Human Quality Management at Working Life - Essential for Worker’s Health

Rudolf Karazman
IBG GmbH - Innovative Occupational Health Management
University of Economics/Dept. HRM – Medical University Vienna/Dept. Psychiatry
www.arbeitundalter.at

Wie bei jedem von uns, so ändert sich auch bei jeder Arbeitnehmerin und jedem Arbeitnehmer mit dem Alterwerden die psychische und physische Leistungsfähigkeit. Dies muss jedoch keineswegs zur Produktivitäts-Reduktion führen. Eine Arbeitsorganisation, die die natürliche Entwicklung älter werdender MitarbeiterInnen und Mitarbeiter berücksichtigt, ist mit organisatorischen oder personellen Veränderungen in der Lage, die Produktivität des betreffenden Mitarbeiters zu erhalten oder sogar zu steigern.

**Internationale Beispiele & Erfahrungen**

... geben konkrete Anregungen für Unternehmensführung. Personalverantwortliche, BetriebsratsInnen und BeraterInnen zu lebensaltersgerechten Reorganisation von Arbeitsprozessen. Arbeit&Alter kann somit als Wissensdatenbank und virtuelle Unternehmensberatung genutzt werden.
3 Pathways towards Essentials of Workers Health

• Health Prevention at Work
• Health Promotion at Work
• Health Promotion by Work ............... HQM
How is evolution of mankind and work related?
Anthropology of Work, Human sciences, Social Sciences
leaving the pathogene corner
salutogenetic research

Human Qualities
Work as frame of human evolution
# Health Potentials @ Working Life

<table>
<thead>
<tr>
<th>Salutogene Paradigms</th>
<th>Author</th>
<th>Structure-Dynamic</th>
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<tbody>
<tr>
<td>Sense of Coherence</td>
<td>Antonovsky</td>
<td></td>
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<tr>
<td>Meaning - Existence</td>
<td>Frankl</td>
<td></td>
</tr>
<tr>
<td>Evolutive Life Dynamic</td>
<td>Langer</td>
<td></td>
</tr>
<tr>
<td>Expectations</td>
<td>h@w</td>
<td></td>
</tr>
<tr>
<td>Social Ritual</td>
<td>Achterberg</td>
<td></td>
</tr>
<tr>
<td>Recognition-Visibility</td>
<td>Siegrist/h@w</td>
<td></td>
</tr>
<tr>
<td>Dignity</td>
<td>h@w</td>
<td></td>
</tr>
<tr>
<td>ÄstEthics</td>
<td>h@w</td>
<td></td>
</tr>
<tr>
<td>Humanecology</td>
<td>Darwin</td>
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</tbody>
</table>
Salutogene Dynamic at Work ....

meaningfulness, interestingness, selfactualisation

Person potential

pro-ducere

meaningful task

HUMAN productivity

source of performance AND health

! suppression of HUMAN productivity makes sick !
Productivity → Salutogene semioses

Personal Productivity leads to social inclusion into relations

Person

„I want“

Health develops „from“ outside

Clients
Colleagues
Superior
Family

Challenge
Social inclusion ↔ Expectation ↔ Pictures

Inter face leads to inter faith

employee „I want“

management „I want from You“

I may

expectations and pictures of leaders are the entrance
## Respect for the Ageing

**Evaluation of FIOH-Programmes (1990-1995) - J.Ilmarinen et al.**

<table>
<thead>
<tr>
<th>IMPROVEMENT OF WORK ABILITY</th>
<th>DETERIORATION OF WORK ABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Improved attitudes of superiors towards ageing od employees</strong> (OR 3.6, CI 1.8-7.2)</td>
<td><strong>Reduced recognition and tribute at work</strong> (OR 2.4, CI 1.4-4.3)</td>
</tr>
<tr>
<td><strong>Reduction of repitative movements at work</strong> (OR 2.1, CI 1.0-3.4)</td>
<td><strong>Deteriorated working roms</strong> (OR 1.6, CI 1.0-2.6)</td>
</tr>
<tr>
<td><strong>Increased physical activity in leisure time</strong> (OR 1.8, CI 1.0-3.5)</td>
<td><strong>Increased standing at work</strong> (OR 1.7, CI 1.0-2.9)</td>
</tr>
<tr>
<td></td>
<td><strong>Reduced physical activity at leisure time</strong> (OR 1.8, CI 1.2-2.8)</td>
</tr>
</tbody>
</table>
Human-ecological Model of Work

