012) to measure work engagement on a daily basis (SWE).
The results of the study did not show any differences in the daily level of the factors of engagement in actions that go beyond the basic professional duties of people of different ages, different sexes, those studying in different modes and working in the different range of working time. However, there were statistically significant relations of the average weekly level of autonomy, competence and feedback with the factors of daily engagement in actions that go beyond the basic professional duties. Particularly high correlations of daily vigour, dedication and absorption have been reported with feedback from others (r values between .54 and .65). On the basis of the obtained results it can be concluded that every person, regardless of personal characteristics or time, which he or she devotes to work may engage in additional activities for the benefit of the organisation. This attitude can be supported by resources available in the work environment, such as autonomy or receiving feedback from others.

P140: Comparative Study on Work Engagement among Firefighters and Police Officers
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Introduction: Firefighters and police officers are included amongst the occupations considered as high demanding and stressful (Basinska & Wiciak, 2013; Lambert et al., 2017; Smith et al., 2018), despite individual interests and vocation playing a crucial role to keep those professionals engaged with their tasks (Perrott & Blenkarn, 2015; White et al., 2010). Currently, in Portugal, becoming a police officer requires approval in several evaluation tests after rigorous training (physical, psychological and operational); if approved, police officers have the guarantee of getting the job. To be a firefighter it is also necessary to have exigent training, and most firefighters are volunteers (and not career/professional ones), even if they are employed as firefighters. Several studies analysed engagement among those professionals, suggesting that they are highly engaged (Angelo & Chambel, 2013; Hu et al., 2017). Since rescuers’ suicide is an actual concern, studies about engagement are important to find protective factors (Gillet et al., 2013; Martin et al., 2017) for these two occupational groups whose wellbeing is crucial to face more frequent and dramatic events such terrorist attacks and natural disasters.

Aims: This study aims to compare engagement levels among two samples, one of Portuguese firefighters and another of Portuguese police officers, and to identify the relationship between engagement and some sociodemographic characteristics, namely age and gender.

Method: A brief sociodemographic questionnaire and the Utrecht Work Engagement Scale (Schaufeli & Bakker, 2003; Sinval et al., 2018) were voluntary and anonymously filled in by 264 police officers and 251 employee firefighters (volunteers but paid by their tasks as firefighters), aged between 21-47 years (M=29.7 SD=6.27) and with job experience between 1-27 years (M=7.7 SD=4.75). Gender percentage within each occupation was similar, with 13% of women police officers, and 14% of women firefighters.

Results: Moderate levels of engagement were found (between 4.37 and 4.94 using a 0-6 scale), but comparative analysis revealed firefighters as higher engaged than police officers, dedication being the higher dimension for both groups, followed by vigour. Regarding sample gender comparison, no differences were found. However, in the firefighters sample, men presented higher absorption levels (p=.028) while in the police officers sample, women presented higher values on all engagement dimensions. Considering only men, firefighters presented higher values than police officers on all engagement dimensions, while considering only women no differences were found. Age was negatively correlated with engagement dimensions only for police officers' sample.
Conclusions: Results are in line with other studies which found that firefighters have higher engagement levels than police officers, maybe due to their voluntary commitment with the firefighter group (Tuckey et al., 2012; van Gelderen & Bik, 2016). Moreover, results reinforce the need to study work engagement separately within each occupation and gender, since comparative analysis revealed different patterns (Woudstra, 2016). In fact, women/men and firefighters/police officers present different affective reactions at work (Dubbelt et al., 2016; Shaffer, 2010; Stanley et al., 2017) despite using similar mal-adaptive strategies to cope with occupational stress (Guajardo, 2015; Haddock et al., 2017; Stanley et al., 2016).

P141: Does a Psychological Detachment Intervention Help Educational Professionals to Stay Work Engaged?
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Purpose: Educational professionals are fairly work engaged, they are especially dedicated to their work. Since the educational sector is characterised by high workload and high drop-out rates —especially among relatively young teachers—it is important to find out how the initial engagement can be sustained. Earlier research showed that recovery plays a central role in the wellbeing of employees over time. Since teachers are very dedicated to their work, psychological detachment after work—a necessary precondition to recovery—is sometimes difficult to accomplish. Therefore, we empirically test an intervention aimed at increasing recovery and sustaining work engagement among educational professionals.

Design/Methodology: The intervention programme consisted of two classroom training sessions. Prior to the first session, the participants filled out a questionnaire (T0). In the first session, participants learned about work engagement. The second session was about recovery from work stress and psychological detachment. Tailored feedback – partly based on the outcomes of the questionnaire – and assignments aimed at facilitating the reflective processes were important parts of the training to stimulate participants to actively engage with the training content and to set appropriate goals. Participants received several reinforcements to encourage them to actively implement gained insights of the training in their own work environment. The control group only received a concise explanation of the aim of the research project and a feedback report. Five months after the training, the intervention and control group received an invitation to fill out another questionnaire (T1). In the intervention group 69 participants filled out both questionnaires, from the control group 48 respondents did.

We hypothesised the intervention group would show increased recovery compared to the control group. As a consequence we expected the work engagement of the intervention group to increase (in case engagement of the control group stayed equal) or stay equal (in case engagement of the control group decreased).

Findings: The repeated measures MANOVA revealed a marginally significant group x time interaction effect on relaxation and psychological detachment. Further analysis using ANOVA’s showed a significant interaction effect on psychological detachment. The psychological detachment of the intervention group on T1 was increased compared to T0, while the level of the control group barely changed over time. There was no significant interaction effect found for relaxation. The repeated measures ANOVA showed a significant group x time interaction effect on work engagement. The intervention group was slightly more engaged after the intervention, compared to their level prior to participating in the intervention while the engagement of the control group declined over time.
Conclusion: These results lead to the conclusion that the intervention has successfully increased the psychological detachment of educational professionals. The findings indicate that the improved recovery of the participants contributed to the stable level of their engagement. Based on this conclusion, we encourage employers to support employees to detach from work, especially in sectors with highly engaged employees.

Originality/Value: There are few intervention studies aimed at recovery. This study shows the potential of these kind of interventions to keep employees work engaged.

P142: Engaging in Meaningful Work: Perceived Calling and Work Engagement in Nursing
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The aim of this research was to evaluate the impact of perceived calling on work engagement, over and above major work environment factors in nursing. Various artefacts of human activity from primitive cave paintings to great cathedrals suggests that people are willing to invest great effort in achieving something greater than momentary rewards. However, according to Job demands-resources theory (Bakker & Demerouti, 2014), engagement in some work is mostly a result of work environment resources (and, to a lesser extent, demands). Later view could hardly be applied to nursing, where work environment is rarely motivating, yet the work itself is often perceived as meaningful by the nurses themselves. Previous qualitative studies show, that work engagement in nursing might be associated with an approach to occupation as a calling, signifying, that work is perceived as meaningful, aimed at helping others, and chosen because of external causes (Dik & Duffy, 2007).

A longitudinal design was applied with 8 months separating the two parts of study. In all, 351 nurses responded in T1 and 211 nurses participated in both parts. Both times participants were asked to fill a survey. T1 survey consisted of Expanded Nursing Stress Scale (French et al., 2000), measuring main job demands in nursing, Job Design Questionnaire’s (Morgeson & Humphrey, 2006) autonomy, task variety, task significance, social support and feedback subscales, used to measure major motivating job resources, Calling and Vocation Questionnaire (Dik et al., 2012), and major demographic measures. On T2 participants were asked to fill Utrecht Work Engagement Scale (Schaufeli & Bakker, 2003). 4-step hierarchical regression analysis was used to measure the influence of T1 perceived calling on T2 work engagement components (i.e. vigour, dedication and absorption) over and above T1 demographics, job demands and resources.

Study results show, that perceived calling allows predicting nurses’ work engagement, and this influence remains significant after controlling for demographic and work environment factors. Perceived calling is weaker predictor of nurses’ work engagement than job demands and resources, but it’s effect is greater than the one of major demographic factors. Results mean, that although work environment factors might be the most important motivators to engage, approaching one’s occupation as a meaningful calling might slightly modify nurses’ inclination to strive, even in burdensome conditions. Having in mind, that the most motivated and dedicated employees are the first to burn out, further research is needed to evaluate, whether perceived calling is beneficial for nurses, working in demanding work environment.
P143: Measurement Instrument for the Collective Zone of Proximal Development - The Antecedent for Team Flow
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*Background:* Instruments measuring team flow experience have been developed and validated in a variety of populations and for various occupation types (Delle Fave, Massimini & Bassi, 2011). However, measurement tools for the antecedent of team flow are rarely seen in the field of positive psychology apart from van den Hout and his colleagues’ work (van den Hout, Davis & Walrave, 2016).

