

## The Journal of Positive Psychology



Dedicated to furthering research and promoting good practice

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/rpos20

# Differences among a satisfied, a meaningful, and a psychologically rich working life

Hannes Zacher & Roy F. Baumeister

**To cite this article:** Hannes Zacher & Roy F. Baumeister (04 Nov 2024): Differences among a satisfied, a meaningful, and a psychologically rich working life, The Journal of Positive Psychology, DOI: 10.1080/17439760.2024.2417102

To link to this article: <a href="https://doi.org/10.1080/17439760.2024.2417102">https://doi.org/10.1080/17439760.2024.2417102</a>

9	© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.	Published online: 04 Nov 2024.
	Submit your article to this journal 🗷	Article views: 2053
Q <sup>L</sup>	View related articles 🗹	Uiew Crossmark data ☑
4	Citing articles: 7 View citing articles 🗹	This article has been awarded the Centre for Open Science 'Open Data' badge.
		This article has been awarded the Centre for Open Science 'Open Materials' badge.







### Differences among a satisfied, a meaningful, and a psychologically rich working life

Hannes Zacher o and Roy F. Baumeister b,c

aWilhelm Wundt Institute of Psychology, Leipzig University, Leipzig, Germany; Department of Psychology, Harvard University, Cambridge, USA; 'Bremen International Graduate School of Social Sciences, Constructor University Bremen, Bremen, Germany

#### **ABSTRACT**

This investigation elucidates what makes a good working life. A sample of 678 employees from diverse jobs rated their job satisfaction, work meaningfulness, and work psychological richness, as well as several key work characteristics (both stressors and resources) and important work and life outcomes. We explored the unique contributions of satisfaction, meaningfulness, and psychological richness by controlling each measure for the other two. Job satisfaction correlates were consistent with previous work, namely stressors and negative outcomes correlated negatively, whereas resources and positive outcomes correlated positively. More surprisingly, psychological richness was positively correlated with both stressors and resources, as well as with high rates of feeling exhausted after work and with thoughts of changing jobs. Meaningfulness, meanwhile, had relatively weak correlates after controlling for psychological richness and satisfaction. The strongest were with being proficient at the job, being highly engaged with it, and coping well with changes affecting the work role.

#### **ARTICLE HISTORY**

Received 26 February 2024 Accepted 19 August 2024

#### **KEYWORDS**

Satisfaction; meaningfulness; psychological richness; work; employment

#### Introduction

In the field of psychological science, the notion of 'the good life' has traditionally been conceptualized and measured in terms of hedonic wellbeing (e.g. happiness, life satisfaction, positive emotions) and eudaimonic wellbeing (e.g. experienced meaningfulness, purpose in life, personal growth; Kesebir & Diener, 2008; Ryan & Deci, 2001; Ryff, 1989). Although living a happy life and living a meaningful life overlap substantially, Baumeister et al. (2013) found that happiness (controlling for meaningfulness) had unique and different associations with other variables (e.g. satisfying one's needs and wants, being a taker) than meaningfulness (controlling for happiness; e.g. concerns with personal identity and expressing the self, being a giver). The traditional bipartite conceptualization of the good life in terms of hedonic and eudaimonic wellbeing has recently been extended to include the living of a 'psychologically rich life', or a life that provides a variety of interesting and perspective-changing experiences (Besser & Oishi, 2020; Oishi et al., 2020). In support of this third and distinct dimension of the good life, Oishi and Westgate (2022) found that 'a nontrivial number of people around the world report they would choose a psychologically rich life at the expense of a happy or meaningful life' (p. 790).

Although psychological science has made great strides in understanding the good life in general (for reviews, see Diener, 2018; King & Hicks, 2021), the tripartite conceptualization including happiness, meaningfulness, and psychological richness has not specifically been applied to the context of work and employment as one of the most important domains or roles in life. This is surprising, given that many people spend a substantial proportion of their awake time at work and in organizations, which may be associated with different expectations, opportunities, constraints, and experiences than life in general (Bliese et al., 2017; Diener et al., 2020). Moreover, person- and workrelated constructs that are uniquely (i.e. controlling for the respective other two dimensions) and differentially associated with each dimension of the good working life have not been identified.

Accordingly, the goals of this article are twofold. First, we introduce, and explore relations among, three core dimensions of the good working life: job satisfaction, work meaningfulness, and work psychological richness. Second, similar to Baumeister et al. (2013), we examine unique and differential associations between these dimensions of the good working life and other constructs. Specifically, we investigate associations with 18 key work characteristics (e.g. workload, job autonomy, supervisor and coworker support, job insecurity) and 16 key work and life outcomes (e.g. job proficiency, turnover intentions, physical and mental health). Table 1 summarizes the definitions and corresponding measures of these constructs. To attain our goals, we conducted a survey study with a large sample of 678 employees in Germany. The study was exploratory and so we did not preregister hypotheses, and hence it is fair to consider our theorizing as post hoc. Nevertheless, we did have some ideas and expectations that shaped the design of the study, and we shall provide some hypothesizing as a way of lending context to the work. Only some of our hypotheses will end up finding support.

This study contributes to research and practice in at least three important ways. First, we extend the literature on occupational wellbeing, which has predominantly focused on hedonic wellbeing and, somewhat less frequently, on eudaimonic wellbeing (Sonnentag, 2015), by adapting the construct of psychological richness (Oishi & Westgate, 2022) to the work context. We argue that job satisfaction, work meaningfulness, and work psychological richness represent three important and complementary dimensions of the broader concept of the good working life. Second, we offer first insights on how these three dimensions of the good working life are uniquely (i.e. independent of the respective other two dimensions) and differentially associated with several key work characteristics as well as several important work and life outcomes. Our study thus constructively replicates previous research on differences between happiness and meaningfulness (Baumeister et al., 2013), and the findings may inform a new research agenda on the predictors, correlates, and outcomes of the good working life. Finally, we contribute to practice by offering initial suggestions how certain work characteristics could be changed to enhance satisfaction, meaningfulness, and psychological richness at work.

#### The good working life: definitions

Consistent with psychological theorizing on human wellbeing in general (e.g. Ryan & Deci, 2001; Ryff, 1989), Sonnentag (2015) describes hedonic and eudaimonic wellbeing as two overarching dimensions of occupational wellbeing. Accordingly, we include an indicator of each of these dimensions in our conceptualization of the good working life (see Table 1).

First, job satisfaction is typically defined as a cognitiveaffective construct representing 'a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences' (Locke, 1976, p. 1304). Job satisfaction is a principal and widely studied indicator of hedonic wellbeing at work (Judge & Klinger, 2008). Numerous empirical studies have examined individual (e.g. personality) and contextual (e.g. work characteristics) antecedents, as well as work outcomes (e.g. performance, withdrawal behavior) of job satisfaction (Judge & Kammeyer-Mueller, 2012; Judge et al., 2017).

Second, work meaningfulness refers to people's experience of their work as important, significant, and having a purpose (Bunderson & Thompson, 2009; May et al., 2004; Pratt & Ashforth, 2003). We focus on a conceptualization of work meaningfulness that emphasizes the perceived importance of one's work for other people and society in general, as opposed to work as personally meaningful (Lysova et al., 2019; Steger et al., 2012). Just like happiness and perceived meaning in life are positively related, but distinct, constructs (Baumeister et al., 2013), job satisfaction and work meaningfulness are positively related, yet distinct (R. D. Duffy et al., 2015). Research has identified various sources of work meaningfulness, including personal values and beliefs, work characteristics, and national culture (Rosso et al., 2010). Moreover, a meta-analysis reported associations between work meaningfulness and several important outcomes, including job engagement, self-rated job performance, (lower) withdrawal intentions, health, and life satisfaction (Allan et al., 2019). However, these studies did not control for the potential confounding effects of job satisfaction in these associations.

Third, and inspired by recent advances by Oishi and Westgate (2022), we suggest that work psychological richness complements job satisfaction and work meaningfulness to form a tripartite conceptualization of the good working life. The construct of work psychological richness is adapted from the broader notion of psychological richness, which describes the extent to which one's life is characterized by complexity, entails a variety of interesting and perspective-changing experiences, and involves feeling a variety of deep emotions (Besser & Oishi, 2020). Oishi and colleagues showed that psychological richness is positively related to, but distinct from, hedonic and eudaimonic forms of wellbeing. For example, when asked whether they would prefer a happy, a meaningful, or a psychologically rich life, between 7 and 17% of participants from nine different countries chose the psychologically rich life (Oishi et al., 2020). Initial research on individual difference predictors showed that higher curiosity, more holistic thinking, and a more liberal political orientation are associated with the experience of a psychologically rich life (Oishi & Westgate, 2022). Moreover, studying abroad, which represents a rather unusual life experience among citizens of the United States, has been shown to be positively associated with psychological richness, but not with life satisfaction and meaning in life (Oishi et al., 2021).

Table 1. Definitions and operationalizations of the good working life, work characteristics, and work and life outcomes.

Construct	Definition	Example item (number of items in parentheses, unless single item)	Response format	Cronbach's alpha	Source
Dimensions of the good working life	ng life				
Job satisfaction	A positive emotional state resulting from the	feel fairly well satisfied with my work. (5)	7-point Likert scale"	.79	Judge et al. (1998)
Work	Belief that one's work is meaningful and	The work that I do is important. (5)	7-point Likert scale <sup>a</sup>	.93	Bunderson and Thompson
meaningfulness	important.				(2009)
Work psychological richness	Belief that one's work is characterized by a variety of interesting and perspective-	I have a lot of interesting experiences at my work. (12)	7-point Likert scale <sup>a</sup>	.97	Adapted from Oishi et al. (2019)
	changing experiences.				
Work characteristics – Work stressors	fressors		600000000000000000000000000000000000000	,	0.000 10 to 20000000000000000000000000000000000
Caallauve workload	to which tasks are complicated and	inere are unings at my work that are too computated. (2)	ט־אַסװוּר בואפֿור זינמוּפֿ	7/:	נומוווספו פרמו. (1990)
beoldzow owitetitacijo	Time programs and regulation everload	(2)	5 olers Hilliam	75	(1995) Le to your mind
Qualiticative workload Work interruptions	Infle pressure and regulation overload. Regulation obstacles while carrying out the work (e.g. phone calls, missing information)	carry out my work tasks. (2)	5-point Likert scale 5-point Likert scale <sup>a</sup>	c /:	Frumper et al. (1995) Prümper et al. (1995)
Envisormontal	Noise duet best inadequate lighting: 2000	200	5 olera toolia	6	Driiman ot al (1995)
stressors	or equipment not ergonomic.	unfavorable environmental conditions at my workplace, n as noise, heat, dust. (2)	סייוני בואפור טלמות	20:	ומווספו פרמו: (ייסס)
Supervisor	Perceived anger, dislike, criticism, or actions	ffcult. (4)	7-point scale $(1 = never.$	96	Kammever-Mueller et al.
undermining	that hinder goal attainment by supervisors directed at oneself.		7 = always)	}	(2013)
Coworker undermining	Perceived anger, dislike, criticism, or actions	My coworkers act in ways that show they dislike me. (4)	7-point scale $(1 = never,$	96.	Kammeyer-Mueller et al.
	that hinder goal attainment by coworkers directed at oneself.		7 = always)		(2013)
Job insecurity	Perceptions that one is at risk of losing their	I worry about becoming unemployed. (4)	5-point Likert scale <sup>a</sup>	88.	Kristensen et al. (2005)
	current employment.				
Working hours	Average working hours per week.	How many hours have you actually worked in the last 4 weeks on average per week?	Open response format	1	White et al. (2003)
Work characteristics - Work resources	esources				
Job autonomy	Opportunity to make one's own decisions regarding work procedures, methods, and scheduling.	Are you able to plan and organize your work independently? (3)	5-point scale (1 = very little, 5 = very much)	.87	Prümper et al. (1995)
Skill variety	Extent to which different skills can be used to	Are you able to make full use of your knowledge and skills at	5-point scale $(1 = very little,$	.78	Prümper et al. (1995)
	complete tasks and make decisions.		5 = very much		
Perceived contribution	Opportunity to recognize the contribution of one's tasks to the overall product or service (also called task identity).	My work is designed in a way that allows me to produce a complete work result from the beginning to the end. (2)	5-point Likert scale <sup>a</sup>	89:	Prümper et al. (1995)
Participation	Receipt of information about new	employees' ideas and	5-point Likert scale <sup>a</sup>	.70	Prümper et al. (1995)
	developments; consideration of employees' ideas and suggestions.	suggestions into account. (2)			
Development	Opportunities for training, development, and	Our company offers good training opportunities. (2)	5-point Likert scale <sup>a</sup>	.87	Prümper et al. (1995)
opportunities	promotion.				
Supervisor support	Perceived transactions with supervisors that provide emotional, instrumental and	My supervisor helps me to understand and sort things out. (4)	7-point scale (1 = never, 7 = always)	96.	Kammeyer-Mueller et al. (2013)
1,000	Intormational support.		2010 - 1) olon taion 7	C	- +0 %0   M.:0   %0.00
Coworker support	rerceived transactions with coworkers that provide emotional, instrumental and informational support.	My coworkers listen to me when I needed to talk. (4)	/-point scale (1 = never, 7 = always)		Kammeyer-Mueller et al. (2013)

