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## Opening the Black Box: Examining the Nomological Network of Work Ability and Its Role in Organizational Research

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### Synopsis

The concept of work ability, or a person's ability to meet the demands of their job, is rooted in the occupational medicine literature. Recently, researchers in the organizational sciences have adopted the concept of work ability for understanding employee well-being, performance, and retirement. However, the antecedents of work ability need greater clarity to understand how organizations and societies can promote it. The outcomes of work ability need greater examination as well. To address these issues, we meta-analytically summarized the results of 247 studies (312,987 employees). We found that job demands and resources were related to employee work ability, and that work ability in turn was related to outcomes such as employee attitudes, behaviour, and retirement.

### Introduction and Background

The concept of work ability, or a person's ability to meet the demands of their job, has its roots in the occupational medicine literature as a way of predicting the likelihood of a person seeking retirement or going out on disability. Work ability is typically measured by asking a person how well they can meet the physical and psychological challenges of their job. Some measures of work ability also ask about a person's health.

In the last decade, the work ability concept has been adopted by researchers in the organizational sciences because of its usefulness in understanding employee well-being, performance, and retirement. In particular, there is a keen interest in how to promote work ability in order to support an aging workforce, specifically, so that people can continue working longer and effectively

with increased well-being. However, there has been no quantitative summary of the broad work ability literature to clarify the specific antecedents of work ability (e.g., health, co-worker/supervisor support, physical and emotional stressors). This is unfortunate because understanding these antecedents can enable organizations and policymakers to support the work ability of their workforces. In addition, although it is known that work ability predicts worker attitudes, performance, and retirement, the strength of these relationships is unclear.

### Issues and Questions Considered

Most of the research on work ability has come from the occupational medicine literature. The way work ability has been measured in this literature has often included objective health measures. On the other hand, researchers in the organizational sciences have relied primarily on brief, self-report measures of work ability – easier to use in a survey, and less invasive regarding personal information. One of our main questions, then, was the degree to which these two different types of work ability measures were useful in predicting employee attitudes, well-being, performance, and retirement.

We used the job demands-resources model to consider the possible antecedents of work ability.

Specifically, we examined whether:

- Job demands such as physically and mentally demanding work and workplace mistreatment negatively impact work ability.
- Job resources such as co-worker and supervisor support, control over work, and fair treatment are positively related to work ability.

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- Personal resources such as optimism, resilience, and self-efficacy support work ability.
- Physical and mental health and positive health behaviours are associated with greater work ability.
- Age is negatively related to work ability.

In addition, we examined whether work ability was related to important outcomes such as attitudes, motivation, performance, and turnover and retirement, and whether work ability mattered more for certain occupations than others.

Finally, we wanted to see if work ability would also predict these attitudinal and behavioural outcomes over and above similar constructs such as self-efficacy and perceived fit.

## Methodology

Because the work ability concept was developed in the medical literature and later in the occupational health psychology literature, we performed database searches from both the psychology/management (PsychINFO) and medical (PubMed) literatures, examining research from 1980 until 2017. We also reviewed the reference lists from the papers we found and presentations from relevant conferences (2012-2017). We also submitted a call to the Organizational Behavior and Occupational Health Psychology listservs. Article screening resulted in 247 studies (312,987 employees) which were coded by two of the authors. Meta-analyses were conducted using the Hedges and Olkin (1985) approach.

## Outcomes and Findings

**Antecedents of work ability.** We found that mental/emotional demands, physical demands, and workplace mistreatment had a negative effect on work ability. On the other hand, co-worker and supervisor support, job control, and fair treatment were positively

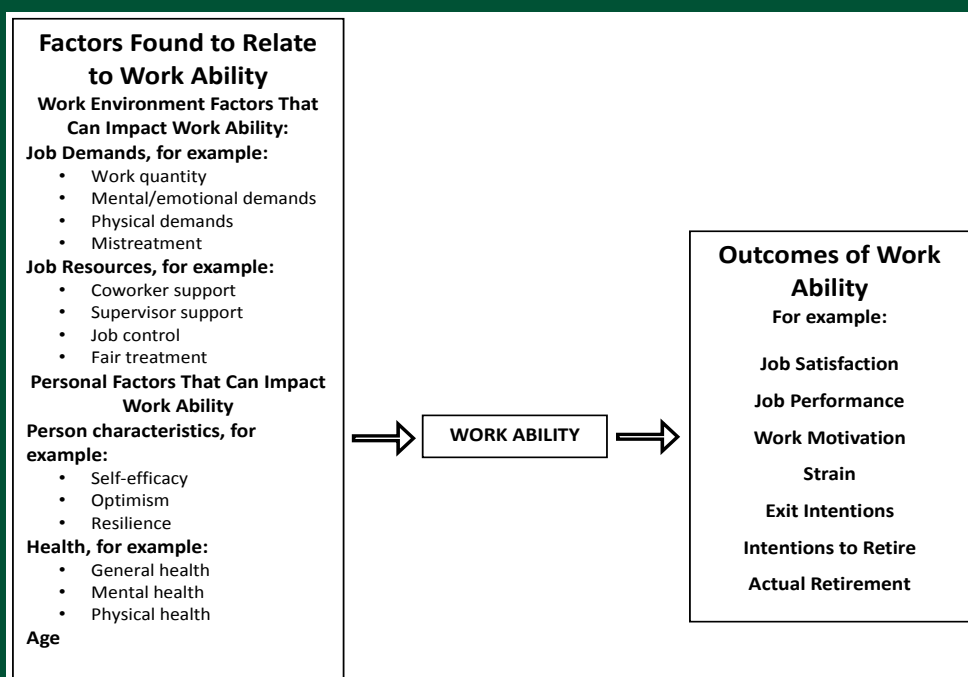
related to employees' work ability. Personal characteristics such as optimism, resilience, and self-efficacy had a positive effect on work ability. Physical and mental health also had a positive impact, and older age was associated with slightly lower work ability.

**Outcomes of work ability.** We also found that high work ability was related to a number of important outcomes such as job satisfaction, work motivation, and work performance, while low work ability was associated with burnout, retirement intentions, and actual retirement. In terms of the type of work ability measure (subjective versus more health-based), few differences were found. Interestingly, we found that different types of work ability measures seem comparable in predicting these nearly all outcomes, except for heavily health-based outcomes such as disability, where health-based measures were more predictive. Our analyses showed that work ability is different from other, related concepts such as self-efficacy and perceived fit.

**Implications.** Taken together, this study shows the importance of work ability to society, organizations, and workers. First, it shows that organizations can support work ability by reducing job demands and increasing employee resources. Second, it shows that how people perceive their work ability is related to important outcomes such as job satisfaction, well-being, performance, and retirement. Third, it suggests that societies should monitor and support the work ability of their workforces to provide economic advantages in terms of maintaining a productive workforce while promoting well-being and reducing medical, disability, and retirement costs. In short, these findings illustrate that work ability can provide a useful lens for understanding how to support worker well-being and performance.

*Note: This study was conducted as part of the doctoral dissertation of Grant Brady at Portland State University*

**Work ability's antecedents and outcomes.** (Based on: Brady, G. M., Truxillo, D. M., Cadiz, D. M., Rineer, J. R., Caughlin, D. E., & Bodner, T. (2020). Opening the black box: Examining the nomological network of work ability and its role in organizational research. *Journal of Applied Psychology*, 105, 637-670. <https://doi.org/10.1037/apl0000454>)



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