Bridging Occupational, Organizational and Public Health
– a Research-Practice Perspective –

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Aim

• Introduce a salutogenic intervention research approach helpful to tackle this challenge
• Show specific strategies how to bridge fields & thus the research-practice gap
  - Integrative, conceptual frameworks for research & practice
  - Aggregated concepts / measures
• Draw Conclusions
Potential Public Health Impact: Evaluation of the dissemination of SME-vital (Period: July 2004 to June 2007)

- 2,200 registered users
- Download of 12,000 documents
- 1/3 registered companies implement modules (n=300; 1% of Swiss companies > 10 employees)
- Average implementation of 3 modules; 160 employee surveys
- >80% positive impact assessments

Phase II: Set-up for salutogenic intervention research

Bridging fields & stakeholders

Center for Organizational & Occupational Sciences
Institute for Social & Preventive Medicine

Division Public & Organizational Health

Educational Programs
- MAS Work + Health
- CAS Organiz. Health

Consulting Center
- Field research
- Capacity Building

Research
- Etiology
- Interventions

Salutogenic perspective: Part of broad trend towards the positive
(see: Cameron et al. 2003; Cameron & Spreitzer 2012; Bauer & Jenny 2012)

Occupational → Organizational → Public

Employees → Employers → Policy Makers

Positive Psychology
Positive Health

Positive Organizational Behavior & Scholarship
Management Sciences:
Happiness; Corporate Social Responsibility
Sociology: social capital

Salutogenesis
Health promotion
Health equity
Sustainability

Key concept: Sense of Coherence
Comprehensibility, Manageability, Meaningfulness of Life

Re-Definition: Perceptual -> Interactional concept

(Antonovsky A. The salutogenic model as a theory to guide health promotion, Health Promotion International 1996)
Approaches for bridging fields & R-P gap:
integrative models & aggregated concepts/measures

Occupational → Organizational → Public

Health

1. Generic Health Development Model as a common ground
2. Occupational Health: Job Demands-Resource-Health Model
3. Organizational Health as key unit of analysis & change

Common ground: (Generic) Health development model
(Bauer GF et al. Health Promotion International 2006)

Job-Demand-Resources Model
(Demerouti et al., 2001; Bakker & Demerouti, 2007)
Application to Occupational Health: Job Demands-Resource-Health Model

**Pathogenic process**

**Salutogenic process**

- **PH-Perspective:** Specifies the generic Health Development Model for occupational context
- **OHP-Perspective:** Applies JDR Model to broader health development
- **Research:** Simultaneously study pathogenic & salutogenic process; study relationships between neg./pos. health & sub-dimensions; develop sum-indices
- **Practice:** Identify key determinants for health dimensions; evidence-based priority setting

Issues for future positive health research: Dimensions of positive health?

- Philosophical question of the “good life”: engagement in living - purpose, belonging, self-regard, mastery (Ryff & Singer 1998)
- Self determination theory: satisfaction of basic needs (Autonomy, Belonging, Competence) – Determinants vs. Dimensions? (Deci & Ryan 2008)
- Operationalization, e.g. flourishing (Keyes et al. 2002, 2005, 2012)
  - Hedonia - emotional wellbeing, e.g. positive affect
  - Eudaimonia - psychological wellbeing e.g. self acceptance, purpose, autonomy
  - Eudaimonia - social well-being: e.g. social growth, contribution, integration
- Only 23% of variance shared with mental illness symptoms (Keyes 2005)
**Issues for future positive health research:**
Dimensions of positive health?

- Apply distinction of emotion & functioning to three established dimension, e.g.:
  
<table>
<thead>
<tr>
<th>Physical</th>
<th>Mental</th>
<th>Social</th>
</tr>
</thead>
<tbody>
<tr>
<td>energy</td>
<td>satisfaction</td>
<td>belonging</td>
</tr>
<tr>
<td>endurance</td>
<td>engagement</td>
<td>fulfilling</td>
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<tr>
<td></td>
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<td>social roles</td>
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</table>

- Generic or context-specific health indicators
  - e.g. to be engaged in working life (Vigor, dedication, absorption (Schaufeli et al. 2006))
  - Live vs. work satisfaction

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**SWiNG stress prevention project:**
8 companies, 3 consultancy firms

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**Job Demands-Resource-Health Model: Initial Testing**

- **Pathogenic process**
  - JOB DEMANDS
  - INTERACTION
  - JOB RESOURCES

- **Salutogenic process**
  - POSITIVE HEALTH
  - SUSTAINABLE PERFORMANCE

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**SWiNG– Project Architecture**

- **Initial phase**
  - Introductory senior management workshop

- **Analysis phase**
  - Enterprise figures
  - Interviews with key persons
  - Stress assessment instrument (S-Tool)
  - Systematic observation of activities

- **Internal project communication**

- **Intervention phase**
  - Management training and organization of work
  - Health circles
  - Workplace stress management
Job Demands-Resource-Health Model: Initial Testing
Data Basis: S-Tool; SWiNG Intervention Project; 8 companies; wave 1: n=3036
(Brauchli, Jenny, Füllemann, Bauer, in preparation)

