Running head: TITLE 1

Engagement Measurment of Invariance

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- 7 must be indented, like this line.

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- The authors made the following contributions. Casey Osorio-Duffoo:
- Conceptualization, Writing Original Draft Preparation, Writing Review & Editing;
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Abstract 14

One or two sentences providing a basic introduction to the field, comprehensible to a 15

scientist in any discipline. 16

Two to three sentences of more detailed background, comprehensible to scientists 17

in related disciplines.

One sentence clearly stating the **general problem** being addressed by this particular 19

study. 20

One sentence summarizing the main result (with the words "here we show" or their 21

equivalent).

Two or three sentences explaining what the main result reveals in direct comparison 23

to what was thought to be the case previously, or how the main result adds to previous

knowledge.

One or two sentences to put the results into a more **general context**. 26

Two or three sentences to provide a **broader perspective**, readily comprehensible to 27

a scientist in any discipline. 28

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Keywords: keywords

Word count: X 30

Engagement Measurment of Invariance

2 Definitions of Engagement

31

The roots of employee (aka work; e.g., W. Schaufeli & Bakker, 2010) engagement
research likely started with theoretical expansions of forms of employee participation (see, for
example, Ferris & Hellier, 1984) and job involvement (e.g., Elloy, Everett, & Flynn, 1991).
This exploration extended into broader considerations of attitudes and emotions (Staw,
Sutton, & Pelled, 1994) and were informed by further exploration of the dimensionality of
constructs such as organizational commitment (Meyer & Allen, 1991). The 1990's saw
focused development and refinement (for example, a dissertation; Leone (1995) or actual
semantic reference; Kahn (1990)). Staw, Sutton, and Pelled (1994) investigated the
relationships between positive emotions and favourable work outcomes, and although they do
not use the word, "engagement," their distinction between felt and expressed emotion was
likely a stimulating influence upon the burgeoning interest in the engagement construct.
Gallup is also widely acknowledged as an early pioneer in the measurement of the construct
(see, for example, Coffman & Harter, 1999).

- Kahn (1990) described engaged employees as being physically involved, cognitively vigilant, and emotionally connected. Although occasionally referred to as residing on the opposing pole to burnout (Christina Maslach & Leiter, 2008), these two constructs are currently most commonly conceptualized as being distinct (Timms, Brough, & Graham, 2012), although not universally (Cole, Walter, Bedeian, & O'Boyle, 2012; Taris, Ybema, & Beek, 2017).
- Engagement/Burnout: Burnout is defined as a psychological syndrome characterized by exhaustion, cynicism, and inefficacy, which is experienced in response to chronic job stressors. Engagement is understood to be the direct opposite of burnout and exist on a continuum—with engagement on one end and burnout on the other. Exhaustion (low energy), cynicism (low involvement), and inefficacy (low efficacy) are characteristic of

burnout; whereas, high energy, high involvement, and high efficacy are characteristic of engagement C. Maslach and Leiter (1997) (Maslach and Leiter, 1997) (Leiter & Maslach, 2004).

- Work engagement: Work engagement refers to a positive, fulfilling, work-related state 60 of mind that is characterized by vigor, dedication, and absorption. Vigor is 61 characterized by high levels of energy and mental resilience while working. Dedication 62 refers to being strongly involved in one's work and experiencing a sense of significance, 63 enthusiasm, inspiration, pride, and challenge. Absorption is characterized by being 64 fully concentrated and happily engrossed in one's work, whereby time passes quickly 65 and one has difficulties with detaching oneself from work (Wilmar B. Schaufeli, 66 Salanova, González-Romá, & Bakker, 2002) - The Utrecht Work Engagement Scale 67 (UWES), a self-report questionnaire first developed by Schaufeli and Bakker (2003) (W. 68 B. Schaufeli & Bakker, 2003) includes the three aspects of work engagement: vigor, 69 dedication, and absorption. - we have to make note of how we are different from this! 70
- Employee engagement: Employee engagement refers to the "individual's involvement and satisfaction as well as enthusiasm for work" (Harter, Schmidt, & Hayes, 2002) Work engagement is the mental state where employees...
- ... feel full with physical energy (Vigor)

- ... are enthusiastic about the content of their work and the things they do

 (Dedication)
 - ... are so immersed in their work activities that time seems to fly (Absorption)
- The tripartite substantive model of employee engagement is also partially informed by
 the definitions provided with the Utrecht Work Engagement Scale
 (schaufeli utrecht 2003?).

81	Methods

We report how we determined our sample size, all data exclusions (if any), all manipulations, and all measures in the study.

- 84 Participants
- 85 Material
- 86 Procedure
- 87 Data analysis

We used R [Version 4.0.5; R Core Team (2021)] and the R-package *papaja* [Version 0.1.0.9997; Aust and Barth (2020)] for all our analyses.

90 Results

91 Discussion

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