*Aim:* Based on the theoretical framework of the Complexity Theory and the empirical evidence from 20 hours of video observations on four task teams, and a pilot study, the Collective Zone of Proximal Development Survey (CZPD) with an item pool of 30 questions was developed to assess the collaborative structure of team dynamics, which is proposed to be the antecedents of the experience of team flow.

*Method:* Using a sample of 391 university student participants (undergraduate and postgraduate from a variety of courses) who have been working on assessed teamwork assignments from a large university in the UK, exploratory and confirmatory factor analyses supported a four-dimensional model of the CZPD.

*Results:* The result demonstrated that there are 25 items with satisfactory factor loadings ($Mdn=.61$), an adequate goodness of fit indices and strong internal consistency ($\alpha=.84$) are to be included in the final version of CZPD. There are four dimensions included, namely decentralised control, idea interaction, redundancy and idea diversity.

*Conclusions:* This study developed and tested the factorial validity of the CZPD survey, which is purposed to serve as the antecedent of team flow experience. The four dimensions identified in CZPD are considered as the vantage points of intervention for practitioners planning to promote team flow experience in the workplace. CZPD could also be used as a monitoring tool for teams aiming at building and maintaining an effective collaboration climate. Limitation of the study and future perspective is discussed.

P144: Organisational Commitment and Attitudes Towards Organisational Changes
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The aim of this research is to examine whether different types of organisational commitment are significant predictors of attitudes towards organisational change. These relations were examined on two subsamples consisting of managers and workers. The survey was conducted in the autumn of 2016. The manager subsample included 180 respondents, 56% of which were male and 44% female. 31% of respondents work for state-owned companies, and 69% are from private companies in Serbia. The worker subsample included 210 respondents, 30% male and 70% female. 36% of the respondents work for state-owned corporations, while 64% are from private companies.

Organisational commitment was operationalised using Meyer & Allen model (Meyer, Allen, & Smith, 1993). The scale comprises of 18 items measuring three dimensions: affective, normative and instrumental commitment. Attitudes towards organisational changes were determined by the OP scale (Suvajdžić & Vujić, 2015). The scale consists of 15 items and measures three dimensions: employees’ flexibility, initiating changes and employees’ negative attitude towards changes.
The results obtained by regression analysis show that the dimensions of commitment are a significant predictor of a negative attitude towards organisational changes. On the manager subsample, about 4% of the variance of the negative attitude towards changes is due to commitment dimensions. Instrumental (β = -.135; p <0.05) and normative commitment (β = -.173; p <0.05) were identified as significant predictors. On the worker subsample, 21% of the variance is due to commitment dimensions. Affective (β = .407; p <0.01) and instrumental commitment (β = -.173; p <0.05) were identified as significant predictors. The dimensions of organisational commitment on the worker subsample are not significant predictors of employee flexibility. However, 4% of the variance on the worker subsample can be explained by the dimensions of organisational commitment. Instrumental (β = -.135; p <0.05) and normative commitment (β = -.173; p <0.05) were identified as significant predictors. On the manager subsample, organisational commitment are significant predictors of initiating changes and explain a total of 8% variance. Only instrumental commitment can be identified as a significant predictor (β = -.224; p <0.05). On the worker subsample, organisational commitment dimensions are significant predictors of initiating changes and explain a total of 5% variance. Only affective commitment can be identified as a significant predictor (β = .172; p <0.05).

The results show that there are differences in how organisational commitment dimensions influence the attitude to changes in managers and workers. The managers whose organisational commitment is primarily instrumental tend to exhibit a negative attitude towards change, while those who feel a moral obligation to the organisation do not resist changes. The workers whose commitment is affective tend not to see changes as undesirable, and to show willingness to initiate them. The study was conducted as part of the project Proactive behaviour of young people as a basis for social integrity and prosperity, supported by the Provincial Secretariat for Science and Technological Development of AP Vojvodina. Project no: 142-451-3555 / 2017-01-01.

P145: Emotional Dissonance and Sickness Absence: A Study among Employees Working with Customers and Clients. Investigating Possible Mechanisms
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Background: Since 1970 there has been an increase in service-sector employment and a corresponding drop in manufacturing employment. Today more than 60% of the European workforce are employed in the service sector. A unique feature of service jobs is the social interactions with customers or clients, and employees are expected to display emotions according to the organization’s explicit or implicit emotional display rules.

The emotional aspects of client-driven work, originally described by Arlie Hochschild as emotional labour (emotion work), refers to psychological processes necessary to express emotions that are desired by the organisation during interacting with clients. With regard to health outcomes, studies have demonstrated that the key dimension of emotion work is emotional dissonance. Emotional dissonance occurs when an employee’s expressions are in conformity with organisational norms but not represent his or her true feelings, i.e. the employee is required to express emotions which are not genuinely felt in the particular situation.

To capture the complexity of social interactions with customers and clients it is important to measure aspects of emotion work in addition to general job demands. An increasing amount of research has linked sickness absence to psychological and social work factors. However, there is a lack of studies including demands related to client-specific work situations, such as aspects of emotion work. The current thesis seeks to contribute to knowledge regarding the effect of emotion work on employee health and sickness absence.
Aim: The overarching aim of the current thesis was twofold. First, we wanted to gain more insight in the relationship between experiencing emotional dissonance at work, employee health, and sickness absence among employees working with customers and clients. The second aim of the study was to identify moderators that reduces the negative impact of emotional dissonance on employee health and sickness absence.

Methods: A sample of 7 758 employees were recruited from 96 Norwegian organisations in the period 2004 to 2014, all working with customers or clients. The study design was prospective with emotional dissonance measured at baseline, and then linked to official registry data of medically certified sickness absence for the year following the survey assessment.

Publications:
- Emotional dissonance and sickness absence: A prospective study of employees working with customers and clients
- Emotional dissonance and sickness absence among employees working with customers and clients: a moderated mediation model via exhaustion and human resource primacy
- Emotional dissonance, mental health complaints, and sickness absence among health- and social workers. The moderating role of self-efficacy

P146: The Impact of Rumours of Change on Musculoskeletal Pain Depends on the Combination of Fair Leadership, Predictability, and Decision Control
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Impending change in the workplace may challenge one's need for predictability and security, possibly disturbing somatic health. The current study examined the extent to which the relationship of rumours of organisational change affected the extent to which employees remained pain free, and furthermore whether these relationships were moderated by combinations of the perceived levels of fair leadership, predictability, and control of decisions pertaining to the job.

Data were drawn from a two-wave study based on work environment surveys conducted by the National Institute of Occupational Health in Norway with a follow-up period of two years. The effective sample size was 5967 employees. A single item from well established and validated Nordic Questionnaire for Psychological and Social Factors at Work (QPSNordic) was used to determine whether employees had experienced rumours of change in the workplace. Six items were used to determine whether employees had experienced pain in the neck, head, arms, shoulder, back and/or legs the previous four weeks. The outcome variable of the current study was being pain free - i.e. not reporting any of these pain complaints. Latent profile analyses were conducted to determine unobserved subgroups of employees based on the reported combinations of fair leadership, predictability for the next month, and decision control (autonomy) measured with the QPSNordic. Furthermore, the extent to which rumours of change predicted being pain free was determined by binary logistic regression adjusted for sex, age, skill level, and being pain free at baseline. These regressions were conducted for each subgroup defined by the latent profile analysis, to determine any difference in associations across latent subgroups.

Results suggested that four latent subgroups of employees could be distinguished: “Predictable”, “High control, fair, predictable”, “fair”, and “fair and predictable”. Furthermore, the musculoskeletal health of employees of the subgroup characterised by combined high control, predictability and fairness did not seem to be affected by rumours of change (OR 1.00, p=0.96). The “fair” and “fair and predictable” subgroups exhibited negative statistically significant associations (OR 0.74, p=0.04 and OR 0.85, p<0.01, respectively), suggesting the impact of rumours was stronger for these groups and decreased the probability of being pain free.
The current results suggest that the adverse effects of anticipating change may be alleviated by a work environment pervaded by fairness, predictability and job control. This should have considerable practical implications since it describes some modifiable protective factors that should be taken into account when considering impact impending change may have on employees.

**P147: Predictive Psychophysiological Stress Symptoms in Dentists at a Social Security Institution in Mexico**

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**Introduction:** Dentistry has been identified as a stressful occupation that can affect mental and/or physical health, because these professionals are forced to remain seated for long periods of time in forced postures and to deal with nervous or anxious patients. Likewise, dentists can be exposed to potentially dangerous diseases and with this stress is conceived as a normal physiological response of the organism in certain situations that can become pathological if the reactions are not appropriate, affecting in a physical, emotional, social way or psychic to those who experience it. Evidence suggests that stress, depression, fatigue, anxiety, headache, carpal tunnel syndrome, neck pain, hypertension, as well as musculoskeletal injuries, are common diseases of dentists. They are manifestations of their work practice and may negatively affect the quality of the oral health services they offer.

**Objective:** The study sought to identify the psychophysiological symptoms of chronic stress related to the presence of high levels of perceived stress in dentists of a social security institution in the city of Guadalajara, Mexico.

