





Personal perspectives influencing the development of the LLWI:

Perspective I

Studies of Economics and Psychology

Judson University Elgin, II, USA 1982 – 1983

Christian-Albrechts-University Kiel, Germany 1983 – 1992

PhD at the University of the Armed Forces Hamburg, Germany





(Photo: Siegbert Brey, 2015)

Personal perspectives influencing the development of the LLWI: Perspective II

More than eight years in the corporate world at Daimler in several corporate Human Resource functions in Stuttgart and Berlin, Germany

Office management of the Executive Board Member Human Resources, Dr. Norbert Bensel, DaimlerBenz Inter Services (debis AG), Potsdam Square, Berlin

1991 - 1999

Photo: debis house at Potsdam Square, Berlin

(Photo: Cafezinho, 2006)



Personal perspectives influencing the development of the LLWI: Perspective III

Workshop hosted by Dr. Norbert Bensel, German Rail, on the "Future of Work"

Meeting with Patrick Liedtke, Geneva Association

Start of the Silver Work Project: "Do people work in retirement? Individual perspectives on work in retirement"

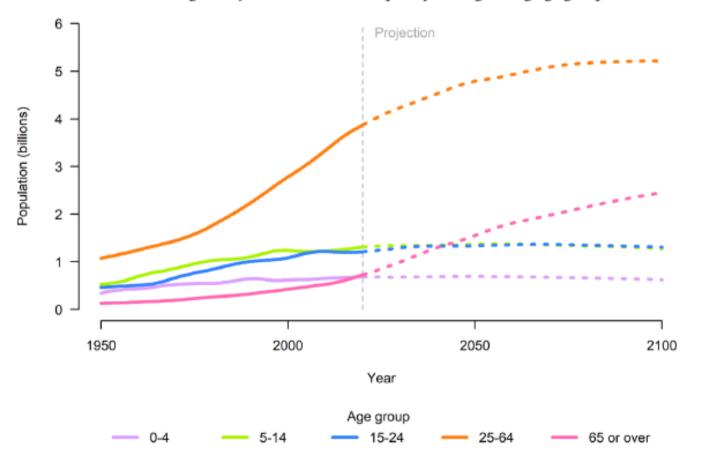
(Photo: Jörg Zägel, 2009)



Demographic change is happening worldwide

Figure 12. Estimated and projected global population by broad age group, 1950-2100, according to the medium-variant projection

Persons aged 65 years or over make up the fastest-growing age group

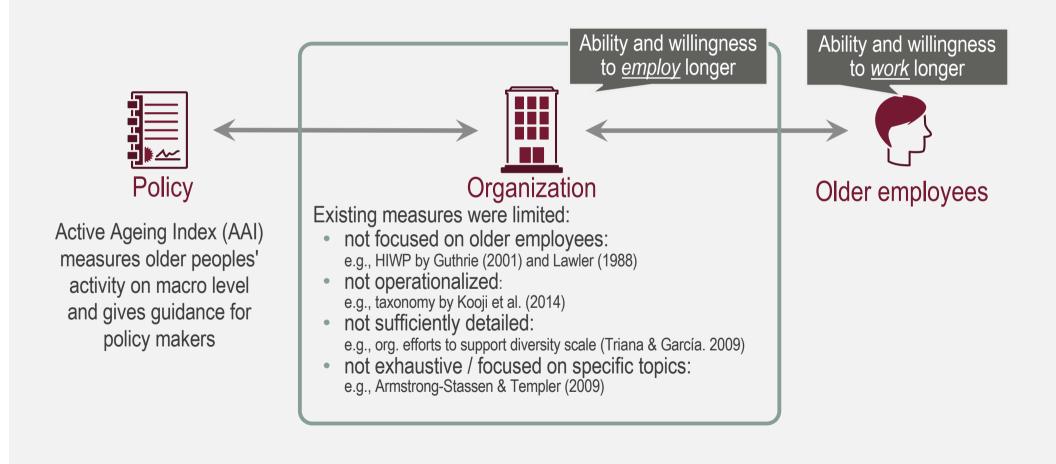


Data source: United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Prospects 2019.