Construct	Definition	Example item (number of items in parentheses, unless single item)	Response format	Cronbach's alpha	Source
Perceived organizational support	Belief that the organization values one's contributions and cares about one's wellbeing.	My organization really cares about my well-being. (8)	7-point Likert scale <sup>a</sup>	06:	Eisenberger et al. (1997)
Job level	Position in the hierarchy of a company.	Please indicate your position in your company on a scale that corresponds to a ladder with $7  \text{steps}$ .	7-point scale (1 = entry level position, 7 = managing director)	I	von Hippel et al. (2013)
Working from home	Carrying out one's work remotely from home.	Carrying out one's work remotely from home. What percentage of an average work week have you worked from home during the last 4 weeks?	Scale from 0 to 100%	I	Golden et al. (2008)
pesitable work and life outcomes Job proficiency E	Extent to which one meets the expectations and requirements of the work role.	I carry out the core parts of my job well. (3)	7-point scale $(1 = never, 7 = always)$	.91	Griffin et al. (2007)
Job adaptability	Extent to which one copes with, responds to, and supports changes that impact the work role.	I adapt well to changes in my core tasks. (3)	7-point scale (1 = never, $7$ = always)	.86	Griffin et al. (2007)
Job proactivity	Extention on the engages in self-starting, future-oriented behavior to change work roles and situations.	l initiate better ways of doing my core tasks. (3)	7-point scale (1 = never, 7 = always)	.95	Griffin et al. (2007)
Work ability	Assessment of one's ability to continue working in one's job, given characteristics of the job along with one's personal resources.	How would you evaluate your ability to work overall? (4)	11-point scale $(0 = 1 \text{ am not able}$ to work at all, $10 = 1$ have the best work ability of my life)	.95	McGonagle et al. (2015)
Job engagement	The simultaneous investment of cognitive, affective, and physical energies into role performance.	At work, I focus a great deal of attention on my job. (9)	7-point Likert scale <sup>a</sup>	.95	Rich et al. (2010)
Work-family balance satisfaction	An attitude reflecting the judgment that one's resources are adequate to meet work and family role demands.	I am satisfied with the way I divide my time between work and personal or family life. (5)	5-point scale (1 = very dissatisfied, 5 = very satisfied)	.97	Valcour (2007)
Work-family balance effectiveness	Belief that one is successfully meeting expectations negotiated and shared with partners in work and family roles.	I am able to accomplish the expectations that my supervisors and family have for me. (6)	5-point Likert scale <sup>a</sup>	96:	Carlson et al. (2009)
Physical health	The condition of one's body, taking into consideration everything from the absence of disease to fitness level.	During the past four weeks, how much of the time have you accomplished less than you would like as a result of your physical health? (6)	3- and 5-point response scales	.86	Ware et al. (1996)
Mental health	One's condition with regard to psychological and emotional well-being.	During the past four weeks, how much of the time have you accomplished less than you would like as a result of any emotional problems, such as feeling depressed or anxious?	3- and 5-point response scales	.85	Ware et al. (1996)
Family satisfaction	Perceptions of family quality and relational wellbeing.	All in all, how satisfied are you with your family life?	7-point scale (1 = very dissatisfied)	ı	Rudolph and Zacher (2021)
Life satisfaction	The degree to which one positively evaluates the overall quality of one's life.	All in all, how satisfied are you with your life in general?	7-point scale $(1 = \text{very})$ dissatisfied, $7 = \text{very satisfied})$	I	Zacher and Rudolph (2024)
<i>Undesirable work outcomes</i> Job fatigue	Extreme tiredness and reduced functional capacity experienced during and at the end of the workday.	How often do you feel physically drained at the end of the work day? (9)	7-point Likert scale <sup>a</sup>	76.	Frone and Tidwell (2015)
Financial difficulties	Difficulties covering ongoing costs of living.	Did you have problems in the last 4 weeks covering your ongoing costs (e.g. buying groceries, rent. bills)?	5-point scale $(1 = never, 5 = very often)$	ı	Caleyachetty et al. (2012)
Turnover intention	Willingness or intention to voluntarily quit one's job or leave a company.	I am planning to leave my job for another in the near future. (3)	7-point Likert scale <sup>a</sup>	.97	Adams and Beehr (1998)
Sickness absenteeism	Missing work due to sickness.	On how many days in the last 4 weeks were you unable to attend work due to sickness?	Open response format	ı	Dietz and Zacher (2023)
Sickness presenteeism	Attending work despite sickness.	weeks did you work although worked due to health reasons?	Open response format	1	Dietz and Zacher (2023)

 $^{a}$ Response options ranging from 1 = strongly disagree to 5 (or 7) = strongly agree.

Based on theorizing and previous research on human wellbeing both within and outside of the work context (Allan et al., 2019; Baumeister et al., 2013; Oishi & Westgate, 2022), we expected that job satisfaction, work meaningfulness, and work psychological richness would all be positively and strongly associated with each other. In other words, people with higher levels in each of these wellbeing facets are also more likely to have higher levels in the respective other two facets of wellbeing. Also consistent with previous research (Baumeister et al., 2013), however, we expected that these three dimensions of the good working life would have unique and differential associations with key work characteristics as well as work and life outcomes.

#### Work characteristics

Several theories about work have proposed how the work situation can predict occupational wellbeing, in addition to work motivation and performance (Humphrey et al., 2007; Parker, 2014; Parker & Knight, 2023; Parker et al., 2017). In particular, the job characteristics model highlights how job satisfaction and meaningfulness will be affected by features of the work (Hackman & Oldham, 1976). These features include job autonomy, skill variety, and perceived contribution of one's work to the overall product or service (also called 'task identity'). Further predictions arise from Karasek's (1979) job demand-control model and its extension by Demerouti et al. (2001), the job demands-resources model. Work demands and stressors such as heavy workload, frequent interruptions, and unpleasant aspects of the work environment, such as noise and heat, are detrimental for wellbeing (N. P. Podsakoff et al., 2007). Meanwhile, work resources such as autonomy, integrated participation (e.g. receiving information and the ability to voice ideas), and opportunities for professional development should all enhance wellbeing at work (Humphrey et al., 2007; Kubiak, 2022; Weber et al., 2019).

The job demand-control model has been extended to include social support (Häusser et al., 2010), and the job demands-resources model also features social stressors and resources (Bakker & Demerouti, 2017). Accordingly, we included measures of interpersonal stressors and resources at work: both undermining and support (by coworkers and by supervisors), as well as perceived organizational support. Prior work has linked these social stressors and resources to occupational wellbeing (M. K. Duffy et al., 2002; Ng & Sorensen, 2008; Rhoades & Eisenberger, 2002).

Last, we included four additional work characteristics that have been shown to be associated with occupational wellbeing, particularly job satisfaction. Specifically, we included job insecurity (Sverke et al., 2002) and working hours (Ng & Feldman, 2008) as two additional work stressors, and job level (or occupational status; Weiss et al., 2022) and working from home (Gajendran & Harrison, 2007) as two additional work resources.

The straightforward predictions were that all eight work stressors would be associated with lower job satisfaction (N. P. Podsakoff et al., 2007), with the possible exception of work hours (after all, increasing time spent doing something pleasant could enhance rather than reduce wellbeing; Ng & Feldman, 2008). There were no obvious theoretical links from work stressors to either work meaningfulness or work psychological richness, except that social undermining by supervisors or coworkers might be negatively related to a sense of belongingness and in that way contribute to lower work meaningfulness.

The work resources generally represent positive features of one's job, but they seemed more differentially relevant to the three dimensions of the good working life (Humphrey et al., 2007). Job satisfaction would seem most closely related to job autonomy (insofar as people prefer to decide for themselves rather than being told what to do), as well as perceived support by supervisors, coworkers, and the organization as a whole (which satisfy the need to belong). Opportunities for professional development could increase all three dimensions of job satisfaction, work meaningfulness, and work psychological richness (Kubiak, 2022). Higher ranking jobs should presumably be more meaningful, because they are more important and consequential than lower-level jobs (Weiss et al., 2022). Social support should be positively associated with work meaningfulness by virtue of the link between meaning and social integration (Humphrey et al., 2007). Additionally, the perceived contribution of one's job to the broader product or service offered by the company should be a strong source of meaning (Humphrey et al., 2007): It must be difficult to find one's job meaningful if one lacks any sense of how or what it contributes to the overall endeavor. Finally, work psychological richness seemingly should be positively related to skill variety, integrated participation, and having a higher rank in the organizational hierarchy - but it should also be negatively related to working from home (which by definition should reduce the variety of the work experience).

#### Work and life outcomes

We examined a broad range of important work and life outcomes in our study, some of which are, in addition to job satisfaction and work meaningfulness, considered in prominent models of work design

(Bakker & Demerouti, 2017; Hackman & Oldham, 1976; Karasek, 1979; Parker, 2014). We included 11 generally desirable work and life outcomes. Specifically, we considered three self-reported work performance measures (i.e. job proficiency, adaptability, proactivity; Griffin et al., 2007) and two motivational work outcomes, including work ability (Ilmarinen, 2009) and job engagement (Bakker & Demerouti, 2017). Furthermore, we investigated employees' satisfaction with, and the perceived effectiveness of, their work-family balance (Wayne et al., 2017), physical and mental health (Ware et al., 1996), as well as family and life satisfaction (Rudolph & Zacher, 2021). These desirable work and life outcomes should generally be positively related to job satisfaction, whereas we did not have specific expectations regarding their links with work meaningfulness and work psychological richness.

We additionally included five generally undesirable work-related outcomes. In particular, we considered job fatigue (Frone & Tidwell, 2015) and financial difficulties (Fusco, 2016), as well as three work withdraconstructs associated with occupational wal wellbeing: turnover intentions (Adams & Beehr, 1998), sickness absenteeism (i.e. missing work due to illness), and sickness presenteeism (i.e. working despite being ill; Dietz & Zacher, 2023). These undesirable work outcomes should all seemingly be related to lower job satisfaction, whereas we did not have specific expectations about links to work psychological richness.

Although those were the rather obvious predictions, there was one further aspect suggested by the findings of Baumeister et al. (2013). They concluded that participation in highly meaningful work could often be linked to more stress. Active engagement with society and striving for high ideals are often fraught with frustrations and difficulties. Hence, it was plausible to expect that work meaningfulness would be linked to some negative work and life outcomes. In particular, people who regard their work as highly important might well show higher sickness presenteeism, given that they think they cannot afford to stay home sick. But highly meaningful work could also disturb work-family balance (see also Bunderson & Thompson, 2009).

#### Method

#### Participants and procedure

The data used in this paper were collected in September 2023 as part of a larger longitudinal data collection effort (for an overview, see Zacher & Rudolph, 2024), and none of the substantive variables included in the present study have so far been used in other publications. The data and materials of this study are openly available at https://osf.io/ge4mg/. Given the exploratory nature of the study, no hypotheses were preregistered. This study was approved by the ethical advisory board of Leipzig University (Protocol ID# 2019.06.27\_eb\_17, Title: Longitudinal study on experience and behavior at work). Participation in the study was voluntary, anonymous, and informed written consent to take part in the research was obtained prior to the commencement of the study. A professional panel company was commissioned to recruit employed participants from a nationally representative online panel in Germany. The company is ISO 26,362 certified, which ensures quality of the data. The survey was initiated by 693 employees, 686 completed the survey, and 678 employees provided complete data on the focal variables and, thus, constitute the final sample of this study. Participants' ages ranged from 18 to 67 years with a mean age of 44.94 years (SD = 10.53), and 58.1% were men. In terms of educational level, a majority of participants held either intermediate secondary school/ high school (32.6%) or college/university or technical college diplomas (41.0%). Participants worked in various jobs and occupations across 21 different industries, including public administration (12.7%), manufacturing (10.9%), and healthcare (10.9%).