Application to Research & Practice:
Job Resource/Demand Ratio
(Jenny, Brauchli, Bauer, in preparation)

Factor score job resources / factor score job demands = R/D ratio
⇒ the higher the values the better the ratio between job resources and job demands

• Tertiles (33%) to create subgroups with
  1. low (i.e. unfavorable)
  2. intermediate, and
  3. high (i.e. favorable) ratio between job resources and job demands

Job Resource/Demand Ratio & relevant health outcomes
Testing in SWiNG Intervention Project; 8 companies;
n = 2403 (SWiNG; wave 3)
- low → 33.33%, n = 800
- high → 33.33%, n = 801

- less consumption of pain killers, less visits to general practitioners and physiotherapists
- feeling less stressed
- high resources and high demands: higher readiness for change
Job Resource/Demand Ratio
Changes by SWiNG Stress Intervention
(8 companies; n= 779)

<table>
<thead>
<tr>
<th>Changes in the resources/demands ratio, t₀–t₂</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Employees</strong></td>
</tr>
<tr>
<td><strong>Green</strong> = high impact assessment / <strong>Blue</strong> = intermediate/low impact assessment</td>
</tr>
<tr>
<td>1.7</td>
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<tr>
<td>1.6</td>
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<td>1.5</td>
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<tr>
<td>(1) Good R/D ratio at t₀</td>
</tr>
<tr>
<td>t₀=4.36, p&lt;0.001, part. eda-squared=0.027</td>
</tr>
<tr>
<td>(2) Medium R/D ratio at t₀</td>
</tr>
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<td>t₀=4.36, p&lt;0.001, part. eda-squared=0.027</td>
</tr>
<tr>
<td>(3) Poor R/D ratio at t₀</td>
</tr>
<tr>
<td>t₀=12.48, p&lt;0.001, part. eda-squared=0.001</td>
</tr>
</tbody>
</table>

Impact assessment: Retrospective question in the last employee survey: Has SWiNG led to change in your individual coping with stress? Has SWiNG led to more active discourse on stress? Has SWiNG led to change in your line managers behaviour?

Further strategy: higher order constructs

- “Integrating various existing constructs into a new higher-order construct might advance our knowledge on positive organizational behaviour” (Bakker and Schaufeli 2008)
- E.g. PSychCap (self-efficacy, hope, optimism, psychological resilience) (Luthans et al. 2007)
- E.g. Work-related sense of coherence Work-SoC: the perceived comprehensibility, manageability and meaningfulness of the current working situation and thus as a higher-order construct of the individual’s job demands and job resources (Bauer & Jenny in prep.)
- E.g. Work-to-home gains = [Work-to-home enrichment minus work-to-home conflict] (Brauchli et al. in prep.)

Approaches for bridging fields & R-P gap:
integrative models & aggregated concepts/measures

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1. **Generic Health Development Model** as a common ground
2. **Occupational Health**: Job Demands-Resource-Health Model
3. **Organizational Health** as key unit of analysis & change

Comprehensive literature review on organizational health (OH): Identified key principles (Bauer & Jenny 2012)

- Organisations are social systems involving multiple interactions between the organisation and its members
- Neutral concept of main, interacting dimensions of OH (instead of determinants->outcomes)
- Analysis of these multiple interactions should consider both factual (task-related) and social (people-related) processes
- OH is dependent on the environment of the organisation, including its various stakeholders
- OH needs to balance tensions between the various dimensions of OH as well as between the interests of diverse stakeholders
- OH interventions should support organisational change driven by the organisational system itself
Need for logic model

- To facilitate the self-improvement process by the organisation, OH should relate to existing logic models and terminology of decision-makers in organisations
- Create an explicit OH model to which organisations, practitioners and researchers can equally relate to
  - **Organisations**: mind map for self-observation & optimization
  - **Consultants**: provide structured support
  - **Intervention researcher**: multi-level mapping of intervention theories, the change process, the desired outcomes and the organisational context

**Organizational Health**

- Partial assessment of organizational context: e.g. organizational justice, safety climate, social capital
- Heterogeneous organizational health models (e.g. HERO, PATH, AMIGO, OH-Frameworks,...)
- Acknowledged management models -> link to mental models and language of decision makers

**POH/Bauer**

**Balanced Scorecard**

(Kaplan & Norton 1996)

- Financial
- Customer
- Internal business processes
- Learning and growth

**The New St. Gallen Management Model**

(Rüegg-Stürm 2005)

- Structure
- Organisational strategy
- Competence
- Motivation
- Identity

**Organizational Health Development Model**

(Jenny & Bauer 2009)
"OHD = On-going reproduction & targeted improvement of health in organisations as social systems, based on the interaction of individual and organisational capacities"
Approaches for bridging fields & R-P gap: Summary & Conclusions

1. **Generic Health Development Model** as a common ground
   - Concept & Operationalization of positive health?

2. **Occupational Health**: Job Demands-Resource-Health Model
   - Study pathogenesis & salutogenesis in parallel
   - Aggregation of JDR into a ratio
   - also for pos./neg. health?

3. **Organizational Health Development Model**
   - Clear intervention theory & evaluation framework

Agreed-upon indicators of positive occ. & organizational health