* excluding Australia and New Zealand

Background and Motivation

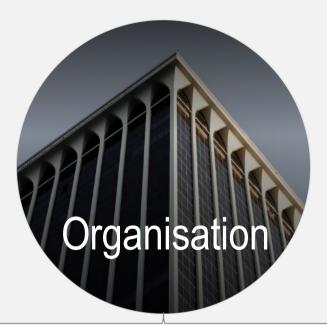
Too little attention is put on the organization as a key enabler for later life work



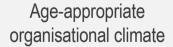
Demographic change requires the successful employment of older workforces: Three levels of relevance



What is important at the organisational level? Previous research has focused on individual aspects









Personnel development / lifelong learning



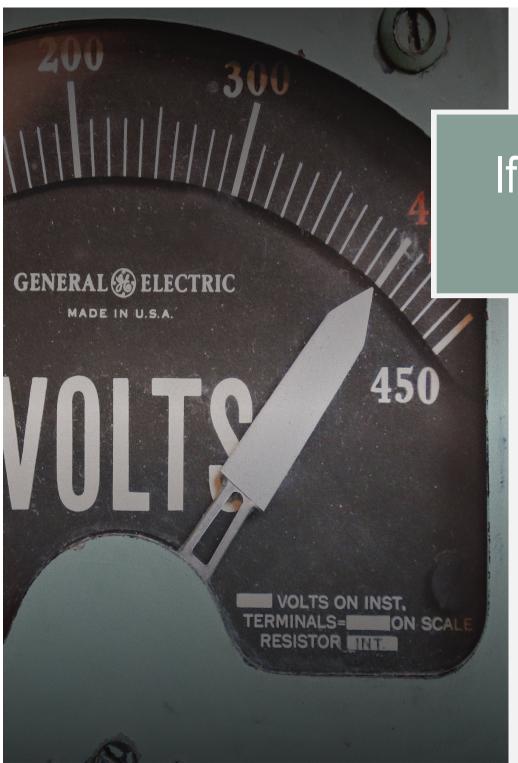
Health management



Ergonomic work design



Etc.



If you can't measure it, you can't improve it.

Peter Drucker (1909 – 2005)

Hence, we developed an index of organizational practices for later life work:
The *Later Life Workplace Index* (LLWI)



The LLWI as a measure for research and practice



For Research

- Help understanding the set of organizational practices beneficial for making an aging workforce 'work'
- Provide a validated
 multidimensional measure
 that allows to distinguish
 different age-friendly
 organizational practices
- Identifying **relative importance** of individual
 practices compared to others





For Practice

Enabling organizations to

- self-assess their own capabilities regarding employment of an aging workforce
- identify best practices
- benchmark with peers
- derive levers to improve productivity, health and motivation

The development of the Later Life Workplace Index started with qualitative research and has been operationalized and validated by multiple studies



Comprehensive Development and Validation of the LLWI











Qualitative assessment

Qualitative studies, independently in Germany (27 expert interviews) and the U.S. (61 company assessments)

Focus group workshop to review results

Integrated taxonomy with 9 dimensions proposed and checked for interrater reliability (Krippendorff's α = .65 - .91)

Item development

Initial item set developed based on qualitative taxonomy

Items revised and scales shortened based on psychometric characteristics and factor analysis results of multiple studies

Overall item set administered among 608 workers in Germany and further streamlined

Scale validation

Finally selected items crossvalidated in a second sample of 348 older workers

Convergent, discriminant, and criterion validity cross-checked

Application of the validated LLWI scales in an organizational study with ~100 participating organizations providing 5-11 respondents

The qualitative assessment revealed nine domains of organisational practices for the ageing workforce