#### Measures

Definitions of the focal constructs, example items, response formats, Cronbach's alpha reliability estimates, and sources of the definitions and measures are shown in Table 1.

#### The good working life

We used three scales to operationalize the three dimensions of the good working life. All items were answered on a 7-point scale ranging from 1 = strongly disagree to 7 = strongly agree. Job satisfaction was assessed with a widely used 5-item scale (Judge et al., 1998). Three example items are 'I feel fairly well satisfied with my work', 'Most days I am enthusiastic about my work', and 'I find real enjoyment in my work'.

Work meaningfulness was also measured with five items (Bunderson & Thompson, 2009). We note that meaningfulness does not translate exactly into German, which uses two different words for meaning (Bedeutung for the meaning of a word or sentence, and Sinn, akin to the English 'sense', for purposive meaning). The scale focuses on perceived importance of one's work to



society, which is one operational definition of meaningfulness: One's work is meaningful to the extent that it serves a positive purpose within society, for example by contributing to other people's wellbeing through one's work. Three example items are 'The work that I do is important', 'I have a meaningful job', and 'What I do at work makes a difference in the world'.

Work psychological richness was assessed with the 12-item short version of the psychological richness questionnaire developed and validated by Oishi et al. (2019), which we adapted to refer to the work context in present tense (n.b. the original items of the psychological richness scale are worded in present perfect tense). Three example items are 'I have a lot of interesting experiences at my work', 'My working life consists of rich, intense moments', and 'I have a lot of stories about my work to tell others'.

#### Work characteristics

The work stressors qualitative and quantitative workload, work interruptions, and environmental stressors were measured with two or three items each from the German short questionnaire for job analysis ('Kurzfragebogen zur Arbeitsanalyse', KFZA), developed and validated by Prümper et al. (1995). Supervisor and coworker undermining were assessed with four items each from Kammeyer-Mueller et al. (2013), and job insecurity was assessed with four items from the Copenhagen psychosocial questionnaire (Kristensen et al., 2005). Finally, working hours were assessed with a single item (see Table 1 for details).

The work resources job autonomy, skill variety, perceived contribution, participation, and development opportunities were measured with two or three items each from the KFZA (Prümper et al., 1995). Supervisor and coworker support were assessed with four items each (Kammeyer-Mueller et al., 2013), and perceived organizational support was assessed with an 8-item scale (Eisenberger et al., 1997). Finally, job level and percentage of working from home were each assessed with single items that have been used in previous studies (see Table 1).

#### Work and life outcomes

The generally desirable work outcomes job proficiency, adaptability, and proactivity were measured with three items each (Griffin et al., 2007). Work ability was assessed with four items (McGonagle et al., 2015), and job engagement (Rich et al., 2010) was measured with nine items that tap cognitive, emotional, and physical aspects of this construct. Work-family balance satisfaction (Valcour, 2007) and effectiveness (Carlson et al., 2009) were measured with five and six items, respectively. Finally, the generally desirable life outcomes physical and mental health were measured with six items each (Ware et al., 1996), and family and life satisfaction were assessed with established single-item measures (see Table 1).

In terms of generally undesirable work outcomes, job fatigue (Frone & Tidwell, 2015) was measured with nine items that tap cognitive, emotional, and physical aspects of this construct. Turnover intention was measured with three items (Adams & Beehr, 1998), and sickness absenteeism and presenteeism were assessed with established single items (Dietz & Zacher, 2023). Finally, financial difficulties were also measured with a single item (see Table 1).

#### Analytical strategy

Although we measured the three dimensions of the good working life with two established scales (i.e. job satisfaction and work meaningfulness) and one slightly adapted scale (i.e. work psychological richness), the tripartite notion of the good working life is new to the field of organizational psychology. Accordingly, to determine whether the three dimensions represent statistically distinct factors, we conducted a series of confirmatory factor analyses using the statistical software Mplus (Muthén & Muthén, 1998-2017).

Next, consistent with Baumeister et al. (2013), we adopted an exploratory analytical strategy using the statistical software SPSS (IBM Corp, 2023) to obtain an initial understanding of the unique relations between work characteristics, work and life outcomes, and the three dimensions of the good working life. Like Baumeister et al. (2013), we therefore first computed partial correlations between each of the three dimensions of the good working life and each work characteristic and work or life outcome always controlling for the respective other two dimensions of the good working life. This analytical approach corresponds to running several regression analysis in which the three dimensions of the good working life are entered simultaneously as predictors of each work characteristic or each work and life outcome. Thus, each resulting partial correlation represents an estimate of the unique association between one of the dimensions of the good working life and work characteristics or a work/life outcome that is statistically independent of the other two dimensions of the good working life.

Second, given that the work characteristics and the work and life outcomes are not completely

independent factors but may correlate more or less with each other, we additionally adopted a more conservative approach that controls for the relations among these characteristics. Specifically, we ran three multiple regression analyses using SPSS in which we regressed each of the three dimensions of the good working life simultaneously on the respective other two of the dimensions of the good working life, the 18 work characteristics, and the 16 work and life outcomes as predictors. Thus, each regression coefficient represents an estimate of the unique association between one of the dimensions of the good working life and a work characteristic or a work/life outcome that is statistically independent of the other two dimensions of the good working life and of the respective other work characteristics and work and life outcomes.

Consistent with recommendations for correlational effect size benchmarks in applied psychology regarding attitude-attitude relations (e.g. relations between work characteristics and job attitudes; Bosco et al., 2015), we classify significant correlations and standardized regression estimates lower than .18 as 'small' or 'weak' effects, significant correlations and standardized regression estimates between .18 and .39 as 'medium' or 'moderate' effects, and significant correlations and standardized regression estimates higher than .39 as 'large' or 'strong' effects.

#### **Results**

#### Descriptive statistics, bivariate correlations, and factor analyses

Table 2 shows the descriptive statistics and bivariate correlations of the study variables. As expected, the three dimensions of the good working life were strongly and positively correlated (rs between .51 and .78, p < .001).

A confirmatory factor analysis with 37 factors corresponding to each of our focal variables shown in Table 1 suggested a reasonable fit of the model to the data (i.e. RMSEA and SRMR close to or lower than .08, CFI close to or greater than .90; Hu & Bentler, 1999), with the exception of a somewhat lower CFI (which may be due to the relatively large number of factors, see Kenny, 2020): χ(df = 7726) = 22232.39, p < .001, RMSEA = .05, SRMR = .08, CFI = .82. Considering Hu and Bentler's (1999) 'combination rule' for absolute fit indices, both the RMSEA and the SRMR values were in line with the suggested thresholds for reasonable model fit, suggesting that this model fits the data reasonable well regardless of the low observed relative fit index (i.e. CFI). Moreover, the 37factor model had a significantly better fit than a 36factor model in which job satisfaction and work meaningfulness items were specified to load on the same factor  $(\chi[df = 7762] = 23333.75, p < .001, RMSEA = .05,$ SRMR = .09, CFI = .81;  $\Delta \gamma [df = 36] = 1101.38$ , p < .001); a 36-factor model in which job satisfaction and work psychological richness items loaded on the same factor  $(\gamma[df = 7802] = 27186.89,$ p < .001, RMSEA = .06, SRMR = .13, CFI = .77;  $\Delta \chi$ [df = 76] = 4954.50, p < .001); and a 36-factor model in which work meaningfulness and work psychological richness items loaded on the factor  $(\gamma[df = 7814] = 33738.03,$ same **RMSEA** .07, SRMR = .18, CFI = .69;[df = 88] = 11505.64, p < .001). Finally, the 37-factor model had a significantly better fit than a 35-factor model, in which job satisfaction, work meaningfulness, and work psychological richness items loaded on the same factor  $(\chi[df = 7797] = 25019.60$ RMSEA = .06, SRMR = .09, CFI = .79;  $\Delta \gamma$ ; [df = 71] = 2787.21, p < .001). Thus, overall, we conclude from these analyses that the focal measures in our study are statistically distinct and that a 3-dimensional representation of the good working life is superior to other representations with fewer dimensions.

#### **Partial correlations**

Tables 3 and 4 show the partial correlations (or 'unique associations') between each of the three dimensions of the good working life and the 18 work characteristics and the 16 work and life outcomes, respectively, controlling for the respective other two dimensions of the good working life.

Among the work characteristics (see Table 3), all work stressors, except for working hours, were moderately or strongly and negatively associated with job satisfaction, weakly positively or nonsignificantly associated with work meaningfulness, and weakly to moderately and positively associated with work psychological richness. Working hours were only weakly positively related to work meaningfulness. All of the work resources were weakly to strongly and positively related to job satisfaction and, with the exceptions of perceived organizational support and working from home, also to work psychological richness. Perceived contribution, as well as supervisor and coworker support were additionally weakly and positively related to work meaningfulness, whereas the other work resources were not significantly associated with work meaningfulness.

Among the work and life outcomes (see Table 4), all of the generally desirable outcomes, except for

Table 2. Descriptive Statistics and Zero-Order Correlations Between the Study Variables

	M	SD	-	7	3	4	2	9	7	8	6	10	11	12	13	14	15	16	17	18	19
Dimensions of the good working life 1. Job satisfaction 2. Work meaningfulness 3. Work psychological richness	4.92 4.87 4.54	1.28 1.45 1.47	- .57** .51**		ı																
Work stressors 4. Qualitative workload 5. Quantitative workload 6. Work interruptions 7. Environmental stressors 8. Supervisor undermining 9. Coworker undermining 10. Job insecurity 11. Working hours	2.68 3.10 2.44 2.17 1.97 1.96 1.72	1.06 1.00 1.07 1.44 1.38 0.93	17** 03 35** 40** 40** 40**	.13** .25** .07 14** 16** 20**	.19** .07 .07 06 06 11**		- .46** .28** .15** .15** .22**	5.59** .42** .42** .13**	- .50** .52** .51**	.83* .64* .09*	- ***90.	- 0.	I								
Work resultes 12. Job autonomy 13. Skill variety 14. Perceived contribution 15. Participation 16. Developmentopportunities 17. Supervisor support 18. Coworker support 19. Perceived organizationalsupport 20. Job level	3.39 3.42 3.46 3.17 2.94 4.14 4.51 4.45 4.22	0.99 0.87 1.00 1.02 1.66 1.44 1.40 1.28	.42** .46** .42** .35** .35** .62** .08**	.40** .58** .49** .45** .43** .44** .38** .29**	.444 .454. .454. .454. .464. .474.	.18** .26** .16** .07 .17** .18** .11** .10**	12** 26** 13** 15** 13** 18** 05					18* 18* 09 00 06 06 14* 31* 31*			63*** 46** 47** 41** 32** 32**		.56** .47** .43** .55** .14**	.49* .44** .24** .12**		- .37** .05	- .13**
Desirable work and life outcomes 22. Job proficiency 23. Job adaptability 24. Job proactivity 25. Work ability 26. Job engagement 27. Work-familybalance (effectiveness) 28. Work-family balance (effectiveness) 30. Mental health 31. Family satisfaction 32. Life satisfaction	5.61 5.02 4.27 8.34 4.91 3.82 3.76 49.72 47.96 5.48	1.20 1.37 1.58 2.02 1.30 0.93 0.88 8.22 9.72 1.29	.47** 30** 130** 53** 53** 53** 52** 52** 50**	\$3.52 \$3.93 \$3.93 \$3.33 \$3.33 \$3.53 \$4.53 \$5.53 \$4.53 \$5.53 \$4.53 \$4.53 \$4.53 \$4.53 \$5.53 \$4.53 \$5.53	.42** .48** .37** .55** .02 .27** .37**	.02 .18** .26** .06 .17** .17** .08 .08 .21**	.17**			.29** .07 .17** .35** .14** .29** .27** .25**		.29** .12** .06 .36** .35** .35** .34** .38**	.15** .12** .12** .14** .06 .02 .02 .03	3.38** 3.44** 3.44** 3.54** 3.	41**	45** 34** 35** 35** 36** 37** 27**	37**	23 ** 24 ** 33 ** 36 ** 36 ** 37 ** 36 ** 37 ** 36 ** 37 **	.32* .38** .26** .37** .37** .27**	.43 ** .45 ** .4	
Undestrable work and life outcomes 33. Job fatigue 34. Tumover intentions 35. Sickness absenteeism 36. Sickness presenteeism 37. Financial difficulties	2.66 2.20 1.13 1.32 1.35	1.56 1.65 4.17 4.21 0.83	49** 56** 21** 22**	13** 34** 20** 08	01 22** 16** 03	.29** .19** .06 .09*	.27** .10** .06 .12**	.49** .34** .02 .15** .20**	.49** .40** .07 .16**	.49** .11** .17**	.49* .09* .15* .21*	.50** .46** .09* .15** .29**	.13**0230**050507	.17**18**26**12**09*	.08* .22** .23** .09*	18** 25** 19** 07	24** 24** 20** 13** 13**	***	12** 17** 12** 06	13** 17** 17** 12** (Cont	3**44**  7**42**  7**12**  2**21**  3**18** (Continued)

Table 2. (Continued).

