



Scand J Work Environ Health 2011;37(6):451-453

<https://doi.org/10.5271/sjweh.3198>

Published online: 29 Sep 2011, Issue date: Nov 2011

Adding more years to the work careers of an aging workforce - what works?

by [Härmä M](#)

Affiliation: Finnish Institute of Occupational Health, Topeliuksenkatu
43 a A, 00250 Helsinki, Finland. Mikko.Harma@ttl.fi

Refers to the following texts of the Journal: [1997;23\(6\):403-413](#)
[2009;35\(1\):37-47](#) [1997;23 suppl 1:49-57](#) [2009;35\(1\):56-64](#)
[2009;35\(1\):1-5](#) [2009;35\(5\):325-333](#) [2009;35\(5\):321-324](#)
[2010;36\(5\):404-412](#) [2011;37\(2\):120-128](#) [2011;37\(6\):455-463](#)
[2011;37\(6\):473-480](#) [2011;37\(6\):464-472](#)

The following articles refer to this text: [2012;38\(4\):299-313](#);
[2012;38\(5\):391-392](#); [2013;39\(2\):125-133](#); [2013;39\(5\):477-485](#);
[2013;39\(6\):609-617](#)

Key terms: [ageing](#); [disability](#); [editorial](#); [older worker](#); [retirement](#);
[work ability](#); [work strain](#)

This article in PubMed: www.ncbi.nlm.nih.gov/pubmed/21965083



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

Adding more years to the work careers of an aging workforce – what works?

The increasing societal costs of the expanding retired population are forcing industrialized countries to find new ways to extend life-long work careers. Work careers can be extended in the beginning, middle, or end of the traditional working life, utilizing solutions on the borders of main-life transitions between education, labour market, unemployment, disability, private household, and old age pension. While the central political debate focuses on pressures to delay the general retirement age and the development of economic incentives, policymakers are also interested in increasing participation in working life through disability prevention (1).

A critical prerequisite for the extension of work careers both before and after the retirement age is that the employee has sufficient work ability. Work ability is often conceptualized as the balance between work and personal resources and can be measured by the work ability index (WAI) (2). When measured by WAI, work ability is highly predictive of future disability, sickness absence, health, and even the mortality of workers (3–5).

But are employees able to maintain their work ability until the retirement age? And could those who are, work even longer? In OECD countries, the primary diagnostic causes for disability retirement are musculoskeletal diseases and mental disorders (1). According to the report, about 6% of the working-age population rely on disability benefits. Until the recent recession struck the labor market in 2008, disability was even more prevalent than unemployment across the different OECD countries and spending on disability benefits was twice as high as spending on unemployment benefits (1). It was concluded that already with the current retirement age, too many workers leave the labour market permanently due to disability, and too few people with reduced work capacity manage to remain in employment.

In this issue of the *Scandinavian Journal of Work, Environment and Health*, 28-year trajectories of work ability were studied among initially 44–58-year old municipal employees until old age (6). Work ability was assessed in four separate follow-ups as present perceived work ability relative to lifetime best. Among more than half of the women and nearly half of the men, work ability remained on a moderate-to-excellent level throughout the follow-up time, suggesting a possibility of being basically able to work even after the normal retirement age. The results were even more positive in a recent study of 20–65-year old managers (7). During ten years, work ability remained good or excellent among 88% of the subjects.

But if about half of the workforce would be able to work after their normal retirement age, would they actually want to do so? In this issue, Nilsson et al (8) evaluated the factors behind why some older workers want to work until the age of 65 years or beyond while others leave the workforce earlier. As in the follow-up study of Bonsdorff et al (6), over half – 54% – of the participants stated that they could work beyond the retirement age but only 38% “wanted” to do so. The factors explaining willingness to work later related, first and foremost, to economic incentives, but also to family/leisure pursuits and societal, managerial, and organizational attitudes towards retirement and older workers. The essential role of economic factors in retirement has also been supported by earlier studies (9, 10).

According to Bonsdorff et al (6), those who maintained their work ability on an excellent-to-moderate level throughout the long follow-up had reported less mental and physical work-related strain in midlife. The authors concluded that work strain may have far-reaching negative effects on individuals’ work ability from midlife to old age. The results are supported by similar observations where several physical and mental working conditions predicted future disability retirement (eg, heavy work, work in uncomfortable positions, long working hours, inability to control individual working hours, noise at work, inability to communicate with fellow workers, low job control, and insufficient social support from supervisors) (11, 12, 13).

Also in this issue of the Journal, Leinonen et al (13) studied the association of disability retirement to socioeconomic position and working conditions. Based on a ten-year prospective study of municipal employees in Helsinki, there were large social class differences in disability retirement. In lower social classes, unfavorable physical working conditions appeared to be the primary reasons for disability retirement. For mental disorders, job control also mediated the association. There is now good evidence that low socioeconomic position is strongly associated with unfavourable working conditions and increases the likelihood of both psychiatric and musculoskeletal work disability and disability pensions (13–16). In general, work ability declines faster in physical than mental work (17). In construction work, for example, physical workload seems to be the critical determinant of work ability (18). However, even managerial position as such does not prevent the decline of work ability. The organizational climate, job control, and other specific work demands of managers were related to their work ability trajectories (7).

We thus seem to know the main factors predicting disability, but do we know what really works in prospective settings? For example, good possibilities to control individual working times are associated with the reduced risk of early retirement in prospective cohorts (8), but do we know how to increase the individual control of working times in a feasible and sufficient way to delay the retirement age? Although, repetitive work demands predict disability (11), do we know feasible ways to decrease systematically physical workload in different work tasks? Unfortunately there is only scattered information available from intervention studies aimed at the prevention of disability in long-term settings (19). A promising alternative may be to analyze the effects of natural interventions on work ability. For example, based on a phone interview at baseline and one year later, construction roofers who had received job accommodation for musculoskeletal disorders had a four-time lower risk for retiring compared to workers with a similar medical status but no accommodation (20).

Research is needed on practical and feasible ways to modify the work demands at both the individual and corporate level. To get feasible information, studies need to be carried out in different industrial sectors but especially in occupations where physical work is required. Work ability is the balance between work and personal resources. Workplace health promotion is needed, but the challenge of disability prevention is related to the ability to create healthy and satisfying work conditions. Although effective national- and corporate-level strategies supporting the promotion of well-being at work are needed, in addition to interaction between the worker, his or her supervisor, and the healthcare system, the prevention of disability always goes back to the worksite level. Musculoskeletal and mental disorders – the most important reasons for early retirement – are often associated with partial work disability. Working conditions and the work itself need to be modified and improved in such a way that sufficient work ability is maintained and people can and want to participate in working life.

References

1. OECD. The OECD “Sickness, Disability and Work” project [Internet]. Paris: OECD; [cited 17 September 2010]. Available from: www.oecd.org/els/disability.
2. Ilmarinen J. Work ability—a comprehensive concept for occupational health research and prevention. *Scand J Work Environ Health*. 2009;35(1):1–5.
3. Alavinia SM, van den Berg TIJ, van Duivenbooden C, Elders LAM, Burdorf A. Impact of work-related factors, lifestyle, and work ability on sickness absence among Dutch construction workers. *Scand J Work Environ Health*. 2009;35(5):325–333.
4. Ahlstrom L, Grimby-Ekman A, Hagberg M, Dellve L. The work ability index and single-item question: associations with sick leave, symptoms, and health – a prospective study of women on long-term sick leave. *Scand J Work Environ Health*. 2010;36(5):404–412.
5. von Bonsdorff MB, Seitsamo J, Ilmarinen J, Nygård C-H, von Bonsdorff ME, Rantanen T. Midlife work ability as a predictor of mortality and late-life disability: A 28-year prospective study. *CMAJ*. 2011;183:E235–42. <http://dx.doi.org/10.1503/cmaj.100713>.
6. von Bonsdorff ME, Kokko K, Seitsamo J, von Bonsdorff MB, Nygård C-H, Ilmarinen J, Rantanen T. Work strain in midlife and 28-year work ability trajectories. *Scand J Work Environ Health*. 2011;37(6):455–463. <http://dx.doi.org/10.5271/sjweh.3177>.
7. Feldt T, Hyvönen K, Mäkilangas A, Kinnunen U, Kokko K. Development trajectories of Finnish managers’ work ability