Age-friendly leadership



Work design



Health management



Individual development



Knowledge management



Transition to retirement



Continued employment



Health and retirement coverage

Domains and Indicators of the LLWI (Wilckens et al., 2021)

ORGANIZATIONAL CLIMATE

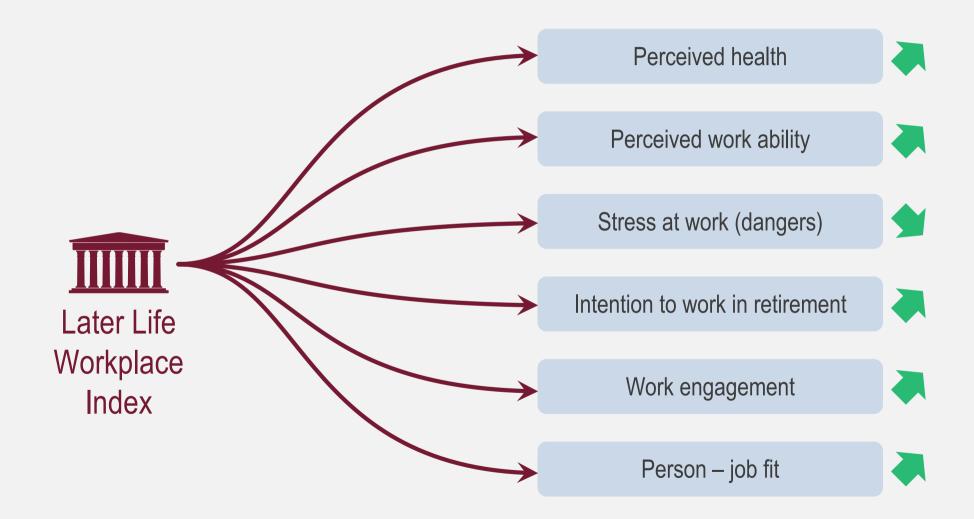
- 1. Equality of opportunity
- 2. Positive image of age
- 3. Open and target group-oriented communication

LEADERSHIP

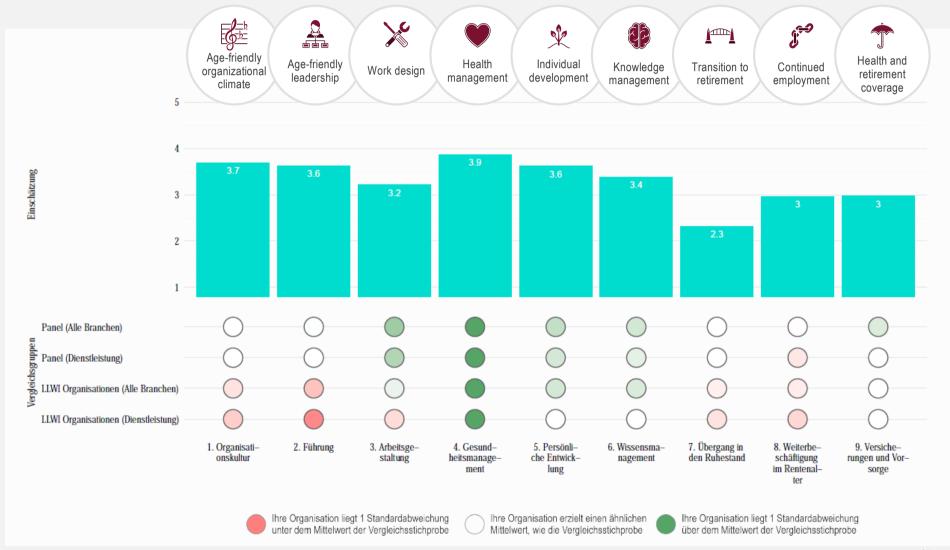
- 1. Appreciation
- 2. Responsiveness to individuality

