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# A review on health and well-being at work: More than stressors and strains

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## Abstract

Research in psychology and organizational behavior has made substantial progress in understanding what affects employee health and well-being. In this review article, we describe how characteristics of individual workplaces (job resources, job stressors), interpersonal and teamwork factors, leadership, and specific employee behaviors contribute to health and well-being. We summarize findings from intervention research and discuss how health and well-being, in turn, predict perceived work characteristics and behavior at work. We highlight emerging topics in the field (job-related health and well-being during the COVID-19 pandemic, technology-enabled connectivity to work, micro-interventions, dynamism in health and well-being). We include a cross-cultural and international perspective and address issues related to diversity and inclusion in organizations. We provide suggestions on how research can proceed in the future and point to practical implications that can improve employee health and well-being.

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## 1 | INTRODUCTION

In 1998, when reflecting on an article by Beehr and Newman (1978) on job stress and employee health published in *Personnel Psychology*, Terry Beehr concluded that research in this area “is still an unfinished enterprise” (p. 843). Now, 25 years later, and with continual changes and challenges in people’s working lives and the broader world (Parker & Grote, 2020), we could not agree more. However, despite many unanswered questions, research on employee health and well-being made enormous progress during the past decades. In our review, we focus on research progress made within the past 25 years. During this period, progress is evident in three main areas (Table 1):

First, scholars have developed new theoretical frameworks and refined existing ones. For instance, affective events theory (Weiss & Cropanzano, 1996)<sup>1</sup>, the challenge/hindrance framework (Cavanaugh et al., 2000), and the job-demands resources model (JD-R model; Demerouti et al., 2001) were published around the turn of the millennium. Hobfoll’s book on the conservation-of-resources (COR) approach that extended his previous work appeared during this time (1998). These frameworks were influential in advancing knowledge about job-related health and well-being by (1) emphasizing that various stressor types need to be differentiated, (2) expanding the perspective from a strong previous focus on job stressors to include job resources, and (3) arguing that well-being fluctuates depending on events experienced at work. As a whole, these frameworks demonstrate the importance of resources and an increased interest in dynamic processes.

Second, in empirical studies, scholars have extended the range of factors they examine as potential facilitators versus barriers to health and well-being, now covering more diverse work and non-work factors. At work, interpersonal factors in the work environment, such as incivility (Cortina et al., 2001) and abusive supervision (Tepper, 2000), as well as factors typical for customer-service work (emotional labor, Grandey, 2003) gained increasing attention, in addition to the traditionally studied task-related stressors (e.g., workload, organizational constraints). Off work, scholars examined recovery processes during leisure time (Sonnentag, 2001) and factors at the work-family interface (Edwards & Rothbard, 1999) as contributors to job-related well-being. Moreover, during the past 25 years, scholars became particularly interested in employees’ proactive capabilities (Frese & Fay, 2001; Parker, 2000), so employees’ agentic behaviors—as opposed to external and environmental factors—are now increasingly seen as an ingredient for health and well-being. This development reflects a growing emphasis on agency and self-actualization, as is evident in positive psychology (Seligman & Csikszentmihalyi, 2000) and positive organizational scholarship (Cameron et al., 2003). The multiplicity of factors studied as predictors of health and well-being is also framed as a multilevel phenomenon that includes individual and organizational processes (Bakker, 2015).