- **Social Inclusion Meaning**
  - Maximum

- **Human Productivity**
  - Optimum

- **Psychobiological effort**

- **Best Performance & Best Health**
We shall

Lead

Cooperation

Meaning

Capability

Sustainability

Economic Growth

Personal Growth

Human Work Index: Salutogene Work Quality

I may

I want

I can

Human Work Index 2.1

R.Karazman®
Human Work Index
Health - Wellbeing - Life Quality (1-5)
n= 18.390 - each dimension p=0.00 - 1=very good…4=not good

Subjective Rating 1=very good - 5

HWI classes on human productivity

<table>
<thead>
<tr>
<th>Health</th>
<th>Wellbeing</th>
<th>Life Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,5</td>
<td>1,5</td>
<td>1,5</td>
</tr>
<tr>
<td>1,9</td>
<td>1,8</td>
<td>1,9</td>
</tr>
<tr>
<td>2,25</td>
<td>2,4</td>
<td>2,3</td>
</tr>
<tr>
<td>2,8</td>
<td>3</td>
<td>2,9</td>
</tr>
</tbody>
</table>

excellent  good  medium  low
Meaning, Social Inclusion & Health/Stress

IBG-Darabase HWI, n=7222; R. Ernst, G. Klicka, I. Karazman-Morawetz, R. Karazman 2008

~20% W&SI--
~70% M&SI++

Subjective Stress Rating 1-5

NO stress (n=666)
Little stress (n=2108)
middle stress (n=2906)
plenty stress (n=1308)
HIGH stress (n=234)

% (Very) Good Health

0 10 20 30 40 50 60 70 80 90 100

~70% M&SI ++
~20% W&SI--
## Double Character of Work on Health

<table>
<thead>
<tr>
<th>Work</th>
<th>Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Interest</td>
<td>Meaning Social relations</td>
</tr>
<tr>
<td>Work Ability</td>
<td>Psychobiological effort</td>
</tr>
<tr>
<td>I will</td>
<td>Enrichment promotes</td>
</tr>
<tr>
<td>I can</td>
<td>Exhaustion endangers</td>
</tr>
</tbody>
</table>
**5a-Probability to Remain in the Job@HWI level**

Probability of Remaining at the Job at HWI-level of Human Productivity

**Prospective Study 2002-2008**

Statistics: Univ Economics Vienna
Prof. R. Hatzinger, R. Dittrich

HWI Survival-Analysis 66 Months
PH-Cox Analysis
n= 314 Employees

- **High**: 90%
- **Medium**: 73%
- **Low**: 49%

Months since HWI-Measurement

Kumuliertes Survival
# HWI-Levels of Human Productivity

<table>
<thead>
<tr>
<th>HWI-Level</th>
<th>Work Quality</th>
<th>Work Dynamics</th>
<th>Personal Dynamics</th>
<th>Prognosis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High</strong></td>
<td>social inclusion, meaning challenge, regenerated effort</td>
<td><strong>Human Productivity</strong></td>
<td>Evolution</td>
<td>sustainable</td>
</tr>
<tr>
<td><strong>Middle</strong></td>
<td>lack of social inclusion, meaning challenge, regenerated effort</td>
<td><strong>Unpersonal Routine</strong></td>
<td>Stagnation</td>
<td>not sustainable</td>
</tr>
<tr>
<td><strong>Low</strong></td>
<td>loss of social inclusion, meaning challenge, regenerated effort</td>
<td><strong>Antipersonal Pressure</strong></td>
<td>Involution</td>
<td>displacing</td>
</tr>
</tbody>
</table>
Pathogene Exit-Probability for 5a Sickness, Crisis, Conflict