| WORK DESIGN | HEALTH MANAGEMENT | INDIVIDUAL DEVELOPMENT | KNOWLEDGE MANAGEMENT | TRANSITION TO RETIREMENT | CONTINUED EMPLOYMENT | HEALTH & RETIREMENT COVERAGE |
|---|--|---|--|---|--|--|
| 1.Flexible work time arrangements 2.Flexible workplaces 3.Work according to capabilities 4.Ergonomic working conditions | 1.Availability of physical exercise and nutrition opportunities 2.Workplace medical treatment 3.Health promotion | 1.Continuous development planning 2.Appropriate solutions for training and development 3.Enabling development steps and job changes | 1.Institutionalized knowledge transfer 2.Intergenerational collaboration | 1. Timely transition planning 2. Phased retirement & individualized transition solutions 3. Counseling for retirement life preparation 4. Continuous inclusion and maintaining contact | 1.Individualized employment options 2.(Re-)hiring of older employees | Retirement savings and pensions Insurances and financial emergency support |

Results so far show positive effects on a number of relevant work outcomes



We benchmark participating organizations with peers and provide detailed feedback to support organizational change



The Later Life Workplace Index (LLWI) and DIN ISO 25550:2024-06 Ageing societies – General requirements and guidelines for an age-inclusive workforce

INTERNATIONAL STANDARD

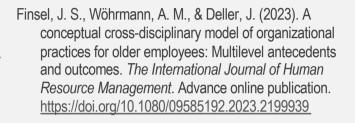
ISO/FDIS 25550

Ageing societies — General requirements and guidelines for an age-inclusive workforce

Weiterführende Informationen



Later Life Workplace Index website https://www.leuphana.de/en/portals/later-life-workplace-index.html







Deller, J., Gu, X., Choi, S. J., & Wöhrmann, A. M. (2025). Working conditions and organizational practices to support well-being of multiage workforce in Germany, USA, Japan, and South Korea. *Public Administration and Policy*. https://doi.org/10.1108/pap-08-2024-0143

Finsel, J. S., Wöhrmann, A. M., Wang, M., Wilckens, M. R., & Deller, J. (2023). Later Life Workplace Index: Validation of an English Version. *Work, Aging and Retirement*, 9(1), 71-94. https://doi.org/10.1093/workar/waab029





Finsel, J. S., Axelrad, H., Choi, S. J., Derous, E., Gu, X., Paolo Guandalini, Ha, J., Kim, E. S., Marzec, I., Mykletun, R. J., Oliveira, E., Pajic, S., Maaike Schellaert, Beatrice, Michela Vignoli, Wöhrmann, A. M., & Deller, J. (2025). Development and validation of the short form of the Later Life Workplace Index (LLWI-SF): A study across ten countries. *Work Aging and Retirement*. https://doi.org/10.1093/workar/waaf006

Wilckens, M. R., Wöhrmann, A. M., Deller, J., & Finsel, J. (2022). Health and the intention to retire: Exploring the moderating effects of human resources practices. *The International Journal of Human Resource Management*. Advance online publication. https://doi.org/10.1080/09585192.2022.2133967





Finsel, J. S., Venz, L., Wöhrmann, A. M., Wilckens, M. R., & Deller, J. (2023). Worlds apart: Does perceptual congruence between leaders and older employees regarding age-friendly organizational climate, leadership, and work design matter? *Work, Aging and Retirement.* Advance online publication.

https://doi.org/10.1093/workar/waad009

Wilckens, M., Wöhrmann, A. M., Deller, J. & Wang, M. (2021). Organizational practices for the aging workforce: Development and validation of the Later Life Workplace Index (LLWI). *Work, Aging and Retirement,* 7(4), 352–386. https://doi.org/10.1093/workar/waaa012



Talking about Post Retirement Careers: Relevant constructs

- occupational self-efficacy
- interest in occupation-related activities
- postretirement career outcome expectations
- postretirement career intention
- postretirement career planning activity