- over a 10-year follow-up period. *Scand J Work Environ Health*. 2009;35(1):37–47.
8. Nilsson K, Hydbom A, Rulander L. Factors influencing the decision to extend working life or to retire. *Scand J Work Environ Health*. 2011;37(6):473–480. <http://dx.doi.org/10.5271/sjweh.3181>
 9. Forma P, Tuominen E, Väänänen-Tomppo I. Who wants to continue at work? Finnish pension reform and the future plans of older workers. *Eur J Soc Sec*. 2005;7:227–250.
 10. Bösch-Supan A. Incentives effects of social security on labor force participation: Evidence in Germany and across Europe. *J Pub Econ*. 2000;78:25–49.
 11. Krause N, Lynch J, Kaplan GA, Cohen RD, Goldberg DF, Salonen JT. Predictors of disability retirement. *Scand J Work Environ Health*. 1997;23:403–13.
 12. Vahtera J, Laine S, Virtanen M, Oksanen T, Koskinen A, Pentti J and Kivimäki M. Employee control over working times and risk of cause-specific disability pension: the Finnish Public Sector Study. *Occup Environ Med*. 2010;67:479–485. <http://dx.doi.org/10.1136/oem.2008.045096>
 13. Leinonen T, Pietiläinen O, Laaksonen M, Rahkonen O, Lahelma E, Martikainen P. Occupational social class and disability retirement among municipal employees - the contribution of health behaviors and working conditions. *Scand J Work Environ Health*. 2011;37(6):464–472. <http://dx.doi.org/10.5271/sjweh.3182>.
 14. Korkstad S, Johsen R, Westin S. Social determinants of disability pension: a 10-year follow-up of 62 000 people in a Norwegian county population. *Int J Epidemiol*. 2002;31:1183–92. <http://dx.doi.org/10.1093/ije/31.6.1183>
 15. Virtanen M, Kawachi I, Oksanen T, Salo P, Tuisku K, Pulkki-Råback L, Pentti J, Elovainio M, Vahtera J, Kivimäki M. Socio-economic differences in long-term psychiatric work disability: prospective cohort study of onset, recovery and recurrence. *Occup Environ Med*. 2011; [Epub ahead of print]
 16. Ropponen A, Silventoinen K, Svedberg P, Alexanderson K, Koskenvuo K, Huunan-Seppälä A, Koskenvuo M, Kaprio J. Health-related risk factors for disability pensions due to musculoskeletal diagnoses: A 30-year Finnish twin cohort study. *Scand J Public Health*. 2011 [Epub ahead of print].
 17. Ilmarinen J, Tuomi K, Klockars M. Changes in the work ability of active employees over an 11-year period. *Scand J Work Environ Health*. 1997;23 suppl 1:49–57.
 18. Welch LS. Improving work ability in construction workers – let's get to work. *Scand J Work Environ Health*. 2009;35(5):321–324.
 19. Shiri R, Martimo KP, Miranda H, Ketola R, Kaila-Kangas L, Liira H, Karppinen J, Viikari-Juntura E. The effect of workplace intervention on pain and sickness absence caused by upper-extremity musculoskeletal disorders. *Scand J Work Environ Health*. 2011;37(2):120–8. <http://dx.doi.org/10.5271/sjweh.3141>
 20. Welch L, Haile E, Boden LI, Hunting KL. Musculoskeletal disorders among construction roofers—physical function and disability. *Scand J Work Environ Health*. 2009;35(1):56–64.

Mikko Härmä, MD, PhD
 Finnish Institute of Occupational Health
 Topeliuksenkatu 43 a A
 00250 Helsinki
 Finland
 [E-mail: Mikko.Harma@ttl.fi]