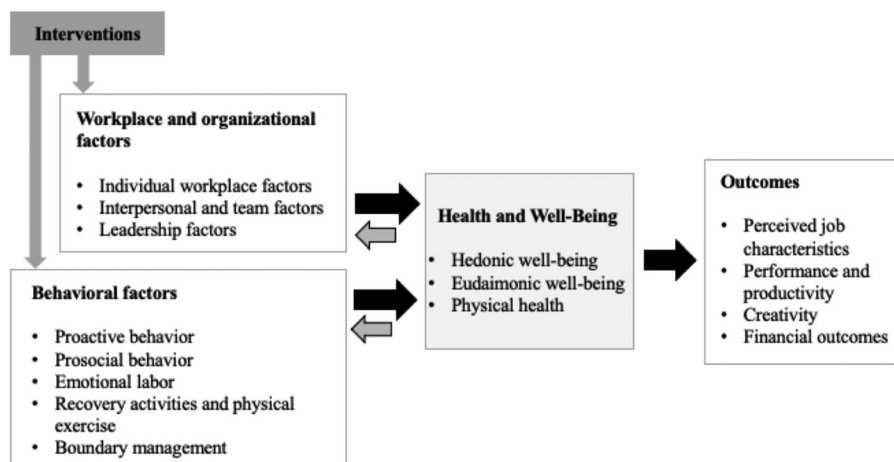
Third, during the past 25 years, research has made substantial methodological progress. The number of longitudinal as well as daily-diary and intervention studies substantially increased, making it possible to overcome some of the limitations of cross-sectional designs, to gain more insight into both longer-term and day-level processes that contribute to health and well-being. Moreover, the number of meta-analyses increased; although most meta-analyses still largely rely on cross-sectional data, they contribute to a broad knowledge base about patterns of different factors (work and non-work) and outcomes that concurrently occur together with job-related health and well-being. In addition, new methodological developments made it possible to incorporate temporal and multilevel aspects into meta-analyses (Dormann et al., 2020; Gooty et al., 2021), enriching the conclusions that can be drawn from this research approach.

The use of more leading-edge and robust research designs in primary studies and meta-analyses provides stronger empirical evidence for the assumed underlying processes. Moreover, findings building on such research designs have challenged traditional assumptions that mainly job factors influence health and well-being. For instance, meta-analyses based on longitudinal primary studies demonstrate that health and well-being also may impact people’s work situation (Guthier et al., 2020; Lesener et al., 2019).

Our review will reflect this research progress and, where available, will draw from research designs beyond cross-sectional studies. Accordingly, we will cover various factors that promote and protect versus threaten health and well-being. We will include a broad range of predictor variables, including factors referring to the interpersonal work

TABLE 1 Areas of process in research on health and well-being at work

Type of progress	Examples	New perspectives and insights
Theoretical progress by extending and refining theories on well-being	<p>Job-demands-resources model (JD-R model; Demerouti et al., 2001)</p> <p>Affective events theory (Weiss &amp; Cropanzano, 1996)</p> <p>Conservation of resources theory (Hobfoll, 1998)</p> <p>Challenge/hindrance framework (Cavanaugh et al., 2000)</p>	<p>Beyond job control and job demands (Karasek, 1989), other resources are important predictors of employee health and well-being</p> <p>Well-being fluctuates and is influenced by events experienced at work</p> <p>Gains and losses of resources are crucial for health and well-being</p> <p>Several types of stressors and demands need to be differentiated</p>
Empirical progress by studying a multiplicity of factors affecting well-being	<p>Interpersonal work environment (Cortina et al., 2001; Tepper, 2000)</p> <p>Customer-service work (Grandey, 2003)</p> <p>Recovery during leisure time (Sonnentag, 2001)</p> <p>Work-family interface (Edwards &amp; Rothbard, 1999)</p> <p>Employee proactive behaviors (Demerouti et al., 2015)</p>	<p>The interpersonal work environment is crucial for health and well-being</p> <p>Demands of customer-service work threaten health and well-being</p> <p>Recovery is essential for health and well-being</p> <p>Family experiences spill over into work—and vice versa</p> <p>Employees can influence their well-being through self-directed behaviors</p>
Methodological progress by developing and using stronger research designs	<p>More longitudinal studies (Zyphur et al., 2020)</p> <p>More daily-survey and experience-sampling studies (Gabriel et al., 2019)</p> <p>More and better intervention studies (Nielsen &amp; Miraglia, 2017)</p> <p>More and better meta-analyses (Dormann et al., 2020)</p>	<p>Not only do work-situation factors predict changes in health and well-being, but well-being predicts changes in work situations</p> <p>Job-related health and well-being, its predictors, and its outcomes fluctuate from day to day</p> <p>Health and well-being can generally be improved through interventions, with behavioral interventions being most successful</p> <p>More robust and precise estimates of the predictors and outcomes of health and well-being</p>