Post Retirement Careers: Hypotheses

- Hypothesis 1: We predict that occupational self-efficacy will be positively related to postretirement career outcome expectations
- Hypothesis 2: ... and interest in occupation-related activities
- Hypothesis 3: We expect postretirement career intention to be influenced by postretirement career outcome expectations
- Hypothesis 4: ... and interest in occupation-related activities
- Hypothesis 5: Postretirement career intention is expected to be positively related to postretirement career planning activity
- Hypothesis 6a: ... which in turn is indirectly affected by occupational selfefficacy Hypothesis 6b: ... postretirement career outcome expectations,
- Hypothesis 6c: ... and interest in occupation-related activities.

Post Retirement Career Planning: A Model Based on Social Cognitive Career Theory (Wöhrmann et al., 2014)

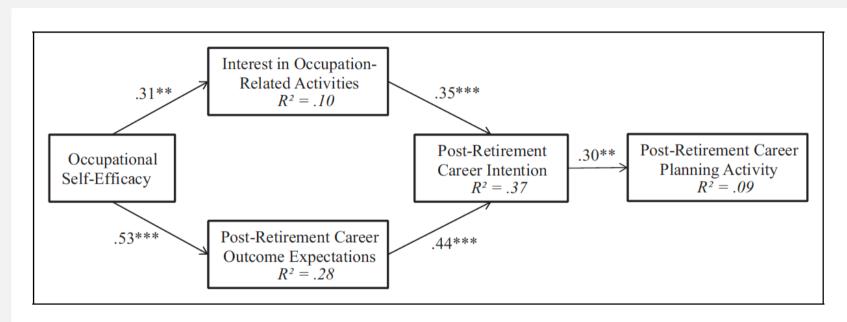


Figure 1. Standardized path coefficients for the hypothesized postretirement career planning model. **p < .01; ***p < .001.

CONTINUED EMPLOYMENT



Domain:

The continued employment domain includes the organizational design and employment options for employees at retirement age. This includes former employees of the organization as well as external employees looking for continued employment.

Indicators:

CONTINUED EMPLOYMENT



Domain:

The continued employment domain includes the organizational design and employment options for employees at retirement age. This includes former employees of the organization as well as external employees looking for continued employment.

Indicators:

- 1. **Individualized employment options**: Employment options for individuals, who would otherwise be fully retired, should be offered systematically. To ensure employment options are meaningful for both the organization and the employee, integration of those employees into the organization should be strategically planned. For example, they might be brought in on a temporary basis at peak production times. Tasks and work time should be adaptable to the individual employee. This can be achieved through alternative contract forms such as consulting and mentoring work or flexible work time arrangements with generally fewer hours than a full-time position.
- 2. **(Re-) hiring of older employees**: Older individuals, particularly including already and almost retired employees should be specifically addressed by job marketing, hiring and reemployment processes. This is achieved through age-friendly communication of job offers and the use of alternative marketing paths to address external as well as internal individuals. This explicitly includes employees with long careers in other industries or companies.



Later Life Workplace Index Continued Employment

CE1 Individualized employment options

| CE1-1 | In our organization, employees may work beyond the conventional retirement age if they wish so. |
|-------|--|
| CE1-2 | In our organization, employment opportunities for people in retirement age are clearly defined and structured (e.g., |
| | by integration into strategic workforce planning). |
| CE1-3 | In our organization, managers are well-informed about the possibilities of working beyond the conventional |
| | retirement age. |
| CE1-4 | In our organization, working conditions (time and type of activity) for employees in retirement age are flexibly |
| | adapted to their wishes. |

CE2 (Re-)hiring of older employees

| CE2-1 | In our organization, older applicants are hired as well. |
|-------|--|
| CE2-2 | In our organization, age-neutral language is used in recruitment (e.g., job advertisements). |
| CE2-3 | In our organization, people of all ages apply for job vacancies. |

190523 Deller Wilckens Wöhrmann - Operatii ter Life Work Index. potx