**Methods:** The study design was transversal and analytical. Surveys were conducted to all dentists who were working in a social security institution in the Metropolitan Area of Guadalajara, Mexico during 2011. Of 87 dentists, 41.4% were men and 58.6% women. The questionnaires were completed with voluntary participation and under the status of informed consent. For the assessment of perceived stress, the Stress Profile of Nowack was used and for the psychophysiological symptoms of chronic stress, the Inventory of Stress Symptoms. The strength of association between the high level of perceived stress and psychophysiological symptoms was assessed using the Odds Ratio with a confidence interval of 95% and at the level of significance of \( p < .05 \), a multivariate analysis was applied through statistical regression analysis. Logistics to control confounding factors, a correlation was subsequently applied using Pearson's \( r \) and the method of analysis was stepwise.

**Results:** The levels of perceived stress were: high (67.8%), medium (29.9%) and low (2.3%). This study highlights the existence of a significant association between the psychophysiological symptoms of chronic stress (insomnia and fatigue) and the female gender with a high level of perceived stress, a positive correlation was reported and the regression index indicated a dependence between these symptoms and the high level of perceived stress.

**Conclusions:** Stress can cause negative emotional states that favor the appearance of inappropriate behaviors, these, in turn, negatively impact the work environment generating more stress. The early identification of the symptoms of chronic stress in dentists would favor the implementation of appropriate prevention programs to take care of their health security in the workplace. Women odontologists with overt symptoms of insomnia and fatigue may have high levels of perceived stress, unlike men.
Introduction: Presenteeism is commonly conceptualised as attending work despite illness. This contrasts with sickness absence, which involves not attending for work when ill. There is evidence to suggest that presenteeism has more negative consequences, they include lost productivity, increased work errors, contagion, negative impacts upon health, and future sickness absence. Whilst much research has focused on the types of diseases associated with presenteeism and absenteeism, there has been little investigation into how individuals’ illness perceptions vary between these episodes. Such knowledge would help researchers to understand employees’ presenteeism and absenteeism decisions. This type of research may be particularly valuable in healthcare settings where the frequency of presenteeism is often greater than in other sectors.

Aim: To determine how illness perceptions vary between periods of presenteeism and sickness absenteeism.

Methodology: A survey was completed by 280 ward-based nurses working with older adults. Retrospective data on illness perceptions during episodes of presenteeism and sickness absenteeism was collected. Illness perceptions were measured via the Brief Illness Perceptions Questionnaire (B-IPQ). Single-item measures were also used to collect information on contagion, workability, absence legitimacy, and expectations of the impact of presenteeism and absenteeism on illness. Data was also collected on the type and number of illnesses experienced during each episode. Data was analysed via the Paired-Samples t Test, Wilcoxon test, and McNemar test.

Results: The study revealed numerous significant differences between presenteeism and absenteeism episodes. Musculoskeletal disorders (MSDs), common mental health disorders (CMHDs), and headaches were more common during presenteeism, whilst digestive illnesses, infectious disease and post-operative recovery were significantly more common during absenteeism. When compared with presenteeism, illnesses that occurred during sickness absenteeism significantly: affected lives more, had more symptoms, were more concerning, were more likely to be treated, were more contagious, and were regarded as a more legitimate reason to engage in absenteeism. Treatment was also considered to be significantly more effective during sickness absenteeism. Workability was perceived to be significantly better during presenteeism. Presenteeism was perceived as harmful and absenteeism beneficial for illness; individuals attended work when presenteeism was expected to be less harmful and stayed off work when absenteeism was expected to be more beneficial for illness. There were no significant differences between the causes of illness during presenteeism and absenteeism episodes.

Conclusions: The significant differences between presenteeism and sickness absenteeism episodes highlighted the relevance of including illness perceptions and related factors within models of illness behaviour. In view of the findings, practical implications might include the introduction of novel treatment options for ill members of staff, and the implementation of tailored support systems for struggling nurses.
P149: Firefighter Health Study – Trend Analysis for Absenteeism Due to Illness Among Brazilian Fire Fighters (2004-2012)

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Absenteeism due to illness is a relevant health indicator in occupational studies. The outcome involves a complex network of variables, including exposure to risk factors at work and individual characteristics. Moreover, the outcome also relies on worker’s self-perception and recognition of symptoms, formal medical registration procedures and normative legislation. The aim of the present paper is to analyse the main causes and time pattern of absenteeism due to illness, between 2004 and 2012, in a Brazilian Fire Service. The analysis is part of a prospective project regarding the mental health of fire fighters – the Firefighter Health Study (FHS). Official documents of the institution provided by the human resources department were used to calculate the number of active fire fighters and causes, frequency and severity of absences from work due to illness.

For data analysis, five indexes were constructed: 1) Frequency index (number of sick leave); 2) Severity index (number of days lost); 3) Percentage of firefighters absent from work due to illness; 4) Average days of sick leave; and 5) Percentage of days lost. The indicators were calculated for health problems in general and for specific diagnoses (according to the International Classification of Diseases - ICD 10). Results indicated that injury, poisoning and certain other consequences of external causes (ICD – S-T) (15.3% of all sick leave; 27.2% of all days lost), diseases of the musculoskeletal system and connective tissue (ICD M) (20.2% of all sick leave; 19.9% of all days lost) and mental, behavioural and neurodevelopmental disorders (ICD F) (6.5% of all sick leave; 10.2% of all days lost) are the main problems leading to absences from work due to health problems in Fire Service. For absenteeism in general (all causes included), indexes showed that sick leave were more frequent (indexes 1 and 3) and severe (indexes 2 and 5) in 2012 when compared to 2004. No differences regarding average days of sick leave was found during the period (index 4). The analysis for the three specific main causes of absenteeism due to illness indicated that only ICD M and ICD F increased in frequency (53.8% and 200.0%, respectively). Regarding severity, all causes increased (23.9% for ICD S-T, 23.7% for ICD M, and 210.3% for ICD F).

Results indicate that preventive and health promotion actions are necessary in the Fire Service. Mental health problems require special attention from managers and health professionals. The development of an occupational health surveillance system integrated with management practices can contribute to 1) understand the causes of increased frequency and severity of sick leave; and 2) building effective intervention programs.

P150: Readiness for Return-To-Work Scale in a South Korean Setting: Exploring Factor Structure and Psychological Properties for Workers with Musculoskeletal Injuries

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Introduction: The Readiness for Return-To-Work(RRTW) is based on the Readiness for Change model which has been developed and confirmed in western countries, identifying factors affecting an individual’s ability to initiate and continue behaviour change, in this case, return-to-work after work-related injuries. The RRTW scale was developed and validated by Franche et al. (2007) to identify readiness for work especially for workers with work-related musculoskeletal injuries. This
study aims to identify the factor structure of RRTW model especially for not working sample — the RRTW model has stages for both not working and working populations — compared to this original RRTW scale and explore the difference in terms of psychological health status for workers with musculoskeletal injuries in a South Korean setting.

Methods: Participants with work-related musculoskeletal injuries (N = 202) completed the Readiness for Return-To-Work (RRTW) scale, sociodemographic-, work-, and health-related questionnaires in the presence of an assistant. Participants were either in rehabilitation care or yet to return to work after the care. Statistical analysis included exploratory factor analysis using Maximum Likelihood Factoring and oblique Oblimin rotation, and one-way ANOVA.

Results: Following exploratory factor analysis, factor loadings after rotation showed four distinguished RRTW stages: Precontemplation, Contemplation, Prepared for Action — Self-evaluative and Prepared for Action — Behavioral. This result corresponds with the original RRTW scale except for item 10. The four factors were comprised of three items each. Twelve items significantly loaded on one corresponding factor, and each factor was properly explained by its three items. In the one way ANOVA analysis, psychological status significantly differed by RRTW stages: physical activity fear-avoidance, work fear avoidance, mental health (SF-12), and depression. The most compromised group are individuals in Precontemplation stage who have not thought of returning to work and are still struggling to recover from injuries. Conversely, the most advantaged group are those in Prepared for Action — Self-evaluative who think they are ready to return to work but have yet to take specific actions.

Conclusions: The factor structure of the RRTW scale generally fits the original version identifying four RRTW stages. Psychological health status of participants tends to improve as the RRTW stage advances. The result implies that appropriate measures should be taken to individuals in each RRTW stage.

P151: The Health Behaviours of Estonian Police Officers
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Introduction: Based on results of studies conducted in different countries it may be assumed that the health of people working in the rescue services is strongly influenced by smoking, consumption of alcohol and lack of physical activity.

Aim: The aim of this study was to determine the health behaviour (rate of physical activity, alcohol consumption, and smoking habits) in officers of the Estonian Police and Border Guard that conduct fieldwork, taking into consideration their gender and the length of occupational life.