**FIGURE 1** Conceptual model summarizing key areas in research on health and well-being at work

environment, off-job experiences, and employees' behaviors. As the basis for this article, we will mainly use longitudinal studies, daily-survey studies, intervention studies, and meta-analyses, although classic or more recent innovative work may still be cross-sectional.<sup>2</sup>

This review goes beyond older reviews (e.g., Danna & Griffin, 1999; Ganster & Schaubroeck, 1991) by addressing research progress made during the past 25 years. It does this in a more in-depth way than Bliese et al. (2017) could do in their review covering 100 years of research. Our review presents a broader picture than valuable recent reviews that used particular theoretical frameworks (Bakker et al., 2014; Ganster & Rosen, 2013) or specialized on relatively narrow topics such as job insecurity (Jiang & Lavaysse, 2018), workplace discrimination (Dhanani et al., 2018), stress-related team processes (Razinskas & Hoegl, 2020), social support (Jolly et al., 2021), and emotions in the workplace as one specific aspect of well-being (Diener et al., 2020).

Our article is structured as follows. We start by describing core concepts and measures in research on job-related health and well-being. Then, in the following sections, we review the literature on how work and organizational factors as well as individual behaviors impact health and well-being, and how health and well-being, in turn, influence work and organizational life (see Figure 1 for a conceptual model). Next, we present intervention research that examines what organizations and individuals can do to foster health and well-being. In a separate section, we address emerging topics in the field that received particular attention during recent years or that—most likely—will attract more attention in the future. We discuss cross-cultural and international issues and issues of diversity and inclusion in organizations. We close with suggestions for future research and approaches to improving job-related health and well-being in practice.

## 2 | HEALTH AND WELL-BEING: CORE CONCEPTS

Health and well-being are broad concepts comprising multiple components. The World Health Organization (WHO) defines health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (World Health Organization, 1946, p. 1315). Notably, health and well-being comprise not only physical states and chronic physical conditions (i.e., illnesses and their absence) but also psychosocial states and enduring psychological conditions. As the WHO describes, these states and conditions contain both “positive” (e.g., meaning, fitness) and “negative” (e.g., stress, illness) elements.

The psychological literature traditionally differentiates between hedonic and eudaimonic well-being (Ryan & Deci, 2001; Tov, 2018). Hedonic well-being (also termed “subjective well-being”; Diener, 2000) refers to the happiness

component of well-being. It is characterized by the experience of pleasure and is reflected in high positive affect, low negative affect, high satisfaction with life, and satisfaction with various life domains, such as job and family satisfaction (Diener et al., 2018). Eudaimonic well-being is a broad concept that primarily centers around the experience of meaning (Oishi & Westgate, 2022) and also encompasses experiences such as self-determination (Ryan & Deci, 2001), self-expressiveness (Waterman, 1993), and pursuit of goals and activities that align with one's values (Tov, 2018).

Organizational research has spent considerable effort explaining workers' hedonic well-being, for instance, by investigating workplace characteristics, leadership behavior, and interpersonal processes within teams in their relationship to employee affect, satisfaction, but also anxiety and exhaustion. The eudaimonic component of well-being becomes evident in experiences of meaningfulness. Although the different well-being components are conceptually distinct, they are empirically related. For instance, experienced meaningfulness in work is positively correlated with job satisfaction, life satisfaction, and self-reported health (Allan et al., 2019).

Experiences at work are not only related to hedonic and eudaimonic well-being, but to physical health as well. According to the allostatic load model of stress (McEwen, 1998), the human organism reacts to stressful stimuli with physiological (e.g., elevated cortisol levels) and psychosomatic responses (e.g., sleep problems, headache) that may develop into dysregulations of major bodily systems (i.e., immune system, cardiovascular system, metabolic system), that, in turn, can result in a broad range of different manifest diseases (Ganster & Rosen, 2013).

People differ in their health and well-being, and most indicators of health and well-being have a high stability over time (Lesener et al., 2019; Nohe et al., 2015). Despite the relatively stable long-term differences between people, there is substantial within-person variability in health and well-being (Podsakoff et al., 2019). This implies that the subjective experience of health and well-being can fluctuate daily and weekly, and it is crucial to consider health and well-being dynamics. It is also important to note that, traditionally, health and well-being are states that characterize a person—as opposed to the situation the person is in. Accordingly, most studies use the terms health and well-being in this sense. Some approaches, however, embrace a broader conceptualization of health and well-being and try to capture health and well-being not only at the individual but also at the team (Schulz et al., 2017) or organizational levels (Salanova et al., 2012).