	70	21	22	23	24	25	56	27	78	29	30	31	32	33	34	35	36	37	
20. Job level	1																		
21. Working from home	**61.	ı																	
Desirable work and life outcomes																			
22. Job proficiency	.16**	.02	ı																
23. Job adaptability	***17	.03	.63**	ı															
24. Job proactivity	.16**	.05	.31**	**89.	ı														
25. Work ability	.16**	*80	**64.	.32**	.18**	ı													
26. Job engagement	**61.	90:	**59.	**09	**94.	**74.	ı												
27. Work-familybalance satisfaction	.13**	.05	**14.	.23**	90:	.48**	.33**	I											
28. Work-family balance effectiveness	.13**	.05	**94.	.28**	.13**	.50**	.42**	**62.	ı										
29. Physical health	90:	01	.17**	*80:	.05	.29**	.13**	.29**	.24**	ı									
30. Mental health	**61.	.03	**88:	.23**	90:	.54**	.35**	.53**	**64.	.05	ı								
31. Family satisfaction	.15**	9.	**14.	.22**	*60:	.45**	.33**	**02.	.61	.22**	.54**	ı							
32. Life satisfaction	.15**	9.	.35**	.22**	.16**	**94.	.38**	.65**	.57**	.26**	.59**	*8/.	1						
Undesirable work and life outcomes																			
33. Job fatigue	16**	*60:-	20**	05	.07	36**		50**	40**		59**	45**	44**	ı					
34. Turnover intentions	19**	08	30**	19**	03	30**		36**	28**		48**	34**	40**		ı				
35. Sickness absenteeism	12**	04	31**	18**	12**	24**		19**	22**		23**	20**	24**		12**	ı			
36. Sickness presenteeism	*60	05	13**	05	.01	19**	10**	20**	19**	36**	23	21**	25**	.34**	.17**	**04.	ı		
37. Financial difficulties	17**	01		02	.04	20**		24**	24**		30**	22**	31**				.23**	ı	



Table 3. Partial correlations between the three dimensions of the good working life and 18 work characteristics (corrected for the respective other two dimensions of the good working life).

	Job satisfaction	Work meaningfulness	Work psychological richness
	r <sub>part</sub>	r <sub>part</sub>	r <sub>part</sub>
Work stressors			
Qualitative workload	33**	.09*	.19**
Quantitative workload	24**	.12**	.19**
Work interruptions	42**	06	.26**
Environmental stressors	41**	04	.18**
Supervisor undermining	39**	05	.17**
Coworker undermining	41**	06	.18**
Job insecurity	37**	05	.12**
Working hours	05	.08*	.04
Work resources			
Job autonomy	.23**	.02	.21**
Skill variety	.16**	.07	.42**
Perceived contribution	.18**	.15**	.16**
Participation	.30**	.08*	.14**
Development opportunities	.12**	.08*	.21**
Supervisor support	.13**	.15**	.12**
Coworker support	.15**	.13**	.18**
Perceived organizational support	.53**	.05	03
Job level	.14**	.03	.13**
Working from home	.10**	05	001

N = 678.

\* *p* < .05; \*\* *p* < .01.

Table 4. Partial correlations between the three dimensions of the good working life and 16 work and life outcomes (corrected for the respective other two dimensions of the good working life).

	Job satisfaction	Work meaningfulness	Work psychological richness
	r <sub>part</sub>	r <sub>part</sub>	r <sub>part</sub>
Desirable work and life outcomes			
Job proficiency	.24**	.29**	02
Job adaptability	003	.24**	.15**
Job proactivity	15**	.08*	.32**
Work ability	.38**	.09*	.04
Job engagement	.34**	.23**	.19**
Work-family balance satisfaction	.45**	.07	07
Work-family balance effectiveness	.38**	.12**	01
Physical health	.20**	.01	08*
Mental health	.53**	.07	08*
Family satisfaction	.39**	.10**	04
Life satisfaction	.43**	.13**	001
Undesirable work outcomes			
Job fatigue	54**	01	.24**
Turnover intentions	49**	12**	.16**
Sickness absenteeism	12**	08*	.01
Sickness presenteeism	23**	01	.08*
Financial difficulties	21**	05	.10*

N = 678.

\* *p* < .05; \*\* *p* < .01.

job adaptability and job proactivity, were moderately to strongly and positively related to job satisfaction. In contrast, findings regarding relations between desirable outcomes and work meaningfulness and work psychological richness were mixed. Work meaningfulness was weakly to moderately and positively related to job proficiency, adaptability, proactivity, work ability, engagement, work-family balance effectiveness, as well as family and life satisfaction, but non-significantly related to the

**Table 5.** Results of regression analyses with work stressors and work resources as predictors of the three dimensions of the good working life.

		Outcome Variables	
	Job satisfaction	Work meaningfulness	Work psychological richness
Predictor Variables	β	β	β
Job satisfaction	=	.09*	.13**
Work meaningfulness	.09*	_	.47**
Work psychological richness	.14**	.52**	_
Work stressors			
Oualitative workload	10**	.03	.00
Ouantitative workload	02	.06	03
Work interruptions	02	07*	.05
Environmental stressors	.00	02	.00
Supervisor undermining	.02	01	01
Coworker undermining	01	.03	.00
Job insecurity	.02	.00	04
Working hours	03	02	05
Work resources	03	02	03
Job autonomy	.07*	05	04
Skill variety	.07*	01	04 .27**
Perceived contribution	.07** 01	01 .06	02
	01 .03		02 .05
Participation	.03 07*	01	
Development opportunities		.02	.06*
Supervisor support	00	.06	06
Coworker support	.03	02	.09**
Perceived organizational support	.18**	.00	04
Job level	.03	.04	.09**
Working from home	.00	05*	05*
Desirable work and life outcomes			
Job proficiency	01	.12**	08*
Job adaptability	06	.09*	02
Job proactivity	10**	06	.13**
Work ability	.06*	.02	.03
Job engagement	.27**	.06	.06
Work–family balance satisfaction	.05	07	01
Work-family balance effectiveness	.00	.05	01
Physical health	02	03	05
Mental health	.09*	04	.00
Family satisfaction	04	.03	.01
Life satisfaction	.10*	.12**	.05
Undesirable work outcomes			
Job fatigue	09**	.02	.11**
Turnover intentions	17 <del>**</del>	08**	.05
Sickness absenteeism	.01	02	.00
Sickness presenteeism	02	.01	.01
Financial difficulties	.00	<b>0</b> 1	.05*
R <sup>2</sup>	.72	.71	.73
F	46.17**	42.65**	48.80**
$\Delta R^2$	.38**	.06**	.13**

Note. N = 678. Standardized regression estimates ( $\beta$ ) are shown.  $\Delta R^2$  is the proportion of variance explained in each outcome by the work characteristics and work and life outcomes, above and beyond the respective other two dimensions of the good working life. \* p < .05; \*\* p < .01.

other desirable work and life outcomes. Similarly, work psychological richness was weakly to moderately and positively related to job adaptability, proactivity, and engagement, weakly and negatively related to physical and mental health, and nonsignificantly related to the other outcomes. All of the generally undesirable work outcomes were weakly to strongly and negatively associated with job satisfaction. Work meaningfulness was only weakly and negatively related to turnover intentions and sickness absenteeism, whereas work psychological richness was weakly to moderately and

positively related to job fatigue, turnover intentions, sickness presenteeism (but not absenteeism), and financial difficulties.

#### **Regression analyses**

Results of the multiple regression analyses predicting the three dimensions of the good working life are shown in Table 5 and are graphically summarized in Figure 1. Although multiple regression analyses implicitly assume directionality of predictor-outcome associations (Cohen et al., 2013), it is

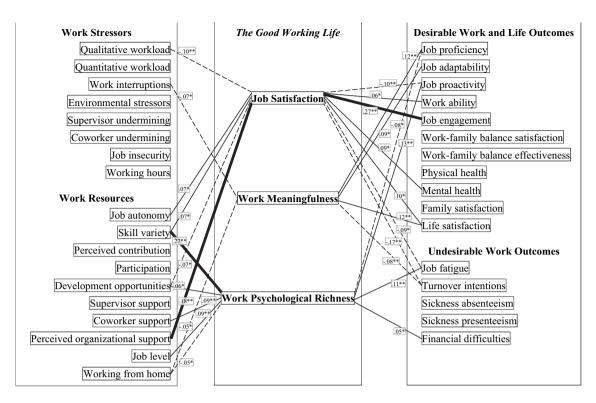


Figure 1. Conceptual model and summary of results of regression analyses predicting dimensions of the good working life. Solid lines = positive effects, dashed lines = negative effects. Thick lines = medium effects, thin lines = small effects. Standardized regression estimates ( $\beta$ ) from Table 5 are shown in boxes.

important to point out that our cross-sectional, correlational data do not allow conclusions about causality and temporal precedence. Nevertheless, these analyses can provide useful insights into the unique associations between each dimension of the good working life and specific work characteristics and work and life outcomes, independent of the respective other good working life dimensions, work characteristics, and work and life outcomes.

Work stressors and resources, as well as desirable and undesirable work and life outcomes, together explained 38% of incremental variance in job satisfaction, 6% of incremental variance in work meaningfulness, and 13% of incremental variance in work psychological richness, above and beyond the respective other two dimensions of the good working life. Job satisfaction was strongly and positively related to perceived organizational support and job engagement; weakly and positively related to job autonomy, skill variety, work ability, mental health, and life satisfaction; and weakly and negatively related to qualitative workload, development opportunities, job proactivity, job fatigue, and turnover intentions. Work meaningfulness was weakly and positively related to job proficiency, job adaptability, and life satisfaction; and weakly and negatively related work interruptions, working from home, and turnover intentions. Finally, work psychological richness was strongly and positively related to skill variety, weakly and positively related to development opportunities, coworker support, job level, job proactivity, job fatigue, and financial difficulties; and weakly and negatively related to working from home and job proficiency.

#### **Examples of job titles**

Finally, we explored the job titles reported by employees in relation to their scores on the three dimensions of the good working life. Table 6 displays several examples of job titles among the highest (i.e. +1 standard deviation) and lowest (i.e. -1 standard deviation) scorers on each dimensions of the good working life, corrected for the scores on the respective other two dimensions. Generally, it seemed that more complex and challenging professional jobs (e.g. architect, human resources officer, software developer) were associated with higher job satisfaction scores, whereas jobs related to social services and safety (e.g. firefighter, nurse, teacher) were associated with higher work meaningfulness scores.

Table 6. Illustrative examples of jobs.

Dimension of the good working life	Low Scoring Jobs	High Scoring Jobs
Job satisfaction	Dental assistant	Architect
	<ul> <li>Warehouse shipping packer</li> </ul>	<ul> <li>Human resources officer</li> </ul>
	Plant operator	<ul> <li>Project manager</li> </ul>
	Postal carrier	<ul> <li>Software developer</li> </ul>
	<ul> <li>Secretary</li> </ul>	<ul> <li>Tax consultant</li> </ul>
Work meaningfulness	<ul> <li>Business-to-business sales consultant</li> </ul>	<ul> <li>Educator</li> </ul>
	<ul> <li>Insurance employee</li> </ul>	<ul><li>Firefighter</li></ul>
	<ul><li>Translator</li></ul>	<ul> <li>Physician, nurse</li> </ul>
	<ul> <li>Travel agent</li> </ul>	<ul> <li>Teacher</li> </ul>
	Web designer	<ul> <li>Medical assistant</li> </ul>
	, and the second	<ul><li>Lawyer</li></ul>
Work psychological richness	<ul> <li>Accountant</li> </ul>	<ul> <li>Prison guard</li> </ul>
. ,	<ul> <li>Cleaning staff</li> </ul>	<ul> <li>Flight or train attendant</li> </ul>
	<ul><li>Janitor</li></ul>	<ul> <li>Immigrant assistance</li> </ul>
	<ul> <li>Librarian</li> </ul>	<ul> <li>Special education worker</li> </ul>
	<ul> <li>Packer</li> </ul>	Art dealer

Note. Jobs were selected as examples from those more than one standard deviation above or below the average for that dimension, after correcting for the other two dimensions. They were selected both for variety and public familiarity.