Methods: For data collection, an electronic questionnaire was used (10.02.2017 - 17.03.2017). All study groups were divided in subgroups by gender and duration of work in this profession (<14 and ≥14 years). For monitoring leisure-time physical activity (PA) WHO recommendations were taken in consideration, and numbered as inactive, optimal active and very active when their PA was ≤150, 151-299, and ≥300 minutes a week, respectively. By frequency and quantity of alcohol consuming (separately wine, beer, spirits) the consumed drinks (10 grams of pure alcohol) were calculated (1 drink=amount (l) X strength (%) X 0.789) per week. According to NIAAA, alcohol consumers were divided as non-consumers, moderate consumers (up to 7 and 14 drinks per week for women and men, respectively), and overconsumers.

Results: Altogether 320 (67.5% men; 52.8% with working duration ≥14 y) were enrolled. One-third of police workers (29.7%) did not consume any alcohol (manifest more frequently in women group than men; p<0.001), but 15.2% were overconsumers. The most consumed alcoholic
beverage was beer (median 14.2 ±28.5 drinks), followed by spirits (10.6 ±18.8). The police
officers’ main diseases (cardiovascular, musculoskeletal, digestive, and urinary tract) prevalence
was similar to the statistics of the whole population and was not associated with a different level
of alcohol consumption. A low physical activity level emerged. Three quarters (76.3%) were
inactive while only 6.6% had an optimal activity level, and there were no differences by gender
or working duration. From the results of this study very active officers as compared to inactive
officers had more musculoskeletal (p=0.003) and respiratory tract (p=0.011) diseases, but this
might be influenced by the very small group of people in the optimal activity level. The favoured
activities were self-training, visiting the fitness studio, swimming and gardening (all about 10%).
One fifth (22.8%) of the respondents were smoking and primarily workers, who have shorter
occupational life (p=0.004).

Conclusions: The physical activity level in officers of the Estonian Police and Border Guard is
low and alcohol consumption and smoking habits analogues with the broader Estonian
population.

P152: The Influence of Health Behaviors on Sleep Quality and Quantity in a Canadian
Mining Workforce
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Many health behaviours including smoking, physical activity participation, alcohol and drug use
are known to impact sleep quality and quantity. Although there is evidence that these factors are
important to overall health, less is known about the association between sleep quantity and
quality in the mining workforce and which health behaviours may be associated with poor sleep
profiles. Furthermore, poor health practices and suboptimal sleep behaviours may increase the
risk of workplace injuries as well as developing occupational diseases. The purpose of this study
was to therefore investigate the sleep quality and quantity and related health behaviors of
workers in the mining industry. Data were collected from 2224 workers in a Canadian Mining
workforce using a 45-page questionnaire composed of validated questionnaires. In particular,
the Pittsburgh Sleep Quality Index was used to collect data on subjective sleep quality and
quantity (PSQI score M=6.43 ± SD = 3.068), the Alcohol Use Disorder Identification Test to
estimate alcohol consumption (M= 1.29 ± SD = 0.537; M=1.214 ± 0.430), the DA
ST-20 to assess
drug use (M= 1.25 ± SD = 1.769) and a demographics questionnaire to gather data on smoking
behaviours (M= 1.12 ± SD = 1.283) and exercise levels (M= 12.530 ± SD = 13.01). The results
from this study will be useful to assist the mining industry to develop targeted interventions aimed
at improving sleep and health behaviours thereby improving occupational wellness and mitigating
workplace injuries in this industry.

P153: Emotional balance, positivity and Type D Personality on the motivation for physical
exercise of men and women with cardiovascular disease in function of laboral situation
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Cardiovascular disease constitutes the main chronic disease worldwide. Previous studies have
demonstrated that the practice of exercise in leisure time acts as a protective factor on the ageing
heart against ischemia and its consequences. Therefore, regular leisure-time physical activity
decreases CVD mortality in men and women. By other hand, the European Guide to prevent
cardiovascular risk has indicated that psychosocial and motivational variables play an important role in the prevention and evolution of the cardiovascular disease. In this sense, research has demonstrated that a poor self-regulation of negative emotions is associated with an increased risk of developing cardiovascular events. Following this line, the main aim of the present research is to test the notion that positive or negative emotions versus positivity, intrinsic motivation or type D Personality influence on the effort that patients follow to accomplish their own physical exercise goals.

A longitudinal study was designed to evaluate the relevance of some psychosocial and motivational variables (emotional balance, positivity, type D personality, and intrinsic motivation) on the prediction of regular leisure time of physical exercise (days/week, minutes), self-set goals and confidence on accomplishment these goals. A total of 520 individuals with cardiovascular disease (average age = 64; 84% men) and different laboral situation (full time workers, part-time workers, unemployed, retirement, home workers) fulfilled the instrument in two different moments. A longitudinal Structural Equation Modelling showed that emotional balance and positivity influence significantly on number of days and minutes that patients realized exercise and set goals and confidence to accomplish goals in future. However, patients with D Personality realized less regular leisure time of physical exercise, less minutes of exercise/day and lower goals and commitment. Intrinsic motivation acts as mediator between emotions and exercise. Once the importance of practice physical exercise on middle age populations and samples with chronic illness has been considered; the present study highlights the relevance of maintain a positive emotional balance and a life positive orientation to maintain a good level of effort to accomplish acquirable goals related to physical exercise.

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Each year over 32,000 people are diagnosed with cancer in Norway, and the number is increasing year by year (Larsen et al., 2016, p. 4 and 8). While individuals carry the heaviest burden, cancer also affects employers and society as a whole. New treatment methods have meant that more people recover from cancer than ever before. With the focus of cancer research being primarily on curing the illness, cancer survivors may feel overlooked by society, and in particular, may struggle to get back into employment due to late adverse effects following cancer treatment. Their reduced work ability challenges both employees and their employers.

This piece of research explores the experiences of Norwegian breast cancer survivors of working age and their way back to working life after treatment. Drawing broadly on a biopsychosocial model of health (Engel, 1977), and more specifically on the job demand, control support model of workplace wellbeing (Karasek and Theorell, 1990), this study seeks to explore challenges breast cancer survivors encounter when returning to work, and their experiences with employers when it comes to adjustments to accommodate an inclusive and sustainable working life. A key aim is to identify what employers can learn from these experiences.

A mixed methods study consisting of an online survey (n=46) and semi-structured, in-depth interviews (n=10), the data reveals that the cancer survivors involved in this research are highly motivated to work, but that many struggle to come back to full-time employment due to late adverse effects. Their experiences with employers vary considerably with some individuals being offered the adjustments they need to be included in working life, while others encounter incompetent employers or employers unwilling to make the necessary adjustments.
Findings from respondents indicate that experiences could be improved if employers/HR can learn to be more patient and flexible with cancer survivors who are navigating a return to work. Employers might need to change their attitudes and to work more systematically to facilitate return to work. Most notably of all, findings indicate that there is a need for employers to have better communication skills and more knowledge about cancer and late adverse effects of treatment if return to work is to be facilitated more effectively.

Although this research is based on a Norwegian sample and relates specifically to the Norwegian inclusive working life agreement, as the incidence of cancer rises, and the number of survivors of the illness increases, implications from this research are far more broad reaching. This paper aims to address a current gap in the workplace health literature on this important issue and, as such, provides an invaluable insight into the experience of cancer survivors when returning to work. Furthermore, it presents a call for further research to be conducted in other countries, and to examine experiences of survivors of other forms of cancer. Improved survival rates mean facilitating an effective and sustainable return to work of cancer survivors of working age will become an increasingly prominent issue for employees and employers alike.

**P155: Physical Health and Psychological Wellbeing of Ill and Injured Canadian Armed Forces Members and Veterans**

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**Introduction:** Military members experience multiple demands and related risks associated with the military lifestyle (Morin, 2011). Among these are the risks of becoming mentally ill or physically injured, which can have life-long implications (Boulos & Zamorski, 2013). Previous studies have shown that ill and injured members who have been medically released from the Canadian Armed Forces (CAF) experience greater difficulty transitioning to civilian life (Veterans Affairs Canada [VAC], 2011). To gain nuanced insight on the experiences of Canadian ill and injured members and veterans as they transition to civilian life and how to best support them, the CAF sought to examine releasing members and veterans’ physical health and psychological wellbeing.

**Methods:** Using a qualitative approach, semi-structured interviews were conducted with a sample of 46 ill and injured members and veterans who had either been medically released or were in the process of medically releasing from the CAF. The semi-structured interviews were carried out either in-person at several Military Family Resource Centres across Canada or over the telephone. During the interview, releasing members and veterans were asked to describe their current physical and mental health, current stressors in their life, and to what extent the stressors are related to the transition as well as their illness and injury. In addition, the members and veterans were asked to indicate the impact of their illness and injury on their daily functioning. Finally, the members and veterans provided descriptions regarding the level of caregiving that was required due to their illness and injury.