### 3 | MEASURES FOR ASSESSING HEALTH AND WELL-BEING

In the organizational literature, health and well-being are usually assessed with self-report measures, although health may also be assessed by objective data (e.g., blood pressure readings). To assess the hedonic aspect of well-being, researchers use measures that focus either on affective and energetic states and experiences. With respect to measures for assessing affect, the PANAS (Watson et al., 1988) which captures high-arousal positive and high-arousal negative affect is a highly used instrument. But also other instruments are available (Daniels, 2000; Van Katwyk et al., 2000; Warr, 1990), with the advantage that they assess low-arousal states as well.

With respect to energetic states and experiences, measures of vigor and exhaustion are relevant. Vigor can be assessed with the three-dimensional Shirom-Melamed vigor measure (Shirom, 2004). For assessing exhaustion, various instruments are available, with the Maslach-Burnout Inventory being probably the most popular one (Maslach et al., 1997). But also, the exhaustion scale of the Oldenburg Burnout Inventory (OLBI; Demerouti et al., 2001) and the Shirom-Melamed burnout measure (Shirom & Melamed, 2006) are highly used. Also, the more recently developed Burnout Assessment Tool (Schaufeli et al., 2020) promises to be useful for assessing low-energy states and associated symptoms.

Because the hedonic tradition covers subjective well-being, which also comprises the evaluative or satisfaction component (Keyes, 2006), researchers assess this aspect with the traditional Satisfaction with Life Scale (SWLS; Diener et al., 1985). They also assess domain satisfaction as part of subjective well-being, which includes job satisfaction scales (e.g., Job Descriptive Index [JDI]; Smith et al., 1969; Brief Job Satisfaction Measure; Judge et al., 1998) and nonwork domain satisfaction scales (e.g., Leisure Satisfaction Scale; Kuykendall et al., 2017).

Meaning as the eudaimonic component of well-being is often captured with items from the Job Diagnostic Survey, either in its original (Hackman & Oldham, 1975) or its revised (Idaszak & Drasgow, 1987) version. The short measure by Spreitzer (1995) is often used as well. The also popular three-dimensional Work and Meaning Inventory (MAWI; Steger et al., 2012) provides a more in-depth assessment of the construct.

When it comes to subjective health measures, organizational researchers usually ask for the presence of physical symptoms such as back pain or headache. Established measures are the General Health Questionnaire (GHQ; Goldman & Hillier, 1979), the somatization sub-scale of the Symptom Checklist-90 (SCL-90; Derogatis & Unger, 2010), or the physical-symptoms measure from Spector and Jex (1998). In addition to these subjective measures, physiological measures can provide important additional information about health-related processes (Ganster et al., 2018).

## 4 | INDIVIDUAL WORKPLACE FACTORS ASSOCIATED WITH HEALTH AND WELL-BEING

Resources and demands individuals encounter at their workplaces have a substantial impact on their health and well-being.

### 4.1 | Individual workplace factors that promote and protect health and well-being

Research during the past 25 years showed that job resources such as autonomy (i.e., job control), learning opportunities, and task variety are essential for health and well-being.

#### 4.1.1 | Hedonic well-being

Meta-analyses focusing on hedonic well-being showed that employees at workplaces with a high amount of job resources enjoy a higher level of job satisfaction (Humphrey et al., 2007), higher vitality (Christian et al., 2011), and a lower level of exhaustion (Crawford et al., 2010) than employees lacking job resources. A meta-analysis of longitudinal primary studies demonstrated that job resources predict an increase in positive well-being indicators and a decrease in negative well-being indicators over time (Lesener et al., 2019), suggesting that job resources indeed enhance health and well-being. The well-being benefits of job resources are not only documented in longitudinal research but are reflected in people's daily working lives as well: Using data from a multilevel meta-analysis, Downes et al. (2021) reported a negative association between job resources and strain symptoms, both at the between- and within-person level, implying that employees at workplaces with a generally high level of resources suffer less from strain symptoms than employees at workplaces with a generally low level of resources and that on days when employees have more resources available they experience less strain symptoms than on days with less resources.

