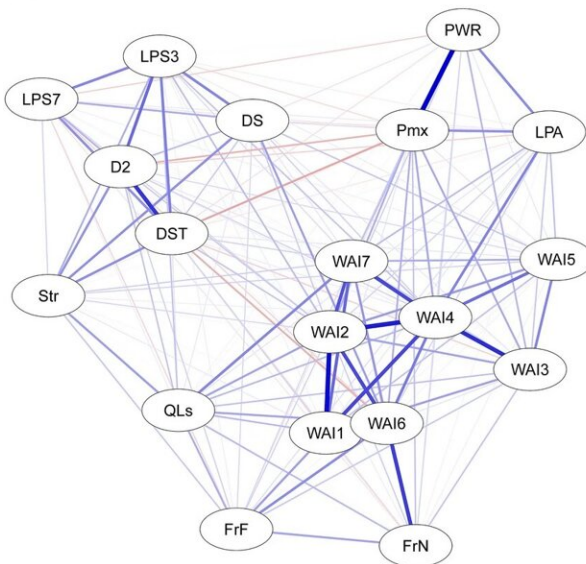


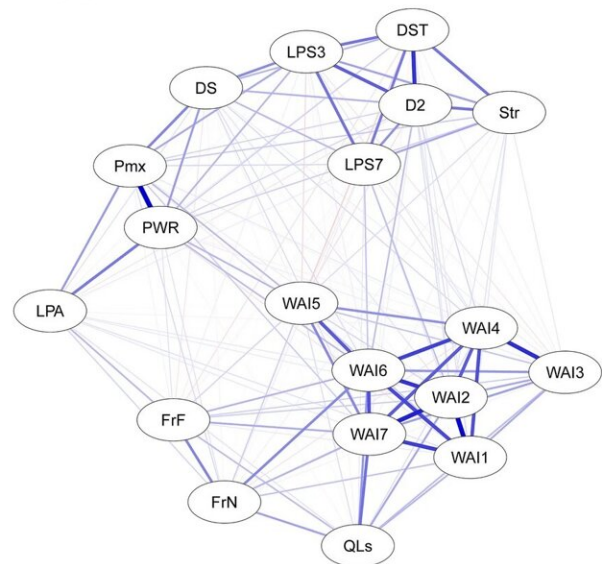
Work ability is influenced by physical fitness, social life and cognitive functions: Study

January 23 2023, by Anne Gregory

(a) Middle-aged adults



(b) Older adults



Network of associations based on polychoric, polyserial, and Pearson's correlations for (a) middle-aged, and (b) older adults. Each node represents one of the indicator variables and the edges represent the strength of the correlations between the variables. Green edges represent positive correlations and red edges represent negative correlations. The width and color of the edges correspond to the absolute value of the correlations. Nodes are placed according to a forced-embedded algorithm (Fruchterman and Reingold 1991) in which the length of edges depends on the absolute weight of the edges. *d2* d2-R Test of attentional endurance, *DS* Digit-Span Backward, *DST* Digit Substitution Test, *FrF* frequency of social contacts, *FrN* number of friends, *LPS3* logical reasoning, *LPS7* spatial rotation, *LPA* lüdenscheid physical activity Questionnaire, *Str* stroop test, *Pmx* maximum power output in watt of the physical work capacity test; *PWR* power-to-weight ratio of the physical work capacity test, *QLs*

WHOQoL social dimension, WAI work ability index. Credit: *International Archives of Occupational and Environmental Health* (2022). DOI: 10.1007/s00420-022-01943-8

Due to demographic change, it is becoming increasingly important to maintain the working capacity of aging workforces. In a recent study, researchers from the Leibniz Research Centre for Working Environments and Human Factors in Dortmund (IfADo) therefore investigated the relationship between changing lifestyle factors, cognitive functions and their influence on work ability. The results show that the ability to work is influenced by various factors in the course of working life.

The study results underline the importance of an active social life outside the workplace for [work ability](#), regardless of the age of the workers. The influence of physical fitness on work ability changes with age, which points to the need for a differentiated view of age effects.

Work ability is influenced by various factors in the course of working life. In particular, [social activities](#) outside work and physical activity in leisure time increase well-being and health and can act as a compensation for work-related negative aspects such as psychosocial stress or even poor working conditions.

Data from about 500 workers analyzed

The study analyzed cross-sectional data from 247 middle-aged and 236 older workers from the Dortmund Vital Study. The results show that social life outside work had significant positive effects on work ability in both middle-aged and older adults.

Physical fitness had a significant effect on work ability only in middle-aged adults, while cognitive functions had no significant effect on work ability in either group. In [older adults](#), physical fitness correlated with cognitive functions, while in middle-aged adults, cognitive functions correlated only slightly with social life.

The research is published in the journal *International Archives of Occupational and Environmental Health*.

More information: Jennifer A. Rieker et al, The impact of physical fitness, social life, and cognitive functions on work ability in middle-aged and older adults, *International Archives of Occupational and Environmental Health* (2022). [DOI: 10.1007/s00420-022-01943-8](https://doi.org/10.1007/s00420-022-01943-8)

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