**Results:** Interview transcripts were analysed using the grounded theory method. Several overarching themes were found. Overall, many medically releasing CAF members or veterans indicated that their physical or mental overall health and wellbeing had been greatly impacted by their illness and injury. Moreover, numerous ill and injured members and veterans described having both physical and mental health challenges, which significantly lowered their overall psychological wellbeing and day-to-day quality of life from a physical, social, and interpersonal perspective. Members and veterans also described a range of stressors, including difficulties with obtaining civilian doctors to continue receiving medical care and treatment outside of the military. Finally, medically releasing members and veterans commonly indicated the need for caregiving across a variety of domains (e.g., physical aid with tasks, managing schedules, medical treatments).
Discussion: Findings from the present qualitative study highlight not only the lasting impact of illnesses and injuries incurred when serving one's country, but the nuances of how the illness and injury, along with its associated stress, continue to interfere with members and veterans’ daily functioning and quality of life in a Canadian military context. By gaining a greater understanding of ill or injured members and veterans’ wellbeing both during and after the transition period to civilian life, the CAF/Department of National Defence and VAC can ensure that the support services and programs are consistent with their needs.

P156: The Importance of Perceived Organisation’s Commitment to Workplace Health Promotion: Investigating the Relationship Between Working Conditions and Emotional Exhaustion
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The implementation of workplace health promotion (WHP) in organizations has been increased across the last decades. From the perspective of organizations, two reasons for the implementation of WHP seem mainly to be important: a) maintaining the working capacity of employees and b) competition advantages in employee recruitment. From the perspective of employees, staying healthy is a crucial need as well.

According to P-E fit theory, stress arises if the environment is insufficient to fulfil the person's needs or if its demands exceed the person's abilities (Edwards et al., 1998). For that reason, the supplies of an organization and the needs of employees should match to facilitate employee health. To guarantee such a positive match, it is important that employees recognize the supplies of the organization. Hence, in terms of WHP, it seems to be important that employees perceive WHP and health as a core value in the organization. Based on this assumption, we assume that the perception of an organization’s commitment to WHP might be a crucial contextual factor that could affect the impact of working conditions on employee health.

In the current study we investigated employees’ perception of the importance of WHP in their organization as moderator in the relationship between autonomy and emotional exhaustion as well as in the relationship between time pressure and emotional exhaustion. Therefore, we conducted an online survey in the head office of a supermarket chain in Germany. In sum, 182 employees from eight departments participated in the study. To test our moderation assumption, we used multilevel regression analysis and thus, controlled for the affiliation to a specific department which might affect the perceived importance of WHP.

The results showed that perceived importance of WHP is negatively related to emotional exhaustion. Furthermore, perceived importance of WHP was demonstrated to moderate the relationship between autonomy and emotional exhaustion, such that autonomy is only negatively related to emotional exhaustion when perceived importance of WHP is high. In the relationship between time pressure and emotional exhaustion was no moderation by perceived importance of WHP demonstrated.

The results illustrated that perceived importance of WHP seems to be an important contextual factor to ensure positive effects of job resources. Hence, organizations should pay more attention on WHP and a corporate culture that supports employee health to maintain the working capacity of their employees. In terms of job stressors, a buffering role of perceived importance of WHP was not supported in the current study and thus, such a buffering function should be further investigated in future research.
P157: Physical Work Capacity Assessment to Encourage Health Habits Among Finnish Firefighters
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Background: Firefighters’ work tasks are physically demanding, and their work involves many occupational health risks. FireFit is an assessment, follow-up and feedback system tailored for operative firefighters (FireFit). It aims to maintain good work ability throughout firefighters’ working careers. The aim of this study was to describe how a computer-based method of assessing the physical work capacity of firefighters motivates them to adopt healthy lifestyle habits for promoting good work ability.

Methods: The qualitative data of the present study consisted of two group interviews and responses to open questions included in the questionnaire. The data were analysed by inductive content analysis. Firefighters obtain feedback on their FireFit test results. In order to understand the basis of motivation, we also deductively analysed the behaviour change techniques (BCT) used in FireFit-system feedback.

Findings: Using the FireFit system helps construct a positive atmosphere and culture at the workplace for promoting health and physical work capacity. It motivates firefighters because it creates a common understanding of promoting their health and work ability. It provides an informal, experimental and social basis for actions at the workplace. The FireFit feedback contained wide-ranging BCT. According to the BCT grouping, the feedback contained 45/93 techniques in 14/16 clusters.

Conclusion: An assessment system tailored for a professional field can encourage healthy lifestyle habits for promoting good work ability. It is possible that the wide use of BCT has made FireFit more motivational. It has also widely influenced the promotion of health in workplace culture.

P158: The Effects of Counselling Delivered Through Mobile Application on Work Ability and Work Recovery Among Micro-Entrepreneurs
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Background: The promotion of work recovery is a key element in the promotion of work ability among micro-entrepreneurs, since their work-related factors might maximize their levels of stress but minimize the possibilities to take care of oneself. Smartphones offer a new way to deliver counselling and to promote health behaviour changes that enhance recovery from work. Interventions with behaviour change techniques have had better results, and the Persuasive Systems Design methodology in the development of mobile applications has been shown to improve the usability and effectiveness of the application and thus enhance the effectiveness of the intervention.

In this study, we will develop an intervention program to promote work recovery among micro-entrepreneurs. Intervention program’s plan of action merges: 1) the contents that are based on the needs of target population and evidence from research on health behaviour enhancing work
recovery, 2) theoretical framework for the counselling, 3) counselling methods including behaviour change techniques, and 4) tailoring the content and counselling according to trans theoretical change model and physical strenuousness of work. Intervention is delivered through mobile application designed by using the abovementioned methodology. The main aim is to investigate if the use of work recovery application results in better work recovery and work ability than no treatment for micro-entrepreneurs.

Methods: Randomized controlled trial. Participants are Finnish micro-entrepreneurs, not their employees. Inclusion criteria are working full-time as entrepreneurs, understand Finnish for using mobile application, have an Android–mobile phone and are willing to participate in the study until the end. The primary outcomes are perceived work ability and the need for recovery scale. Data will be collected by repeated interned-based questionnaires (at baseline, 2, 6 and 8 months) and from the use of mobile application. Randomly selected group of participants (n=30–40) will be interviewed at 2 months. The first results will be ready for presentation until September.

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Introduction: This study concerns the relationship between socioeconomic status (SES) and eating behaviours in working populations. Much research exists on this topic in a community setting, however, more research is needed in a workplace setting to help inform the targeting of interventions to improve employee health.

Methods: The study was conducted in 2014 using a single self-report anonymous questionnaire. The variables of interest in this study were age, gender and number of dependents, three measures of SES (education, income and job type), Body Mass Index (BMI), and diet. Two items, “how often do you eat past the point of feeling full?” and “to what extent does the cost of food influence what you buy?” were introduced into the survey in response to a literature review. Hierarchical linear regression analyses were conducted to examine the variance in eating behaviours.

Result: A 22% response rate was achieved with 6,206 responses. All three SES variables, in addition to age, number of dependents and BMI accounted for 9% of the variance in the cost of food influencing purchase behaviours; age, gender and BMI explained 7% of the variance in eating past the point of feeling full; gender, BMI and all SES variables explained 1% of the adjusted variance in vegetable consumption; age, gender and BMI explained 2% of the variance in fruit consumption and age, gender, BMI, education and salary band explained 5% of the variance in consumption of a healthy well-balanced diet.

Discussion: The findings demonstrate the importance of socioeconomic status in eating behaviours and suggest that demographics also play a significant role in influencing employee eating behaviours. This raises interesting questions as to the feasibility of targeting healthy eating interventions at work on the basis age or BMI.
P160: Which Factors Influence the Participation of Blue-collar Workers in Worksite Health Promotion Programmes Within the Construction and Transport & Logistics Sector
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Purpose: Transport and Construction workers are highly at risk of developing overweight and obesity (Naug et al., 2016; STL, 2016 Arbouw). A recent study has shown that 73% of the transport and logistic workers are overweight (STL, 2017). In 2016, nearly 50% of the working population were overweight (Monitor CBS & Trimbos Institute, 2016). Excessive body weight is associated with increased mortality and morbidity and has a negative impact on health, for example the incidence of chronic diseases such as low back pain, Type II diabetes or cardiovascular disorders (Verweij, 2010, Burdorf et al., 2016). Being overweight and obese are also related to a decrease of work ability of the individual (Proper et al., 2014). A few companies in the Netherlands in the Construction sector and the Transport & Logistic sector offer Worksite Health Promotion Programmes (WHPP’s) with the aim of improving the health, vitality and work ability of workers. There is until now little insight into the factors that influence the participation of workers in WHPP’s and which factors influence the implementation of WHPP’s. The main goal of the current project is to evaluate the implementation and effect of two WHPP’s in the sector Construction and Transport & Logistic sector in order to fine tune the implementation strategy and improve the health and vitality & work-ability of blue-collar workers.

Design: A randomised research design will be used with 12 months follow-up. The research population will consist of blue collar workers within the Construction and Transport and Logistic sector. This project uses the RE-AIM model framework (Glasgow et al., 1999), a validated framework for the systematic evaluation of the implementation of WHPP’s combined with the validated framework of Steckler & Linnan (2002) for the evaluation of interventions. The data will be collected through questionnaires and interviews. In order to gain insight in the implementation process, the results will be analysed at three different actor levels (macro-level: organisation and management; meso-level: implementer; micro-level: participant) using a mixed methods approach. By documenting all of these aspects of the implementation process we are able to assess which factor influence the implementation of Worksite Health Promotion Programmes.

Results: The results of the baseline data will be presented at the conference. This will be accompanied by the results of the qualitative analysis which gives insight into which personal and organisational factors affect the participation of blue-collar workers in WHPP’s within the Construction and Transport & logistics sector and the motivation of blue-collar workers to change their lifestyle behaviour.

P161: Selective Optimisation with Compensation (SOC) at the Individual, Group, Immediate Management, and Organisational Level – Better and Longer Work Life
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The proportion of older workers is increasing due to demographic changes as well as political initiatives to raise the retirement age. At the same time ageing is often associated with a decline in cognitive and physical functioning as well as increased risk of illness. Yet, reduced functioning does not necessarily affect the productivity of older workers. The use of SOC strategies at work has been associated with e.g. job satisfaction, self-rated and manager-rated job performance and with self-rated workability. So far the literature has focused on the use of SOC strategies at
the individual level. However at the workplace, employees are often arranged into teams and both the immediate manager and organisation can be expected to influence the individual employees’ work tasks and work conditions. We therefore wanted to expand the SOC model, applied at the workplace, to include strategies at the group, immediate management, and organisational level. We conducted focus group and individual interviews with employees and managers at two hospitals and two companies from the dairy industry. The interviews explored which SOC strategies individuals, the workgroups, the immediate managers, and the organisational level of the workplaces applied, in order to make it possible and desirable for employees to stay at the workplace until or beyond retirement age. We conducted a total of four focus group interviews and nineteen individual interviews. Based on the results from the interviews we expand the SOC model, applied to the workplace, to include strategies at the group, immediate management, and organisational level and present examples of SOC strategies at these levels.

P162: Effects of Aging on Tolerance and Recovery From Shift Work: A Systematic Review
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Over the last two decades, the study of the effects of aging on the workforce has been a major topic for researchers and policy makers. In the USA, the labour force aged 55 and above increased from 14.3% to 20.9% between 2002 and 2012, and it is projected to continue increasing to 25.6% by 2022 (Toossi, 2013). Similarly, Giannakouris (2008) showed that in the European Union, the population mean age is projected to increase from 40.4 to 47.9 between 2008 and 2060. Together with the increase in life expectancy, an ageing workforce highlights the relevance of new policies to secure improved employment, performance, wellbeing, and health for older workers (Bourn, 2007; Cloostermans et al., 2014; Costa & Di Milia, 2008). In addition, the capability of this aging workforce to tolerate and recover from the contemporary demanding work rhythms and schedules as shift work, needs to be addressed (Blok & de Looze, 2011; Saksvik et al, 2011).

The circadian disruptions resulting from nonstandard work schedules has been associated with a variety of health problems as cardiovascular disease (Puttonen et al, 2010), gastrointestinal disturbances (Knutsson & Bøggild, 2010), metabolic disorders (Nakata et al., 2004), cancer (International Agency for Research on Cancer, 2007), increasing risk of labour accidents (Folkard, 2003), depressive symptoms (Nakata et al., 2004), poorer life satisfaction (Kaliterna et al, 2004) and sleep problems (Akerstedt & Wright, 2009; Yazdi et al., 2014).

Several pathways support the suggestion of an impaired recovery and tolerance to shiftwork resulting from aging: (1) weakening of the circadian system resulting from molecular and functional deterioration in the suprachiasmatic nucleus, which makes it less reactive to external light time signals (Van Someren, 2000); (2) earlier phasing (morningness) of circadian rhythms in older age (Lieberman et al., 1989); (3) slower adjustment of circadian rhythms to consecutive night shifts in older workers (Harma et al., 1994); and (4) reduced sleep duration in older ages, which increased sleepiness during waking hours (Juda, Vetter, & Roenneberg, 2013).

The study reviewed the literature on the effect of ageing on tolerance and recovery from shiftwork published between 2011 and July 2017 and indexed on Medline, PsycINFO, Web of Science, and ScienceDirect. A total of 25 articles were extracted. A first conclusion of this review is that a variety of variables has been used to illustrate the impact of aging on recovery and tolerance to shiftwork from affective disorders, health and wellbeing performance and sleep with great variance within concept.
As a result, the mixed results of the review should not be surprising: 12 studies suggested better shiftwork tolerance among younger workers, eight studies reported opposite results, and 12 studies found no significant correlation between age and shiftwork by the variables examined. This disparity in the results of this review, and in the literature, about the effect of aging and shiftwork can be explained by the lack of consensus and operationalisation of the main concepts under study: aging, shiftwork tolerance. Based on these findings, theoretical, methodological, and practical implications are discussed.

P163: The Aged Civil Aviators’ Personality Functions in Relations to their Successful Aging and Job Performance

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It is of importance to explore the aged civil pilots' personality functions as well as traits in relations to their successful aging in terms of aviation safety. Based on the DSM-5 (2013), there are four types of personality functions to assess a person's wellbeing, that is identity, self-direction, empathy, and intimacy. For successful aging, Baltes and Baltes (1980, 1990) proposed the selection, optimization, and compensation, SOC model to assess the degree of a person's successful aging. In this study, I assess the differences among the groups of aged civil pilots on their personality functions, successful aging of SOC model and job performances. The relationships among the personality functions, SOC, and job performance are also examined. A total of 502 airline pilots participated in this study. Most of them (83.1%) are Taiwanese. The questionnaire consisting of 67 forced-choice items was used in this study. One-way ANOVAs showed that there are no significant differences among 5 groups of aged civil pilots, from ages 40 to 65, on their scores of personality functions and SOC model. The results of the correlations among the 4 types of personality functions, 3 factors of SOC model, and 3 factors of job performance are all highly significant (Ps<.001). The current results have shown that the aged civil pilots are aging very well based on their personality functions, SOC model, and job performance in Taiwan. How to keep or enhance the aged civil pilots' psychological wellbeing and successful aging are discussed based on the results of the current study.

P164: Evidence of Curvilinear Relationships between Age and Job Performance

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Although one’s capabilities and correspondingly work performance may change through the life course, the available empirical evidence on the relationship between age and performance is, at best, inconclusive and, at worst, contradictory. It is possible that the nature of the relationship between performance and age is not consistent throughout the full range of ages. We challenge the general expectation of a negative linear relationship and draw on relevant research to propose and then examine the possibility for differential and curvilinear relationships between chronological age and three types of job performance: proficiency, proactivity, and adaptivity. Using survey data we tested the relationships between age and each aspect of performance using polynomial regression analysis, which indicated a U-shaped relationship between age and adaptivity and an S-shaped relationship between age and proactivity. A curvilinear relationship between age and proficiency was not supported. We then identified the points at which the shapes of the lines for adaptivity and proactivity change trajectory, using the partial derivatives technique. These findings are strongly indicative of the hypothesis that changes in aspects of
performance are not consistent throughout the range of working ages. As such, they can be especially useful for developing ways to optimize performance for different groups of employees and for channelling resources where they are needed the most, in order to support workers through their life course.
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**P165: Associations Between Executive Functions and Work Ability: Implications for an Aging Workforce**
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The global workforce includes a larger proportion of older workers than ever before, and those numbers are increasing due to a range of demographic and social factors including better late-life health and economic necessities to work past previous benchmarks for retirement age. In addition, workforce shifts from manufacturing to knowledge-based jobs represent a rapid change in the workplace that may place greater cognitive demands on older workers. Greater cognitive demands for older workers may in turn compromise work ability. To promote a vital and successful aging workforce, it is important to better understand how cognitive function across age is related to measures of work performance.

We studied a cross-sectional sample of 402 health care workers aged 25-70 who completed questionnaires related to psychosocial work characteristics, as well as computerised cognitive tasks assessing executive functions. We examined associations between executive function performance and work performance in the domains of presenteeism, absenteeism, and work ability, as well as their moderation by worker age. Results indicated that greater age was marginally associated with lower work ability, but was not related to presenteeism or absenteeism. Greater age was broadly associated with lower performances on measures of executive function, but there were limited associations between executive functions and work outcomes. Higher cognitive interference effects were found to be significantly associated with lower work ability, and there was an interaction between age and cognitive interference suggesting that the association between higher susceptibility to cognitive interference and lower work ability was strongest among the older workers. Other aspects of executive functions were not associated with work outcomes and did not interact with age. The current results, while cross-sectional in nature, are more positive than negative with regard to cognition and work ability among older workers, but strategies to reduce workplace distraction may be useful to support work ability with age.

**P166: How does Age Moderate the Relationship between Recovery Experiences after Work and Wellbeing?**
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**Aims and hypotheses:** Aging is a topical issue in working life. However, age has often played only a role as a control variable in the research on work stress recovery. The aim of this study was to examine whether age moderates the relationship between six recovery experiences (detachment, relaxation, autonomy/control, mastery, meaningfulness, and affiliation) during free time and wellbeing (vitality, life satisfaction, and work ability) among Finnish teachers and rectors. These six experiences were based on DRAMMA model. Due to the explorative nature of the study, we did not pose any hypotheses on the moderator effects; but we expected that all recovery experiences during off-job time would relate positively with the wellbeing outcomes examined.
Methods: 909 teachers and rectors took part in a cross-sectional questionnaire study. Of them, 49% worked as class teachers in comprehensive schools, 35% as subject teachers and 15% as rectors in both comprehensive and upper secondary schools. Average age in the sample was 50.6 years (range 18–68 years) and the majority (78%) were women. Detachment, relaxation, control, and mastery experiences were measured with items from the Finnish version of the REQ. Meaningfulness was measured with items adapted from the Job Diagnostics Survey, and affiliation with items from the Basic Needs Satisfaction scale. The data were analysed using moderated hierarchical regression analyses.

Results: Detachment, relaxation, control and meaningfulness related significantly to higher levels of vitality and life satisfaction. In addition, mastery was positively associated with vitality and affiliation with life satisfaction. Relaxation was the only recovery experience that had a significant relationship with better work ability. Age correlated positively with detachment, relaxation, control, and mastery. Regarding wellbeing, age alone played a significant role only in work ability: older teachers and rectors had a lower work ability. Age moderated the relationship between relaxation and all three wellbeing outcomes so that younger participants seemed to benefit more from relaxation experiences during off-job time than older ones. On the other hand, older participants seemed to benefit more from control in terms of higher levels of vitality and life satisfaction than their younger counterparts.

Conclusions: Our results suggest that also other recovery experiences than detachment from work, relaxation, control and mastery, which are most often studied based on the REQ, play a role in promoting wellbeing. Of these, the experience of meaningfulness was crucial both to vitality and life satisfaction and the experience of affiliation was crucial to life satisfaction. It seems that especially younger teachers benefit from relaxation experiences and that older teachers benefit from control experiences during off-job time. This study was cross-sectional, and therefore causal conclusions cannot be made.

P167: How Individuals May Benefit from the Experience of Emotions at Work? Evidence from a Double Moderating Model
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Purpose: Daily events are a constant in daily life at work and can be divided into daily hassles and uplifts. Daily hassles are the tiny things that somehow irritate people. On the other hand, daily uplifts are considered as minor pleasures occurred in daily life. Both kind of events have been proved to influence individuals’ quality of work life. However, the role that emotion regulation strategies play on this relationship is unknown. Thus, this study intended to explore the role that emotion regulation strategies have on the link between daily hassles and uplifts, and workers’ subjective health. We hypothesised that emotion regulation strategies, in particular, suppression and reappraisal, would moderate the link between daily hassles and subjective health. We also hypothesised that emotion regulation strategies would moderate the link between work-related daily uplifts and subjective health.

Design: We collected data among 392 workers from diverse job sectors (60% female). Participants reported daily events occurred to them in the past week, strategies of emotion regulation used after those events, and perceptions of health.

Results: Results show that the negative association between work-related daily hassles with health was influenced by an increased use of emotion suppression. Moreover, emotion reappraisal moderated the link unfriendliness customer daily hassles – health, such that the link was stronger when there was a low, and a moderate frequency of emotion reappraisal. Emotion regulation strategies did not moderate the link between daily uplifts and health.
Limitations: The cross-sectional nature of the study, as well as, the self-reported nature of the data limits the generalisation of our results.

Practical Implications: This study contributes to the positive psychology literature by attempting to examine why daily events relates to individuals' health. However, these results must be taken in light of our model analysis being conducted with cross-sectional data, which we discuss in further detail. Practical implications are further discussed.

Originality: This empirical study advances practical knowledge on how to deal with daily events, and thus maximise the positive benefits of daily uplifts, and decrease the negative effects of daily hassles on perceived health.

P168: The Relationship Between Absence from Work and Job Retention in Older Workers Aged 45 or Over.
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Introduction: Most industrialized countries have been experiencing major demographic changes (e.g., the extension of average life expectancy) that pose socio-economic problems such as the replacement of the ageing workforce or high costs caused by long-term disability. In the education sector in Quebec, for example, older workers aged 45 or over are more often absent from work for psychological and/or physical illness than their younger counterparts (Busque, 2016). Also, in the same population, the average duration of an absence is generally longer and the annual and average costs per injury are higher. The rate of injuries with rehabilitation or recurrence is also proportionally higher than for workers aged 44 or less.

Objective: This longitudinal study aims to assess the relationship between absence from work and job retention in older workers aged 45 and over, employed by a Quebec school organization. Methodology: Researchers collaborated with its human resources management (HRM) to study the relationship between absence from work and job retention in older workers. Record-based data supplied by the HRM measured absence over a 4-year period and job retention behaviours over a 12-year period. The sample (N=480), is predominantly composed of women (355; 74%). The large majority (278; 58%) were teachers [(other functions: clerical personnel=117 (24.20%), professionals=43 (9%), administrators=42 (8.80%)]. The mean age was 54.30 (SD=5.28), and the mean organizational tenure was 21.37 years (SD=5.95).

Results: During the 4 years, 300 participants had no absences; 57 were absent for psychological illness, 95 for physical illness, and 28 for both. The absence due to psychological illness influenced a smaller number of participants, but its duration greatly exceeded that of those with physical illness. Job retention behaviors (i.e., career stages and types of retirement) were established for four groups of participants: Mid-Career (159; 33%), Late Career (n=168; 35.5%), Early Retirement (79; 16.5%), and Regular Retirement (74; 15%). T-test analyses showed that for the Late Career group the average duration of absence caused by physical illness was more than twice that of the Mid-Career group. For participants who had already left the organization, a difference was observed in the average duration of absence caused by psychological illness. In fact, for the Early Retirement group, this duration was almost double that of the Regular Retirement group.
**Discussion:** For workers still employed, the absence due to physical disability was longer for participants in their late career (with mean age and organizational tenure higher), than for those in their mid-career. Meanwhile, the absence due to psychological disability was longer for those who retired early with financial penalties, than for those who retired regularly with a full pension.  
**Conclusion:** Given these results specific interventions to prevent absence and early retirement, and to promote the job retention of healthy older workers, are essential. This study is an example of applied research in the field of occupational health psychology. It could be replicated in other sectors and other industrialized countries.

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**P169: Moral Conflicts as a Motor of Moral Identity Development at Work: Self-Awareness and Micro Processes in Weekly experiences**  
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Moral identity is positioned at the intersection of moral development and identity formation, and it provides an important concept for understanding how we can prevent unethical behaviours and promote moral actions in the workplace. We investigated managers’ experiences of actual moral conflicts in their work with the aim to identify different moral developmental levels and micro processes that stem from facing these conflicts.

**Design and methods:** This qualitative study was based on weekly diary data, which was collected from 10 managers for a total of 16 weeks. Personal descriptions of moral conflicts were obtained by using an open-ended electronic questionnaire item. Each individual story (n = 56) was used as one coding unit, responses per participant varied between two and 15. First, we analysed the data inductively in order to identify potential individual developmental differences between these stories (how managers described the conflicts and how they tried to solve them). In the second phase, we tested the applicability of a model of the micro processes of identity development by using a theory-driven analysis.

**Results:** The data-driven analysis showed that managers used different levels of awareness with regard to how far they were able to identify their own role, values, feelings, and behaviours in each moral conflict. First, the descriptive level included approaching the moral conflict either by acknowledging only the external dimensions of the event or also personal thoughts, feelings, and reactions the conflict elicited within the person. Reflective awareness included being able to identify the reasons behind the personal reactions in the situation. On the evaluative level, managers were able to compare their own understanding of the situation with other potential viewpoints, and acknowledge that their personal moral ideas are one way of looking at a moral conflict, but not the only way. We found that the micro processes of identity development, namely, assimilation, accommodation, and withdrawal were identifiable from the managers’ reactions to moral conflicts. Managers were more likely to use a variety of ways to maintain their existing value framework (assimilation), sometimes by using self-protective or defensive mechanisms, than to show major changes in their personal values (accommodation). The evaluative level of self-awareness was associated with the readiness to change one’s values.

**Limitations:** The study provided only preliminary evidence of moral identity processes based on a relatively small qualitative sample.

**Value and Implications:** A prerequisite for moral identity development seems to be the ability to reflect and evaluate personal moral framework from multiple viewpoints, as this can lead to a readiness for change (value accommodation). Thus, managers can be supported to reach more mature forms of moral identity by developing their flexibility: the ability to look at the moral conflicts from various points of view.
**P170: Personality and Insomnia as Predictors of Anxiety and Depression among Norwegian Nurses: The SUSSH Study**

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**Introduction:** Insomnia seems to predict anxiety and depression, and may be a precursor to anxiety, but not to depression among shift working nurses. In addition, certain personality traits, neuroticism in particular, have shown stable relationships to both anxiety and depression. However, a recent review concludes that psychological functioning among nurses does not seem to be dependent on shift work directly but that several contextual and individual factors are involved in the development of anxiety and depression in shift working nurses. This indicates that the relationship between mental health and sleep is complex, and is important to investigate in a general nursing population. The aim of this study was to examine the effect of personality regarding the relationship between insomnia and symptoms of anxiety and depression among nurses engaged in day work and shift work.

**Methods:** The present study is based on longitudinal data from the Norwegian Survey of Shift work, Sleep and Health (SUSSH). A cohort of 2964 nurses who were members of the Norwegian Nurses Association was established in 2008 (38% response rate), and followed-up annually with questionnaires. In the present study we used data from Wave 1 (insomnia measured with Bergen Insomnia Scale), Wave 4 (personality measured with Mini-IPIP) and Wave 6 (anxiety and depression measured with the Hospital Anxiety and Depression Scale), with a sample size of 1764-1926.

**Results:** Insomnia measured at Wave 1 was a significant predictor of symptoms of anxiety (β = .11, p < .001; $R^2 = .36$, $p < .001$) and depression (β = .09, $p < .001$; $R^2 = .26$, $p < .001$) when adjusting for age and gender. The relations were weakened when personality was added to the final model (β = .07, $p < .001$; β = .06, $p < .001$), still this lead to an increase in explained variance in both anxiety ($ΔR^2 = .05$, $p < .001$) and depression ($ΔR^2 = .07$, $p < .001$). Personality and insomnia combined explained a larger proportion of variance in anxiety ($R^2 = .43$, $p < .001$) and depression ($R^2 = .32$, $p < .001$) compared to insomnia alone. Neuroticism had a positive relation to both anxiety (β = .29, $p < .001$) and depression (β = .37, $p < .001$). Extraversion and conscientiousness had a weak negative relationship with depression (β = -.05, $p < .05$) at Wave 6, but no significant results were found in relation to anxiety.

**Conclusion:** Neuroticism had stronger relationship with anxiety and depression than insomnia, but insomnia was still a significant predictor even when controlling for personality. The present study demonstrates the importance of considering individual differences when investigating the complex relations between sleep and mental health in occupational research.

**P171: A Workplace-Specific Measure of the Dark Tetrad**

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A great deal of psychological literature has focused on the Big Five personality traits and these traits have been found to predict a wide array of organizationally relevant criteria. However, more recent research has explored the darker, socially aversive traits (DeShong, Grant, & Mullins-Sweatt, 2015). Narcissism, Machiavellianism, and psychopathy (or the Dark Triad) have been studied both together and separately in Industrial/Organizational (I/O) psychology (e.g., Judge, LePine, & Rich, 2006; O’Boyle, Forsyth, Banks, & McDaniel, 2012). More recently the list of dark traits has expanded to include sadism, forming the Dark Tetrad (e.g., Buckels, Trapnell, & Paulhus, 2014).
Contextualized measures of personality have been shown to have superior predictive validity over general/global measures of personality (e.g., Woo, Jin, & LeBreton, 2015). However, extant measures of these traits have not been developed with an organizational setting in mind and therefore may be inappropriate for use in an organizational context. The purpose of this study was to create and validate a workplace-specific measure of the Dark Tetrad (the Dark Tetrad at Work or DTW).

Four hundred and sixteen participants completed an online survey including pre-established measures of the Dark Triad (SD3; Jones & Paulhus, 2014) and sadism (VAST; Paulhus & Jones, 2015), workplace behaviours (i.e., instigated incivility, bullying behaviour, counterproductive work behaviour directed at individuals (CWB-I) and at the organization (CWB-O)), and a 53-item context-specific Dark Tetrad measure.

To identify the best items for each of the Dark Tetrad dimensions, initial correlations were conducted separately for each of the four sets of items (the items assigned to each domain) and the pre-existing scale composite score for the trait of interest. The six items that were most strongly (and positively) correlated with the composite score were retained for each set of items. Based on the factor loadings using exploratory factor analysis (EFA), two Machiavellianism items were removed as they loaded more highly with the psychopathy and sadism items than with the other four Machiavellianism items. The 22-item 4-factor model provided the best fit for the data (CFI=.98, TLI=.98, RMSEA=.04, SRMR=.02).

The DTW scale possessed acceptable reliability and (construct criterion-related, and predictive) validity. Based on correlations (both uncorrected and disattenuated), all four Dark Tetrad at Work traits are positively related to each other and each trait from previously established scales. Each scale trait was positively associated with, and predicted, measures of workplace deviance. For example, overall, the Dark Tetrad at Work explained 50% of the variance in CWB-I (R²=.50, F(4,411)=103.04, p<.001). After controlling for the pre-established measures of the Dark Tetrad traits and social desirability, the DTW still added unique variance in predicting CWB-I (ΔR²=.04, F(4,405)=10.25, p<.001), CWB-O (ΔR²=.03, F(4,405)=7.16, p<.001), instigated incivility (ΔR²=.04, F(4,405)=8.19, p<.001), and bullying behaviour (ΔR²=.05, F(4,405)=11.58, p<.001).

These results support the use of a workplace DTW measure and show the potential contribution of such a measure to understanding outcomes of relevance to occupational health psychology.

P172: Woman, Work and Health: The Role of Woman Leadership in Wellbeing at Work Promotion. Spanish Women Entrepreneurs Focus Groups
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Women and men differ biologically and the professions, activities and roles they play in organisations also differ. It is therefore important to integrate gender differences in the strategy, policies, procedures, problema solving and decision making process and actions in the area of risk and health prevention. However, although there is increasing interest in this issue, this has not not always been well understood, assimilated or integrated.

To analyse and further the understanding on this situation, under the title "Women, Work and Health", a cycle of three focus group sessions was designed and carried out. The sessions were run from April to September 2016. Women entrepreneurs from the region of Murcia (Spain) were invited to participate, and to analyse their perception of gender differences in the field of
occupational safety and health. The collaboration and participation of the Organization of Women Entrepreneurs and Professionals (OMEP) and experts in the matter, were driving forces towards the achievement of participation success.

An expert in Focus group techniques energised the sessions and a script was prepared beforehand to discuss the following aspects: The role of woman in health and work (first session, 13 participants); women as a dynamising agent; binomial health and work (second session, 10 participants); and woman leadership and the promotion of the welfare at work (third session, 8 participants). The average length of the sessions was one hour and a half.

The results, in line with earlier studies, show that there are perceived differences in the exposure to the risks arising from the performance of different occupations and activities, performance of responsibilities or status between men and women. In addition, there is a greater concern for the work-life balance, other emerging risks, and their effect on mental health and wellbeing at work. Finally, the need to change and promote parity in Occupational Health was highlighted for which a cultural change is needed. This is to avoid “victimism” which slows down mainstreaming of the gender perspective in prevention of occupational hazards and understates those which specifically affect women.

P173: Leadership Style Operationalized by Using STILRUK Scale: A Two-dimensional Approach
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The goal of the paper is the dimensionality of the construct regarding leadership styles. We started with a premise, that it is crucial to determine specific criteria of differentiations in leadership styles. Starting with a hypothesis, that there is a two-dimensional space, defined by the type of influence on the employees and the preferences of the managers in fulfilling their roles in the context of basic group functions. An instrument called STILRUK (Franceško, 2000), was used to measure leadership type. The indicator of the leadership type is the relative meaning that the managers prescribe to the modalities of reactions in 24 isolated situations.

The research was conducted with a sample of 261 managers. The characteristics of the sample are suitable. It is heterogeneous regarding gender, level of management and field of study. The average age of the examinees is 43 years, and they have been in managing positions for 8 years. By conducting factor analysis of the main components with Promax rotation, two factors are determined which define 23.99% of common variabilities.

The first factor has bipolar characteristics and is defined by elements which show the type of influence that the manager has on employees, so we named it autocratic-democratic leadership. The second isolated factor also has bipolar characteristic. It shows the extent to which managers are oriented toward people or/and tasks. The correlation between these factors is 0.18, which means that these dimensions are relatively independent. The results suggest that there is a need for combining two criteria of differentiations in leadership styles. For example, it is important to make a difference between autocratic leaders that are people oriented and democratic leaders that are task oriented.

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