#### 4.1.2 | Eudaimonic well-being

Job resources are also relevant for eudaimonic well-being. Specifically, autonomy and feedback as well as task features such as skill variety, task identity, and task significance, show substantial meta-analytic correlations with experienced meaningfulness (Humphrey et al., 2007). Aimed at disentangling concurrent and longitudinal relationships between job characteristics and eudaimonic well-being, Weston et al. (2021) found that skill variety, in particular, predicted an increase in experienced purpose (i.e., "the perception one has life goals in place that serve to organize one's sense of self, direct daily activities, and chart a direction for life," p. 244) over time.

### 4.1.3 | Physical health

With respect to physical-health indicators, most studies focused on job control as a crucial job resource. Empirical evidence on the benefit of high job control is mixed. Whereas job control was unrelated to a broad range of physical strain indicators in one meta-analysis (Gonzalez-Mulé et al., 2021), it was associated with less musculoskeletal symptoms and lower all-cause mortality—particularly mortality caused by coronary heart diseases—in other meta-analyses (Goh et al., 2016; Lang et al., 2012; Taouk et al., 2020). These findings might imply that job control has distinct effects on various physiological systems.

### 4.1.4 | Conclusion

Job resources are critical for health and well-being. Of course, the idea that job resources are important for well-being has been discussed in the past; for instance, Karasek (1979) emphasized the role of job control for employee health and well-being, and the job-characteristics model (Hackman & Oldham, 1976) highlighted several work characteristics (e.g., autonomy, feedback, skill variety) that nowadays are considered to be job resources. Likely, the increased interest in job resources during the past decades was encouraged by specific theoretical frameworks such as the JD-R model (Demerouti et al., 2001) and the COR approach (Hobfoll, 1998) as well as broader perspectives such as the positive-psychology movement (Seligman & Csikszentmihalyi, 2000) and positive organizational scholarship (Cameron et al., 2003).

## 4.2 | Individual workplace factors that threaten health and well-being

A broad range of different job stressors can harm health and well-being. During the past decades, we witnessed a strong focus on longitudinal and day-level research designs that promised to bring more light to the dynamism around stressors, health, and well-being.

### 4.2.1 | Hedonic well-being

People who face a high degree of job stressors experience impaired hedonic well-being such as high burnout, depression, and anxiety levels. Meta-analyses reported these findings for both challenge stressors (i.e., workload and time pressure) and hindrance stressors (i.e., hassles, role ambiguity). Importantly, person-level stressor-strain relationships are stronger for hindrance than challenge stressors (Crawford et al., 2010; Downes et al., 2021; Gonzalez-Mulé et al., 2021), demonstrating the importance of differentiating between these two types of stressors (Cavanaugh et al., 2000).

Importantly, meta-analyses focusing exclusively on longitudinal studies showed that job stressors predict an increase in exhaustion (Guthier et al., 2020) and other psychological strain symptoms (Ford et al., 2014) over time, a finding that is in line with the idea that exposure to job stressors leads to impaired well-being. Whereas these meta-analyses did not differentiate between challenge stressors and hindrance stressors, primary longitudinal research suggests that particularly hindrance stressors, but not challenge stressors predict an increase in strain symptoms (Crane & Searle, 2016); challenge stressors, however, may increase exhaustion over time, when they occur within an otherwise stressful work context (Kern & Zapf, 2021).

Job stressors can impair hedonic well-being at the day level as well. For instance, Ilies et al. (2010) reported that on days employees face a high workload (i.e., a typical challenge stressor), they experience higher affective distress during the day, and more exhaustion at night than on days with less workload. De Gieter et al. (2018) found that day-specific



challenge and hindrance stressors are related to day-specific strain symptoms. Meta-analytic evidence points in a similar direction, demonstrating that within-person, both challenge stressors and hindrance stressors are associated with elevated strain symptoms (Downes et al., 2021), with similar effect sizes for both types of stressors.