Finally, jobs related to higher work psychological richness scores seemed to involve more interesting tasks and the potential for varied and negative work experiences (e.g. prison guard, flight attendant, special education worker).

#### **Discussion**

The good working life can be conceptualized and operationalized in terms of three related yet distinct wellbeing constructs: job satisfaction, work meaningfulness, and work psychological richness. Whereas job satisfaction and work meaningfulness are well-established dimensions of occupational hedonic and eudaimonic wellbeing (Bunderson & Thompson, 2009; Sonnentag, 2015), the relatively new construct of a psychologically rich life (Besser & Oishi, 2020; Oishi & Westgate, 2022) has so far not been examined in a work context. Our study showed that the three dimensions of the good working life are strongly and positively interrelated – but also that each contributes in some unique ways to the quality of life at work.

#### **Optimal work settings**

Although our focus is on what features of work differentially predicted job satisfaction, work meaningfulness, and work psychological richness, we acknowledge that six features had positive and significant relationships to all three dimensions: perceived contribution, participation, development opportunities, supervisor support, coworker support, and job engagement. These six features can therefore be considered as particularly potent contributors to the good working life. Importantly, these

significant correlations do not indicate overlap among the three dimensions, because the relations with satisfaction, meaningfulness, and psychological richness were each obtained after controlling for the respective other two dimensions.

Perceiving how one's job contributes to the overall product or service offered by the company (a work characteristic also known as 'task identity'; Hackman & Oldham, 1976) was one of these elite six. Thus, apparently employees relish understanding their place in the big picture. Our findings thus converge with a meta-analysis that showed that perceived contribution is positively related to both job satisfaction and work meaningfulness (Humphrey et al., 2007). The current study contributes to the literature by demonstrating that perceived contribution is independently associated with these two wellbeing outcomes and, additionally, has a unique and positive relation with work psychological richness as a novel and important dimension of well-being at work.

A second key feature was integrated participation – reflected in receiving information about new developments at work and the consideration of employees' ideas and suggestions by the organization. Like perceived contribution, such participation helps people feel part of a coherent group and presumably boosts the subjective value of one's work. Indeed, a recent meta-analysis showed employees' perceived participation in organizational decision-making is positively related to job satisfaction and negatively related to perceived alienating work (Weber et al., 2019). Our findings contribute to this line of research by demonstrating the unique relations of participation with job satisfaction and work meaningfulness. They further demonstrate that

participation is uniquely associated with work psychological richness.

Development opportunities allow employees to participate in training and development activities and entail the possibility to receive a promotion. These opportunities to improve at work were also uniquely linked to job satisfaction, work meaningfulness, and work psychological richness. Whereas previous research has shown that work that offers opportunities for learning and development is perceived as more satisfying and meaningful (Kleine et al., 2019; Kubiak, 2022), our study adds to the literature by demonstrating unique relations with these outcomes as well as with work psychological richness as a novel wellbeing outcome.

Supervisor support and coworker support likewise were positively linked to all three dimensions of job satisfaction, meaningfulness, and psychological richness. These too seem optimal for helping employees feel integrated into a desirable social system. Such a feeling can easily contribute to job satisfaction and work meaningfulness and, indeed, meta-analytic work as provided empirical support for corresponding bivariate associations (Humphrey et al., 2007). Why they also uniquely bolster psychological richness, as demonstrated in the current study, is less clear and should be further investigated in future research. Perhaps the positive interactions with supervisors and colleagues are themselves a source of psychological richness, or perhaps feeling supported emboldens one to tackle new and diverse challenges.

Last, job engagement was also linked to all three dimensions of the good working life. This may well be a result more than a cause (which one cannot determine with correlational data, of course). Insofar as people find their work satisfying, meaningful, and psychologically rich, they may invest more of themselves into this role. Indeed, it would hardly be surprising if people failed to invest their mental, physical, and emotional energies in performing a job that they perceive as unsatisfying, meaningless, and routine or boring. Along similar lines, recent meta-analyses showed that job engagement is strongly and positively associated with job satisfaction (Mazzetti et al., 2023) and with work meaningfulness (Allan et al., 2019), although these studies did not control for the respective other dimensions of the good working life to identify unique associations. This study adds to the literature by doing so, and by additionally identifying a unique and positive link between job engagement and work psychological richness.

These findings, particularly on the unique associations between five work resources, job engagement, and the three dimensions of the good working life, and on the novel dimension of work psychological richness, provide potentially useful information for managers who seek to turn their organizations into highly desirable places to work. Creating a supportive environment in which employees understand how their specific jobs contribute to the big picture, in which they can share ideas, suggestions, and other information with superiors and fellow employees, and where they have ample opportunities to learn and develop may be especially effective for making them regard their work as satisfying, meaningful, and psychologically rich – and ultimately for encouraging them to fully invest themselves into their work role.

#### Work stressors and the good working life

We now turn to the observed differences among job satisfaction, meaningfulness, and psychological richness. That is, we report what correlated with what after we controlled the three dimensions of the good working life for each other, thereby zeroing in on each dimension's unique contributions to the total variance.

Not surprisingly, and consistent with previous metaanalytic research on hindrance stressors and job attitudes (N. P. Podsakoff et al., 2007), almost all of the various work stressors considered were negatively associated with job satisfaction. The only potential stressor that failed to correlate with job satisfaction was work hours and, as we noted, working more hours may not necessarily be a bad thing if one enjoys the work and is highly identified with the organization (see Ng & Feldman, 2008). But too much work, excessive demands, time pressures, intrusive rules and regulations, and overly complicated work all related to lower job satisfaction. Frequent interruptions and various unpleasant aspects of the work environment (e.g. dust, noise, poor lighting, uncomfortable furniture, and bad equipment) were also linked to reduced job satisfaction. Feeling undermined by supervisors and coworkers, and feeling insecure about keeping one's job likewise all had a negative impact. Most of these were among the largest associations we found. However, in the regression analysis that controlled for all other factors, only qualitative total workload remained as a negative predictor of job satisfaction. This suggests that, all things considered, it seems most important to reduce cognitively overwhelming job demands to maintain job satisfaction.

In contrast, these stressors were largely unrelated to

5 😉

work meaningfulness. This finding also represents an important contribution of our study because relations between work stressors and work meaningfulness have been largely neglected in the organizational psychology literature (Humphrey et al., 2007). But perhaps it is no wonder these potentially important relationships have been neglected, if they don't exist. Small associations were found for workload and work hours - but in the surprising direction, that higher workload and more work hours went with more rather than less meaningfulness. One plausible interpretation is that people who regard their work as important and meaningful accept more difficult tasks and work more hours than others (Ng & Feldman, 2008). This may reflect either personal preference regarding workload and hours - or could be simply a requirement of socially important jobs, which attract people who work not just for money but for betterment of society (Clinton et al., 2017). Only work interruptions remained a significant (and negative) predictor of work meaningfulness in the regression analysis. This suggests that being frequently interrupted is largely incompatible with highly meaningful work.

The correlations of work stressors with work psychological richness, which represents a novel construct in organizational psychology, also held some surprises. All were positive (more stress went with greater psychological richness) and all were significant, except for work hours. Again, psychological richness means finding the job interesting, emotionally complex, and perspective changing. Direct causation seems implausible. That is, it is hard to believe that people find their jobs more interesting and complex because the work environment smells bad, or their desk chair gives them back pain, or their boss undermines their efforts, or they worry about getting fired. More plausibly, a psychologically rich job makes people willing to put up with such stressors. Alternatively, it may be that the psychologically richest jobs involve frequent changes to environments, which can then include many that are unstable or stressful. Work psychological richness might, for example, arise sometimes from a wider range of interpersonal contacts and interactions – so the likelihood of finding a rival or enemy seeking to undermine you in the workplace is greater.

#### Work resources and the good working life

The work resources represent various positive aspects of the work environment. As one would expect, and consistent with previous meta-analytic work (Humphrey et al., 2007), all of them were positively related to job satisfaction. Some correlations were quite small (e.g. working from home). The largest was perceived organizational support: Feeling appreciated and valued by one's organization, as well as that the employing organization cares about one's wellbeing was, consistent with previous meta-analytic work (Kurtessis et al., 2017), a large and important contributor to job satisfaction in these data. (We note that supervisor support, in contrast, was a very weak correlate, possibly because it depends on a single individual rather than the organization as a whole - which could make the measure more unstable.) Other substantial contributors to job satisfaction included having autonomous freedom to manage oneself and make decisions about one's work, as well as being enmeshed in a network of colleagues who share information and ideas. In the multiple regression analysis, perceived organizational support remained a strong and positive predictor of job satisfaction when all other variables were controlled. In addition, job autonomy and skill variety had small positive effects and, surprisingly, development opportunities had a weak but significant and negative effect on job satisfaction. A potential explanation for this unexpected finding may be that training and development, when all other work characteristics are controlled, can be perceived as effortful and dissatisfying. Alternatively, it is plausible that unsatisfying, temporary jobs (such as internships) are tolerated as stepping stones to more desirable positions.

The correlations of work resources with work meaningfulness were, consistent with meta-analytic research (Humphrey et al., 2007), also all positive. However, deviating from previous research that did not control for the other dimensions of the good working life, these associations were generally quite weak and, indeed, most were not significant. The only ones that were significant were perceiving that one's own work contributed to the organization's general program (task identity), and feeling supported by supervisors and coworkers. All three of those were also significantly correlated with both job satisfaction and psychological richness, suggesting that they are broadly good things with diverse benefits. It is plausible that the relatively low correlations with work meaningfulness come from dividing their impact among all three dimensions of the good working life. (Consistent with that interpretation, perceived organizational support was only linked to job satisfaction, possibly allowing its share of the variance to be exceptionally large.) Additionally, none of the work resources were significant predictors of work meaningfulness in the regression analysis; an exception was working from home, which showed small and negative effects on both work meaningfulness and psychological richness. A potential explanation may be that working from home offers no opportunities to directly interact

with other people (e.g. beneficiaries of one's job) and that the home environment lacks variety, which may reduce meaning and psychological richness.

Work psychological richness had significant positive relations with all of the work resources, with the odd exception of perceived organizational support. Further research on the novel construct of work psychological richness is needed to better understand the mechanisms underlying these relations as well as the role of perceived organizational support. Meanwhile, the strongest link to psychological richness was the variety of skills required for the job. This may mean merely that interesting jobs with diverse and complex challenges often involve the application of diverse skills. Nevertheless, it does suggest that the psychological richness of a job is not only applying the same skill in different contexts, but rather something that engages multiple different skills. Consistently, autonomy and opportunities for development were the next strongest links to psychological richness.

#### Desirable work and life outcomes and the good working life

Consistent with previous research (Harrison et al., 2006), job satisfaction was positively related to all desirable work and life outcomes, with two odd exceptions. One was work adaptability, defined as the ability to cope with changes that have impact on the work role (Griffin et al., 2007). Possibly this failed because many fine jobs do not have frequent changes, making the concept irrelevant. The other, proactivity for making changes to one's work, may also be irrelevant to many jobs. In fact, the link was significantly negative, which may mean only that people who like their jobs do not seek to make a lot of changes to them (Fay & Sonnentag, 2002). Meanwhile, many of the partial correlations were quite substantial despite controlling for work meaningfulness and psychological richness. Such high correlations could be an indication of bidirectional causality. In other words, it is possible that job satisfaction both enhances and is enhanced by such things as general life satisfaction, general mental health, work-family balance, and being good at one's job (see Bialowolski & Weziak-Bialowolska, 2021; Judge et al., 2001). Most of these relations remained significant in the multiple regression analysis, suggesting that higher job satisfaction is associated with lower proactivity, as well as higher work ability, job engagement, mental health, and life satisfaction.