HWI-Level Human Productivity

High
Medium
Low

Statistics: WU Vienna:
Univ. Prof. R. Hatzinger
Dr. R. Dittrich
HWI Survival-Analysis 66 Months
Cox Hazard Ratio
n= 314 Employees
2002-2008
HWI & Wish to quit and to retire

n= 13.660 (Karazman R., Karazman-Morawetz I. 2008)

Social Inclusion
Meaning
Work Ability

never (n=6165)
sometimes (n=5858)
often (n=1115)
very strong - reluctance against work
Human Quality Management  
Goal, Role & Responsibility

<table>
<thead>
<tr>
<th>Human Work Index 4.0</th>
<th>Management</th>
<th>Flexibilisation</th>
<th>PD &amp; OHP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperation</td>
<td>Involvement</td>
<td>Process &amp; Team</td>
<td>Communication</td>
</tr>
<tr>
<td>Meaning</td>
<td>Challenge</td>
<td>Careers</td>
<td>Competence</td>
</tr>
<tr>
<td>Capability</td>
<td>Work Ability</td>
<td>Ergonomics Working Time</td>
<td>Capacity</td>
</tr>
<tr>
<td>HQM</td>
<td>Culture</td>
<td>Structure</td>
<td>Person</td>
</tr>
</tbody>
</table>
Life Span & Performance Potentials

ageing = no decrease = conversion .... qualitative growth

<table>
<thead>
<tr>
<th>domains</th>
<th>changes</th>
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<tbody>
<tr>
<td>physiological</td>
<td></td>
</tr>
<tr>
<td>psychic &amp; cognitiv</td>
<td></td>
</tr>
<tr>
<td>noetic &amp; social</td>
<td></td>
</tr>
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</table>

one working life .... several identities .... flexibilisation & synergy
Human-ecological Flexibilisation of Work in Lifetime

Physical load
High stress
Pressure
Night Shift work

heaviness

difficulty
complexity

Complexe tasks
Difficult solutions
Social projects
High quality work

elimination of barriers

social inclusion
Revenue/Employee & HWI 2005

Branch process "Healthy Paper" - 13 Companies - 6500 Employees

Revenue in €/Employee

- HWI <80%
- HWI > 80%

Human Work Index

2003 2004 2005 2006 2007
Rudolf Karazman

Human Quality Management

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Springer Gabler
Hvala Lipa
is Gradisce u Austriju
Prospective and Validation Studies 1999-2008

**Hypotheses:**
HWI is valid and prognostic for
- personal growth
- economic growth
- human sustainability at the job

**Methods Personal Validation**
database HWI: n= 18,500 (1999-2008)
dependent variables: subjective ratings of health, mood, life quality (1-5)
Statistics: correlation

**Methods Economic Validation**
sample: 13 companies Austrian paperindustry (2005)
HWI database: meanscore HWI/company out of n=6500 employees in 2005
dependent variables: revenue in €/employee/year in 2003-2007
statistics: correlation

**Methods Prognostic Potential for Maintenance at Work**
non-anonymous assessment of HWI in 540 employees since 2002ff.
2008 exploration of jobsituation and reasons of exit assessed by „Career-Typology“
all persons with external reasons for exit were excluded from further statistics (no bias)
the remaining exits are: death, retirement, early retirement, change to other work,
n=314 persons remaining in sample
independent variable HWI-class
dependent variable: duration of maintenance, probability of maintenance, hazard risk
statistics: Kalplan-Meier-survival, Cox-hazard-ratio
Cultural & structural exclusion by Prime Age Company

- Physical Overdemand
- Reluctance
  - Disorder
  - Early retirement
- Farewell dynamic
  - Exhaustion
  - Thoughts on (early) retirement
- Co-Evolution
  - Healthy Work Dynamics
  - Decidedness
- Physical Demand
- Personal Underdemand
- Social Exclusion – Ageism & Early Retirement Tradition