Because job stressors impair hedonic well-being, researchers have searched for factors that may protect workers from the negative impact of job stressors. Although job resources (e.g., job control) show a positive direct link to hedonic well-being (Gonzalez-Mulé et al., 2021; Lesener et al., 2019), meta-analytic evidence suggests they are not effective in reducing the negative impact of job stressors on hedonic well-being (Gonzalez-Mulé et al., 2021).

#### 4.2.2 | Eudaimonic well-being

Compared to a large number of studies on job stressors and hedonic well-being, eudaimonic well-being has been neglected in empirical studies on job stressors. Cross-sectional research suggests that hindrance stressors such as role conflict and role ambiguity are negatively related to experienced meaningfulness (Monnot & Beehr, 2014). In a recent two-wave study, high strain levels—which may result from high job stressors—predicted decreased work meaningfulness over time (Erlmaier et al., 2022).

#### 4.2.3 | Physical health

Job stressors can have an impact on physical health. Meta-analyses show that job stressors are associated with physical strain indicators (Ford et al., 2014; Gonzalez-Mulé et al., 2021), including somatic symptoms such as headache, gastrointestinal, and musculoskeletal problems (Nixon et al., 2011). Interestingly, person-level stressor-strain relationships are weaker for physical strain indicators than psychological strain indicators (Gonzalez-Mulé et al., 2021), particularly when examining concurrent relationships between stressors and strains (Ford et al., 2014). In lagged analyses, however, the pattern reverses, and the stressors-strain relationships are stronger for physical strain than for psychological strain, suggesting that detrimental effects of job stressors on psychological well-being are more immediate than effects on physical health. With respect to different stressor types, meta-analytic evidence suggests that hindrance stressors show stronger associations with physical strain symptoms than challenge stressors (Mazzola & Disselhorst, 2019).

#### 4.2.4 | Conclusion

The differentiation between different stressor types (Cavanaugh et al., 2000) proved helpful as person-level correlations between hindrance stressors and impaired hedonic and physical well-being were generally higher than between challenge stressors and impaired hedonic and physical well-being, suggesting that hindrance stressors particularly threaten employee health and well-being over time. The benefit of differentiating between different stressor types was less evident in day-level research, thus highlighting the importance of a multi-level perspective on health and well-being and emphasizing the need not to generalize from person-level findings to day-level processes and vice versa. The pattern that challenge and hindrance stressors are similarly detrimental at the day level, but that hindrance stressors show stronger associations with longer-term impairments of health and well-being might imply that people recover more easily from challenge than from hindrance stressors or that challenge stressors have some longer-term benefits that counteract their harmful impact on hedonic well-being.

Despite the interesting findings on the challenge/hindrance framework, a more nuanced perspective emerged in recent years. Researchers have criticized the a priori classification of specific stressors as challenge versus

hindrance, and rather emphasized the importance of individual stressor appraisals (Ma et al., 2021; Mitchell et al., 2019).

## 5 | INTERPERSONAL AND TEAMWORK FACTORS ASSOCIATED WITH HEALTH AND WELL-BEING

Not only factors in the individual workplace but also factors from the interpersonal environment are crucial for health and well-being. Research has addressed beneficial as well as harmful processes within teams.

### 5.1 | Teamwork factors that promote and protect health and well-being

A long research tradition shows that social support is a core resource that protects health and well-being (Cohen & Wills, 1985). Job-related social support encompasses instrumental (e.g., help with work tasks) and emotional (e.g., appreciation and warmth) aspects.

#### 5.1.1 | Hedonic well-being

Meta-analyses show that lack of social support is associated with low hedonic well-being (Viswesvaran et al., 1999), including burnout (Halbesleben, 2006; Michel et al., 2022). Although there is strong evidence about the direct association between social support and hedonic well-being, overall, meta-analyses do not support the idea that social support buffers the detrimental effects of job stressors on well-being (Gonzalez-Mulé et al., 2021; Guthrie et al., 2020).

During the past decades, research has drawn on social identity theory to explain why social identification (i.e., processes related to a person's identification with the team they are working with) is vital for health and well-being (Häusser et al., 2020). