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Measuring Work Ability: How to capture whether an employee can meet the demands of their work

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Synopsis

Our paper examines the existing conceptualisation and measurement of work ability and proposes a new way of measuring work ability. Beginning with the original work ability index (WAI; Tuomi et al., 1998), our paper reviews the most commonly used measures of work ability, outlining their strengths and weaknesses, before presenting and testing a new multidimensional perceived work ability scale (MPWAS).

Introduction and Background

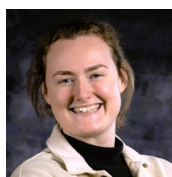
In the context of an ageing workforce, there is increased pressure on social systems (i.e., retirement, healthcare) as fewer people are entering the workforce to support a population that is living much longer than before. At the same time, labour and skill shortages are increasing across EU countries (European commission, 2024). Consequently, both governments and organisations have a vested interest in addressing the following question: How can we help workers to successfully age in their work role? At the core of this question are two key elements: employee motivation and ability (Kooij

et al., 2020). Our paper focuses on one of these key elements by introducing a better way of measuring work ability. By being able to track people's work ability over time, we can identify what factors that sustain high work ability, thereby providing actionable insights for organisations and policymakers.

Issues and Questions Considered

To date, work ability has been measured as a unidimensional construct, meaning that although the existing scales ask workers about multiple aspects of their jobs, the responses are aggregated into one mean score (Ahlstrom et al., 2010; McGonagle et al., 2015; Tuomi et al., 1998). This is problematic for one key reason - averaging these responses risks losing meaning (Cadiz et al., 2019). For example, a person might report being perfectly able to meet their mental job demands, but unable to meet the physical demands of their job. Averaging these two responses obscures this important distinction. The importance of differentiating between whether a person can meet certain aspects of their jobs over others is likely even more important depending on

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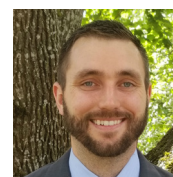
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the type of work they are performing. As such, we argue that there are four distinct work ability dimensions that are likely related but should be considered separate. These include *physical work ability*, *cognitive work ability*, *interpersonal work ability*, and *emotional work ability*. Furthermore, by adding an emotional element to our scale, we redefine perceived work ability as “a multidimensional construct that captures one’s perception of their ability to meet the physical, cognitive, interpersonal, and emotional demands of their current job” (McCarthy et al., 2024; p. 93).

Another challenge of using the existing unidimensional measures of work ability is their applicability within organisations. While they can effectively identify a problem among workers, they do not provide specific areas for initial investigations or targeted interventions. *Ultimately, the goal of our study was to design a better measure of perceived work ability that would help organisations identify potential areas for intervention.* For example, if an organisation were to measure perceived work ability over time and identified that there was a decrease in cognitive work ability at a team level, this would indicate a need to further investigate the cause of this change. Should a decrease in work ability persist over time, the likelihood of employees departing the organization increases (Brady et al., 2020). As such, it is important for organisations to have a tool that can both monitor employee work ability and indicate potential problem areas.

Methodology

We followed the recommended steps outlined by Hinken (1998) to develop and validate our scale. First, we sought the expertise of several PhD students

to review and categorize our items into the correct dimensions. Next, we sought the perspective of a group of business students for feedback on the clarity of our scale. Following this, we recruited a diverse range of participants via Mturk to complete our scale, ensuring a robust check for construct validity. Finally, we recruited a sample via Prolific to complete our survey, including a number of other measures (e.g., job autonomy, emotional exhaustion) that we expected to be both related and unrelated to the work ability subscales. This comprehensive approach ensured the reliability and validity of our scale.

Outcomes and Findings

Our results found support for a four-dimensional conceptualization of work ability and the validity and reliability of the MPWAS. We found that participants consistently responded to the items in our measure in an expected pattern, thus supporting construct validity. Furthermore, we found a distinction between the dimensions of work ability, meaning that people responded differently to whether they could meet their physical, cognitive interpersonal and emotional job demands. This finding is important as it supports the idea that perceived work ability is multidimensional. Additionally, we found that our scale predicted whether someone was likely to (1) feel engaged with their work, (2) feel emotionally exhausted, (3) feel stressed, and (4) have the intention of leaving their job. These results remained when controlling for a previous measure of perceived work ability, indicating that our measure is arguably a better predictor of these work outcomes. In conclusion, the MPWAS may be a useful tool to track work ability over time, providing organisations with insights on whether intervention is needed to increase work ability.

The underlying paper was published in the *Journal of Occupational Health Psychology* 2024, volume 29, issue 2 and a full copy can be obtained at: <https://doi.org/10.1037/ocp0000373>

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