Work meaningfulness had positive correlations with all of the desirable outcomes, though most were weak and many fell short of significance. It may be possible that these findings differed from those of a previous meta-analysis on potential outcomes of work meaningfulness, which also found mostly positive associations (Allan et al., 2019), because we controlled for job satisfaction and work psychological richness. In line with the metaanalysis by Allan et al. (2019), the strongest correlation was with job proficiency, implying that being good at one's job furnishes a strong sense that the work is meaningful and important. It is perhaps unclear why meaningfulness in the sense of the work's importance to society should be correlated with feeling proficient at one's job, but people may be more motivated to perform such jobs than other, less important jobs (Grant, 2008). Indeed, Graeber (2018) noted that a large number of employees regard their work as 'bullshit jobs' that accomplish little or nothing and possibly should not even exist. The incentive to become proficient at such a job must be quite weak. Consistent with that interpretation and Allan et al. (2019) findings, one's degree of personal engagement with one's work, defined as investing mental, emotional, and physical energy into the work role (Rich et al., 2010), was also a strong correlate of work meaningfulness.

The only other correlation with work meaningfulness of that magnitude, which had not previously been examined in the organizational psychology literature, was with job adaptability, which was irrelevant to job satisfaction but correlated significantly with work meaningfulness. Perhaps what motivates people to adjust to and cope with changes to the work is more the perceived importance of the work rather than how satisfying it is. In the regression analysis, only job proficiency, adaptability, and life satisfaction were significant predictors of meaningfulness.

Work psychological richness had relatively few links to positive work and life outcomes. Surprisingly, it had negative correlations with mental and physical health. These correlations were significant but rather weak. We speculate that people suffering from mild degrees of anxiety and depression (i.e. the most common mental health problems; World Health Organization, 2017) may be more drawn than other people to jobs that offer interesting experiences, variety, and challenge, because these jobs promise to improve mental and physical health through cognitive activation and social support. (This interpretation is bolstered by the positive correlation between psychological richness and engagement with the job.) The strongest correlate of work psychological richness in this group was job proactivity. Apparently, one important contributor to the richness of a job is the ability to initiate changes and improvements to the job role. Consistent with that interpretation, job adaptability was also significantly and positively related to richness, as was autonomy. In the more conservative multiple regression analysis, only job proactivity remained a significant positive predictor of work psychological richness. In contrast, job proficiency had a weakly negative effect, which may suggest that, all other things considered, efficiently performing one's job may be associated with more routines and less psychological richness at the workplace.

# Undesirable work outcomes and the good working life

Once again, job satisfaction had clear and straightforward relationships to hedonic outcomes. Consistent with previous research (Harrison et al., 2006), job satisfaction was negatively correlated with all five measures of undesirable work outcomes. Job fatigue and turnover intentions were the strongest correlations, and also remained significant and negative predictors in the regression analysis. Thus, feeling tired and impaired at the end of the workday may be an important contributor to dissatisfaction with one's job. Likewise, it is hardly surprising – and in line with the unfolding model of voluntary turnover (Lee et al., 1999) – that people dissatisfied with their jobs contemplate quitting more than people who like their jobs.

The five undesirable work outcomes were, however, split as to whether they pertained to work meaningfulness or psychological richness. Even the significant correlations were quite weak. The strongest was a positive correlation between work psychological richness and job fatigue. Many people may appreciate a job that is full of challenge and variety, but our research suggests that it does tend to leave them feeling tired and drained at the end of the day. Richness also correlated positively with turnover intentions and financial difficulties. We noted earlier that psychologically rich jobs tend to be more stressful than other jobs, which may help explain why people with these jobs are slightly more prone than others to thinking of quitting. The pay may also be low, contributing to the stress and the contemplation of quitting. Indeed, across the full sample, financial difficulties had a significant positive correlation with turnover intentions. In the regression analysis, however, only job fatigue and financial difficulties remained as significant and positive predictors of work psychological richness.

Turnover intentions were also correlated with work meaningfulness – but the correlation (and the regression coefficient) was negative, unlike with psychological richness. It is perhaps reassuring to note that people who regard their work as highly meaningful and important are inclined to continue working at that job (Clinton et al., 2017). They were also less likely to stay home when sick, which again testifies to their perception that they need to do this work.

#### The psychologically rich working life

Given that this is one of the first investigations to apply the novel concept of psychological richness to the workplace, it may be useful to assemble the various correlations into a composite summary of what characterizes a psychologically rich working life (beyond the definitions of interest value, challenge, novelty, and perspective change). The examples of job titles of people who report having a psychologically rich working life include prison guards, flight attendants, art dealers, and special education workers, whereas librarians, accountants, and janitors scored low on this dimension.

The psychologically rich working life intellectually stimulates employees: employing a variety of skills, having a fair amount of autonomy, as well as proactively shaping one's work activities and coping with workrelated changes in an adaptive way. It offers more than average opportunities for professional development. Interpersonal interactions are diverse and complex, with supervisors and colleagues both supporting and undermining employees more than in other jobs. The high job engagement carries some costs, including above average levels of a variety of stressors, especially being interrupted frequently, qualitatively and quantitatively high workloads, and various negative features of the work environment (e.g. noise). The psychological rich working life appears unstable, as it was positively and significantly correlated both with intending to change jobs and with feeling that one might be terminated. There are small but significantly negative associations with both mental and physical health.

#### Relation to the work of Baumeister et al. (2013)

Like nearly all scientific work, the present investigation was based on earlier findings. In this case, it specifically built on research by Baumeister et al. (2013) that explored correlates of happiness and meaning, controlling for each other. The present work adapted these

concepts to the workplace and added work psychological richness as a third variable to represent the novel notion of the good working life. Given that both the study by Baumeister et al. (2013) and the present study were exploratory, it is useful to note similarities and differences.

Baumeister et al. (2013) found that happiness and meaning in life in general were positively correlated, as did we, and they also found that 'percent of time feeling bored' (the opposite of a psychologically rich life) was negatively correlated with both, consistent with our finding that work psychological richness also correlated positively with job satisfaction and work meaningfulness. Both investigations found happiness/satisfaction to be linked to satisfying basic needs, such as financial comfort vs. difficulties, and assorted stressors, while these factors were largely unrelated to meaningfulness and, in some cases, were significant in the opposite direction. In both sets of findings, interpersonal connection and social support contributed positively to both happiness and meaningfulness. Furthermore, both studies found that physical and mental health were positively linked to happiness/satisfaction, but irrelevant to meaningfulness.

A general impression is that happiness/satisfaction functioned in largely the same way in both studies, whereas meaningfulness found far fewer significant results in the present study than in the previous study by Baumeister et al. (2013). Some of the differences may be attributed to the addition of the psychological richness variable in the present study. It is possible that what passed for meaningfulness in the Baumeister et al. (2013) study included some degree of psychological richness, so when the present investigation separated the two, they essentially divided up the variance. If anything, work psychological richness proved considerably more powerful than work meaningfulness in our study. This raises the broader possibility that many of the findings in the research literature on meaningfulness actually pertain to psychological richness. Indeed, in support of this assumption, Baumeister et al. (2013) found that the number of negative events experienced, stress, time spent worry, as well as reflecting on struggles and challenges were positively related to meaningfulness, whereas the present study found that work stressors were more consistently related to work psychological richness and not significantly related to work meaningfulness when the respective other dimension was controlled.

In summary, the current study contributes to the positive psychology and organizational psychology literatures above and beyond the study by Baumeister et al. (2013) by exploring the unique associations of satisfaction and meaningfulness with other variables in the work context. Moreover, we introduced the novel construct of psychological richness to the work context and explored the unique and differential links of the tripartite notion of the good working life with a broad range of established work characteristics as well as work and life outcomes.

#### Limitations, future research, and practical *implications*

The current study is not without limitations that could be addressed in future research. First, all constructs were assessed by self-report, which may lead to the potential problem of common method bias (P. M. Podsakoff et al., 2012). However, artificially inflated correlations may be less of a concern given that, for each association, we partialled out variance explained by the other two dimensions of the good working life. Nevertheless, future studies should attempt to collect data from different sources (e.g. archival data or observer ratings of work characteristics, coworker and supervisor ratings of work outcomes). Moreover, although the absolute fit indices (i.e. RMSEA, SRMR) suggested a reasonable fit of our measurement model to the data, the relative fit index (i.e. CFI) was rather low. Future research could use alternative measures of work characteristics (i.e. with at least three items), and potentially develop and validate new measures for the three dimensions of the good working life that are as distinct as possible.

Second, the cross-sectional design of this study does neither allow conclusions about the temporal stability or changes in the variables over time, nor about causality among the variables. Future studies on the good working life should make use of more sophisticated research designs, such as experience sampling and longitudinal studies that allows disentangling between-person individual differences from within-person fluctuations or changes in variables over time. Indeed, previous research found that substantial amounts of variance (i.e. approximately 40%) in job satisfaction reside at the within-person level (McCormick et al., 2020; N. P. Podsakoff et al., 2019). Moreover, the size and even direction of relations between the three dimensions of the good working life and other variables may differ across the between- and within-person levels (Zacher & Rudolph, 2020). Indeed, McCormick et al. (2020) reported that in approximately one quarter of all studies considered there were significant differences for between- and within-person relations (and in 6% of studies also differences in the direction of effects). Furthermore, future studies could even attempt to change job satisfaction, meaningfulness, and/or psychological richness through randomized and controlled interventions. Last, consistent with our descriptive results for different job titles, future research could explore links between different combinations of the three dimensions of the good working life and other variables using latent profile analysis (Spurk et al., 2020). Similarly, qualitative research methods could enhance this line of person-centered research by exploring the lived experiences of workers in jobs that are satisfying, meaningful, and/or psychologically rich and illuminating how subjective richness emerges from different kinds of work.

For practical reasons (i.e. participant time and survey constraints), we had to focus on a selection of important work characteristics and work and life outcomes in this study. Research on happiness, meaningfulness, and psychological richness in life in general (Baumeister et al., 2013; Oishi & Westgate, 2022) suggests that there may also be various individual differences that predict dimensions of the good working life in similar and differential ways. Future research could, for example, consider personality characteristics (e.g. Big Five, dark triad traits, proactive personality) and self-beliefs (e.g. self-efficacy, optimism) as relevant predictors of job satisfaction, work meaningfulness, and work psychological richness.

Our preliminary and exploratory findings may offer initial ideas for further developing theorizing on the good working life. In particular, the partial correlations seem to suggest that work stressors are generally negatively, whereas work resources are generally positively, related to job satisfaction. In contrast, associations for work meaningfulness and psychological richness were generally weaker and, especially for work stressors and psychological richness, often in the opposite direction. Future research could explore whether individual differences in basic motives, need satisfaction, and work goal achievement may help explain these associations. To this end, scholars could consider in more depth why the three dimensions of the good working life exist in the first place, and what their functional importance is conceptually (we thank an anonymous reviewer for this suggestion). Work behavior involves intentional and goal-directed action, and wellbeing at work can be conceived as an indicator that important goals are achieved in this context (Zacher & Frese, 2018). Future theory development could link the three dimensions of the good working life to individual differences in, and achievement of, the three higher-order 'self goals' proposed by motivated action theory, including agency (i.e. personal control over one's environment), affiliation (i.e. developing and maintaining interpersonal relationships), and esteem (a positive view of oneself; DeShon & Gillespie, 2005). For example, people with a strong agency motive may experience higher satisfaction in more autonomous jobs, whereas people with a strong need for affiliation might experience higher satisfaction and meaningfulness in social service jobs. People with higher esteem self goals might experience psychological richness in jobs that entail complex tasks and cognitive, emotional, or social challenges that they can successfully address by employing their knowledge and skills.

Furthermore, the generally weak or non-significant associations between work characteristics and work meaningfulness suggest that future theorizing and empirical research should explore additional work characteristics that are more important for work meaningfulness. For instance, previous research has shown that contact with beneficiaries (e.g. customers, care receivers) is positively related to task significance, a work design concept closely related to work meaningfulness (Grant, 2008). Future theorizing should also explain why work psychological richness is positively associated with both work stressors and work resources. In this regard, work psychological richness appears to be a 'double-edged sword': both pleasant, supportive, and motivating work characteristics as well as unpleasant, demanding, and hindering work characteristics seem to play a role when it comes to the experience a variety of interesting and perspective-changing experiences at work.

Future theorizing and research should also clarify the causal direction of relations between the good working life and various desirable and undesirable work and life outcomes. It appears that job satisfaction, work meaningfulness, and work psychological richness could predict outcomes like job performance, life satisfaction, or job fatique – but these outcomes may also precede the experience of the good working life (see Bialowolski & Weziak-Bialowolska, 2021). Moreover, the results of the exploratory regression analyses suggest that some of the relations between the good working life dimensions and the work outcomes may be partially or fully explained by the work stressors and resources we investigated. For instance, it may be possible that a high workload and frequent interruptions may lead to experiencing one's working life as psychologically rich which, in turn, could result in subsequent job fatigue and turnover intentions. Alternatively, the association between work psychological richness and undesirable work outcomes may have disappeared because the work stressors were controlled. Future theorizing and longitudinal studies should explore such potential mediation models.

In terms of practical applications, we suggest that employees, leaders, and organizations should consider work psychological richness in addition to job satisfaction and work meaningfulness as another important dimension of occupational wellbeing. Our findings indicate that working life may not always be satisfying and meaningful, but that does not necessarily mean that occupational wellbeing is low; it may be an interesting and emotionally complex working life. However, although some employees may prefer a psychologically rich working life to a satisfied or meaningful working life (Oishi & Westgate, 2022), this form of occupational wellbeing may also have certain costs or downsides that need to be managed, such as associations with higher work stressors and undesirable work outcomes.

#### **Concluding remarks**

In sum, the findings of our study extend the literature on occupational wellbeing by introducing the notion of work psychological richness, and by offering a preliminary demonstration of unique and mostly differential associations between important work characteristics and work and life outcomes and three key dimensions of the good working life (i.e. job satisfaction, work meaningfulness, work psychological richness). Common work stressors, such as an excessive workload and frequent interruptions, were negatively related to job satisfaction, weakly associated with work meaningfulness, and positively related to work psychological richness. In contrast, key work resources, such as job autonomy and development opportunities, were positively related to both job satisfaction and work psychological richness, but weakly associated with work meaningfulness. Thus, by introducing psychological richness to the work context, our study focuses attention on a novel dimension of occupational wellbeing that appears to be, unlike job satisfaction and work meaningfulness, not only positively associated with work resources, but also with many work stressors.

Desirable work and life outcomes, such as workfamily balance and health, were positively related to job satisfaction, but weakly associated with work meaningfulness and psychological richness. Finally, job proactivity and several undesirable work outcomes, such as fatigue and turnover intentions, were negatively related to job satisfaction, weakly related to work meaningfulness, and positively related to work psychological richness. These findings may inform a new research agenda on the predictors, correlates, and outcomes of the good working life. In particular, our study suggests that work psychological richness is a dimension of occupational wellbeing that may allow people to gain something positive from otherwise negative work-related experiences. The findings may also contribute to organizational practice by offering initial suggestions how certain work characteristics could be implemented or changed to contribute to the good working life. Work resources, such as perceived contribution, integrated participation, opportunities for development, as well as supervisor and coworker support seem particularly well-suited candidates for work design interventions that aim to simultaneously enhance job satisfaction, meaningfulness, and work psychological richness.

#### **Disclosure statement**

No potential conflict of interest was reported by the author(s).

#### **Funding**

The study reported in this article is funded by Volkswagen Foundation (Az. 96 849, "The Role of Work in the Development of Civilization Diseases").

#### **ORCID**

Hannes Zacher (b) http://orcid.org/0000-0001-6336-2947 Roy F. Baumeister (h) http://orcid.org/0000-0003-1413-3296

#### **Data availability statement**

The data and materials of this study are openly available at https://osf.io/ge4mg/.

#### Open scholarship



This article has earned the Center for Open Science badges for Open Data and Open Materials through Open Practices Disclosure. The data and materials are openly accessible at https://osf.io/ge4mg/.

#### References

Adams, G. A., & Beehr, T. A. (1998). Turnover and retirement: A comparison of their similarities and differences. Personnel Psychology, 51(3), 643-665. https://doi.org/10.1111/j.1744-6570.1998.tb00255.x

Allan, B. A., Batz-Barbarich, C., Sterling, H. M., & Tay, L. (2019). Outcomes of meaningful work: A meta-analysis. Journal of Management Studies, 56(3), 500-528. https://doi.org/10. 1111/joms.12406

Bakker, A. B., & Demerouti, E. (2017). Job demands-resources theory: Taking stock and looking forward. Journal of Occupational Health Psychology, 22(3), 273-285. https://doi. org/10.1037/ocp0000056

Baumeister, R. F., Vohs, K. D., Aaker, J. L., & Garbinsky, E. N. (2013). Some key differences between a happy life and a meaningful life. Journal of Positive Psychology, 8(6), 505-516. https://doi.org/10.1080/17439760.2013.830764



- Besser, L. L., & Oishi, S. (2020). The psychologically rich life. Philosophical Psychology, 33(8), 1053–1071. https://doi.org/ 10.1080/09515089.2020.1778662
- Bialowolski, P., & Weziak-Bialowolska, D. (2021). Longitudinal evidence for reciprocal effects between life satisfaction and job satisfaction. *Journal of Happiness Studies*, 22(3), 1287–1312. https://doi.org/10.1007/s10902-020-00273-1
- Bliese, P. D., Edwards, J. R., & Sonnentag, S. (2017). Stress and well-being at work: A century of empirical trends reflecting theoretical and societal influences. *Journal of Applied Psychology*, 102(3), 389–402. https://doi.org/10.1037/apl0000109
- Bosco, F. A., Aguinis, H., Singh, K., Field, J. G., & Pierce, C. A. (2015). Correlational effect size benchmarks. *Journal of Applied Psychology*, *100*(2), 431–449. https://doi.org/10. 1037/a0038047
- Bunderson, J. S., & Thompson, J. A. (2009). The call of the wild: Zookeepers, callings, and the double-edged sword of deeply meaningful work. *Administrative Science Quarterly*, *54*(1), 32–57. https://doi.org/10.2189/asqu.2009.54.1.32
- Caleyachetty, A., Lewis, S., McNeill, A., & Leonardi-Bee, J. (2012). Struggling to make ends meet: Exploring pathways to understand why smokers in financial difficulties are less likely to quit successfully. *European Journal of Public Health*, 22(suppl 1), 41–48. https://doi.org/10.1093/eurpub/ckr199
- Carlson, D. S., Grzywacz, J. G., & Zivnuska, S. (2009). Is work—family balance more than conflict and enrichment? *Human Relations*, 62(10), 1459–1486. https://doi.org/10.1177/0018726709336500
- Clinton, M. E., Conway, N., & Sturges, J. (2017). "It's tough hanging-up a call": The relationships between calling and work hours, psychological detachment, sleep quality, and morning vigor. *Journal of Occupational Health Psychology*, 22 (1), 28–39. https://doi.org/10.1037/ocp0000025
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/correlation analysis for the behavioral sciences*. Routledge.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512. https://doi.org/10.1037/0021-9010.86.3.499
- DeShon, R. P., & Gillespie, J. Z. (2005). A motivated action theory account of goal orientation. *Journal of Applied Psychology*, *90* (6), 1096–1127. https://doi.org/10.1037/0021-9010.90.6.1096
- Diener, E. (2018). Happiness: The science of subjective well-being. In R. Biswas-Diener & E. Diener (Eds.), *Noba textbook series: Psychology*. Champaign, IL: DEF publishers. http://noba.to/qnw7g32t
- Diener, E., Thapa, S., & Tay, L. (2020). Positive emotions at work. Annual Review of Organizational Psychology & Organizational Behavior, 7(1), 451–477. https://doi.org/10.1146/annurevorgpsych-012119-044908
- Dietz, C., & Zacher, H. (2023). Reciprocal effects of sickness presence, job satisfaction, and health: A six-wave longitudinal study. *Occupational Health Science*, 7(4), 647–680. https://doi.org/10.1007/s41542-023-00154-y
- Duffy, M. K., Ganster, D. C., & Pagon, M. (2002). Social undermining in the workplace. *Academy of Management Journal*, 45(2), 331–351. https://doi.org/10.2307/3069350
- Duffy, R. D., Autin, K. L., & Bott, E. M. (2015). Work volition and job satisfaction: Examining the role of work meaning and

- person-environment fit. *The Career Development Quarterly*, 63(2), 126–140. https://doi.org/10.1002/cdq.12009
- Eisenberger, R., Cummings, J., Armeli, S., & Lynch, P. (1997). Perceived organizational support, discretionary treatment, and job satisfaction. *Journal of Applied Psychology*, 82(5), 812–820. https://doi.org/10.1037/0021-9010.82.5.812
- Fay, D., & Sonnentag, S. (2002). Rethinking the effects of stressors: A longitudinal study on personal initiative. *Journal of Occupational Health Psychology*, 7(3), 221–234. https://doi.org/10.1037/1076-8998.7.3.221
- Frone, M. R., & Tidwell, M. C. O. (2015). The meaning and measurement of work fatigue: Development and evaluation of the three-dimensional work fatigue inventory (3D-WFI). *Journal of Occupational Health Psychology*, *20*(3), 273–288. https://doi.org/10.1037/a0038700
- Fusco, A. (2016). The dynamics of perceived financial difficulties. *Journal of Happiness Studies*, *17*(4), 1599–1614. https://doi.org/10.1007/s10902-015-9661-5
- Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences. *Journal of Applied Psychology*, *92*(6), 1524–1541. https://doi.org/10.1037/0021-9010.92.6.1524
- Golden, T. D., Veiga, J. F., & Dino, R. N. (2008). The impact of professional isolation on teleworker job performance and turnover intentions: Does time spent teleworking, interacting face-to-face, or having access to communication-enhancing technology matter? *Journal of Applied Psychology*, *93*(6), 1412–1421. https://doi.org/10.1037/a0012722
- Graeber, D. (2018). Bullshit jobs. Simon & Schuster.
- Grant, A. M. (2008). The significance of task significance: Job performance effects, relational mechanisms, and boundary conditions. *Journal of Applied Psychology*, *93*(1), 108–124. https://doi.org/10.1037/0021-9010.93.1.108
- Griffin, M. A., Neal, A., & Parker, S. K. (2007). A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of Management Journal*, 50(2), 327–347. https://doi.org/10.5465/AMJ.2007.24634438
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior & Human Performance*, 16(2), 250–279. https://doi.org/10.1016/0030-5073(76)90016-7
- Harrison, D. A., Newman, D. A., & Roth, P. L. (2006). How important are job attitudes? meta-analytic comparisons of integrative behavioral outcomes and time sequences. *Academy of Management Journal*, 49(2), 305–325. https:// doi.org/10.5465/AMJ.2006.20786077
- Häusser, J. A., Mojzisch, A., Niesel, M., & Schulz-Hardt, S. (2010). Ten Years on: A review of recent research on the job demand–control (-support) model and psychological wellbeing. *Work & Stress*, 24(1), 1–35. https://doi.org/10.1080/02678371003683747
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, *6*(1), 1–55. https://doi.org/10.1080/10705519909540118
- Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating motivational, social, and contextual work design features: A meta-analytic summary and theoretical extension of the work design literature. *Journal of Applied*



- Psychology, 92(5), 1332-1356. https://doi.org/10.1037/0021-9010.92.5.1332
- IBM Corp. (2023). IBM SPSS statistics (version 29). IBM.
- Ilmarinen, J. (2009). Work ability: A comprehensive concept for occupational health research and prevention. Scandinavian Journal of Work Environment & Health, 35(1), 1-5. http:// www.jstor.org/stable/40967749
- Judge, T. A., & Kammeyer-Mueller, J. D. (2012). Job attitudes. Annual Review of Psychology, 63(1), 341–367. https://doi.org/ 10.1146/annurev-psych-120710-100511
- Judge, T. A., & Klinger, R. (2008). Job satisfaction: Subjective well-being at work. In M. Eid & R. J. Larsen (Eds.), The science of subjective well-being (pp. 393-413). Guilford Press.
- Judge, T. A., Locke, E. A., Durham, C. C., & Kluger, A. N. (1998). Dispositional effects on job and life satisfaction: The role of core evaluations. Journal of Applied Psychology, 83(1), 17–34. https://doi.org/10.1037/0021-9010.83.1.17
- Judge, T. A., Thorensen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction-job performance relationship: A qualitative and quantitative review. Psychological Bulletin, 127(3), 376-407. https://doi.org/10.1037/0033-2909.127.3.376
- Judge, T. A., Weiss, H. M., Kammeyer-Mueller, J. D., & Hulin, C. L. (2017). Job attitudes, job satisfaction, and job affect: A century of continuity and of change. Journal of Applied Psychology, 102(3), 356-374. https://doi.org/10.1037/ apl0000181
- Kammeyer-Mueller, J., Wanberg, C., Rubenstein, A., & Song, Z. (2013). Support, undermining, and newcomer socialization: Fitting in during the first 90 days. Academy of Management Journal, 56(4), 1104–1124. https://doi.org/10.5465/amj.2010. 0791
- Karasek, R. A. (1979). Job demands, job decision latitude and mental strain: Implications for job redesign. Administrative Science Quarterly, 24(2), 285-308. http://www.jstor.org/ stable/2392498
- Kenny, D. A. (2020). Measuring model fit. https://davidakenny. net/cm/fit.htm
- Kesebir, P., & Diener, E. (2008). In pursuit of happiness: Empirical answers to philosophical questions. Perspectives on Psychological Science, 3(2), 117-125. https://doi.org/10. 1111/j.1745-6916.2008.00069.x
- King, L. A., & Hicks, J. A. (2021). The science of meaning in life. Annual Review of Psychology, 72(1), 561–584. https://doi.org/ 10.1146/annurev-psych-072420-122921
- Kleine, A. K., Rudolph, C. W., & Zacher, H. (2019). Thriving at work: A meta-analysis. Journal of Organizational Behavior, 40 (9-10), 973-999. https://doi.org/10.1002/job.2375
- Kristensen, T. S., Hannerz, H., Høgh, A., & Borg, V. (2005). The Copenhagen psychosocial questionnaire: A tool for the assessment and improvement of the psychosocial work environment. Scandinavian Journal of Work Environment & Health, 31(6), 438-449. https://doi.org/10.5271/sjweh.948
- Kubiak, E. (2022). Increasing perceived work meaningfulness by implementing psychological need-satisfying performance management practices. Human Resource Management Review, 32(3), 100792. https://doi.org/10.1016/j.hrmr.2020. 100792
- Kurtessis, J. N., Eisenberger, R., Ford, M. T., Buffardi, L. C., Stewart, K. A., & Adis, C. S. (2017). Perceived organizational support: A meta-analytic evaluation of organizational

- support theory. Journal of Management, 43(6), 1854-1884. https://doi.org/10.1177/0149206315575554
- Lee, T. W., Mitchell, T. R., Holtom, B. C., McDaneil, L. S., & Hill, J. W. (1999). The unfolding model of voluntary turnover: A replication and extension. Academy of Management Journal, 42(4), 450-462. https://doi.org/10.2307/257015
- Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), Handbook of industrial and organizational psychology (pp. 1297-1349). Rand McNally.
- Lysova, E. I., Allan, B. A., Dik, B. J., Duffy, R. D., & Steger, M. F. (2019). Fostering meaningful work in organizations: A multi-level review and integration. Journal of Vocational Behavior, 110, 374-389. https://doi.org/10.1016/j.jvb.2018.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. Journal of Occupational & Organizational Psychology, 77(1), 11–37. https://doi.org/10.1348/096317904322915892
- Mazzetti, G., Robledo, E., Vignoli, M., Topa, G., Guglielmi, D., & Schaufeli, W. B. (2023). Work engagement: A meta-analysis using the job demands-resources model. Psychological Reports, 126(3), 1069-1107. https://doi.org/10.1177/ 00332941211051988
- McCormick, B. W., Reeves, C. J., Downes, P. E., Li, N., & Ilies, R. (2020). Scientific contributions of within-person research in management: Making the juice worth the squeeze. Journal of Management, 46(2), 321-350. https://doi.org/10.1177/ 0149206318788435
- McGonagle, A., Fisher, G. G., Barnes-Farrell, J. L., & Grosch, J. (2015). Individual and work factors related to perceived work ability and labor force outcomes. Journal of Applied Psychology, 100(2), 376-398. https://doi.org/10.1037/ a0037974
- Muthén, L. K., & Muthén, B. O. (1998-2017). Mplus user's guide (8th ed.). Muthén & Muthén.
- Ng, T. W. H., & Feldman, D. C. (2008). Long work hours: A social identity perspective on meta-analysis data. Journal of Organizational Behavior, 29(7), 853-880. https://doi.org/10. 1002/job.536
- Ng, T. W. H., & Sorensen, K. L. (2008). Towards a further understanding of the relationships between perceptions of support and work attitudes: A meta-analysis. Group & Organization Management, 33(3), 243-268. https://doi.org/ 10.1177/1059601107313307
- Oishi, S., Choi, H., Buttrick, N., Heintzelman, S. J., Kushlev, K., Westgate, E. C., Tucker, J., Ebersole, C. R., Axt, J., Gilbert, E., Ng, B. W., & Besser, L. L. (2019). The psychologically rich life questionnaire. Journal of Research in Personality, 81, 257-270. https://doi.org/10.1016/j.jrp.2019.06.010
- Oishi, S., Choi, H., Koo, M., Galinha, I., Ishii, K., Komiya, A., Luhmann, M., Scollon, C., Shin, J., Lee, H. J., Suh, E. M., Vittersø, J., Heintzelman, S. J., Kushlev, K., Westgate, E. C., Buttrick, N., Tucker, J., Ebersole, C. R. ... Besser, L. L. (2020). Happiness, meaning, and psychological richness. Affective Science, 1(2), 107-115. https://doi.org/10.1007/s42761-020-
- Oishi, S., Choi, H., Liu, A., & Kurtz, J. (2021). Experiences associated with psychological richness. European Journal of *Personality*, 35(5), 754–770. https://doi.org/10.1177/ 0890207020962334



- Oishi, S., & Westgate, E. C. (2022). A psychologically rich life: Beyond happiness and meaning. *Psychological Review*, *129* (4), 790–811. https://doi.org/10.1037/rev0000317
- Parker, S. K. (2014). Beyond motivation: Job and work design for development, health, ambidexterity, and more. *Annual Review of Psychology*, *65*(1), 661–691. https://doi.org/10. 1146/annurev-psych-010213-115208
- Parker, S. K., & Knight, C. (2023). The SMART model of work design: A higher order structure to help see the wood from the trees. *Human Resource Management*, *63*(2), 265–291. https://doi.org/10.1002/hrm.22200
- Parker, S. K., Morgeson, F. P., & Johns, G. (2017). One hundred years of work design research: Looking back and looking forward. *Journal of Applied Psychology*, *102*(3), 403–420. https://doi.org/10.1037/apl0000106
- Podsakoff, N. P., LePine, J. A., & LePine, M. A. (2007). Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: A meta-analysis. *Journal of Applied Psychology*, 92 (2), 438–454. https://doi.org/10.1037/0021-9010.92.2.438
- Podsakoff, N. P., Spoelma, T. M., Chawla, N., & Gabriel, A. S. (2019). What predicts within-person variance in applied psychology constructs? An empirical examination. *Journal of Applied Psychology*, *104*(6), 727–754. https://doi.org/10.1037/apl0000374
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendation on how to control it. *Annual Review of Psychology*, 63(1), 539–569. https://doi.org/10.1146/annurev-psych-120710-100452
- Pratt, M. G., & Ashforth, B. E. (2003). Fostering meaningfulness in working and at work. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship* (pp. 309–327). Berrett-Koehler Publishers.
- Prümper, J., Hartmannsgruber, K., & Frese, M. (1995). KFZA. Kurz-Fragebogen zur Arbeitsanalyse [KFZA A short questionnaire for job analysis]. *Zeitschrift für Arbeits- und Organisationspsychologie*, 39(3), 125–132.
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, *87*(4), 698–714. https://doi.org/10.1037/0021-9010.87.4.698
- Rich, B. L., LePine, J. A., & Crawford, E. A. (2010). Job engagement: Antecedents and effects on job performance. Academy of Management Journal, 53(3), 617–635. https://doi.org/10.5465/AMJ.2010.51468988
- Rosso, B. D., Dekas, K. H., & Wrzesniewski, A. (2010). On the meaning of work: A theoretical integration and review. *Research in Organizational Behavior*, *30*, 91–127. https://doi.org/10.1016/j.riob.2010.09.001
- Rudolph, C. W., & Zacher, H. (2021). Family demands and satisfaction with family life during the COVID-19 pandemic. *Couple and Family Psychology: Research and Practice*, *10*(4), 249–259. https://doi.org/10.1037/cfp0000170
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic

- well-being. Annual Review of Psychology, 52(1), 141–166. https://doi.org/10.1146/annurev.psych.52.1.141
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality & Social Psychology*, *57*(6), 1069–1081. https://doi.org/10.1037/0022-3514.57.6.1069
- Sonnentag, S. (2015). Dynamics of well-being. *Annual Review of Organizational Psychology & Organizational Behavior*, *2*(1), 261–293. https://doi.org/10.1146/annurev-orgpsych-032414-111347
- Spurk, D., Hirschi, A., Wang, M., Valero, D., & Kauffeld, S. (2020). Latent profile analysis: A review and "how to" guide of its application within vocational behavior research. *Journal of Vocational Behavior*, *120*, 103445. https://doi.org/10.1016/j. jvb.2020.103445
- Steger, M. F., Dik, B. J., & Duffy, R. D. (2012). Measuring meaningful work: The work and meaning inventory (WAMI). Journal of Career Assessment, 20(3), 322–337. https://doi.org/10.1177/1069072711436160
- Sverke, M., Hellgren, J., & Näswall, K. (2002). No security: A meta-analysis and review of job insecurity and its consequences. *Journal of Occupational Health Psychology*, 7 (3), 242–264. https://doi.org/10.1037/1076-8998.7.3.242
- Valcour, M. (2007). Work-based resources as moderators of the relationship between workhours and satisfaction with work-family balance. *Journal of Applied Psychology*, 92(6), 1512–1523. https://doi.org/10.1037/0021-9010.92.6.1512
- von Hippel, C., Kalokerinos, E. K., & Henry, J. D. (2013). Stereotype threat among older employees: Relationships with job attitudes and turnover intentions. *Psychology and Aging*, *28*(1), 17–27. https://doi.org/10.1037/a0029825
- Ware, J. E., Kosinski, M., & Keller, S. D. (1996). A 12-item short-form health survey: Construction of scales and preliminary tests of reliability and validity. *Medical Care*, 34(3), 220–233. https://doi.org/10.1097/00005650-199603000-00003
- Wayne, J. H., Butts, M. M., Casper, W. J., & Allen, T. D. (2017). In search of balance: A conceptual and empirical integration of multiple meanings of work–family balance. *Personnel Psychology*, *70*(1), 167–210. https://doi.org/10.1111/peps. 12132
- Weber, W. G., Unterrainer, C., & Höge, T. (2019). Psychological research on organisational democracy: A meta-analysis of individual, organisational, and societal outcomes. *Applied Psychology*, *69*(3), 1009–1071. https://doi.org/10.1111/apps. 12205
- Weiss, D., Weiss, M., Rudolph, C. W., & Zacher, H. (2022). Tough times at the top: Occupational status predicts changes in job satisfaction in times of crisis. *Journal of Vocational Behavior*, 139(1), 103804. https://doi.org/10.1016/j.jvb. 2022.103804
- White, M., Hill, S., McGovern, P., Mills, C., & Smeaton, D. (2003). 'High-performance' management practices, working hours and work-life balance. *British Journal of Industrial Relations*, *41*(2), 175–195. https://doi.org/10.1111/1467-8543.00268



World Health Organization. (2017). Depression and other common mental disorders: Global health estimates. https://www.who.int/publications/i/item/depressionglobal-health-estimates

Zacher, H., & Frese, M. (2018). Action regulation theory: Foundations, current knowledge, and future directions. In D. S. Ones, N. R. Anderson, C. Viswesvaran, & H. K. Sinangil (Eds.), The SAGE handbook of industrial, work and organizational psychology (2nd ed. Vol. 2 pp. 80-102). Sage, Organizational psychology.

Zacher, H., & Rudolph, C. W. (2020). How a dynamic way of thinking can challenge existing knowledge in organizational behavior. In Y.-J.-L. Griep, S. D. Hansen, T. Vantilborgh, & J. Hofmans (Eds.), Handbook on the temporal dynamics of organizational behavior (Vol. 1, pp. 8-25). Cheltenham, UK: Edward Elgar. https://doi.org/ 10.4337/9781788974387.00009

Zacher, H., & Rudolph, C. W. (2024). Subjective wellbeing during the COVID-19 pandemic: A 3-year, 35-wave longitudinal study. Journal of Positive Psychology, 19(3), 442-456. https://doi.org/ 10.1080/17439760.2023.2224757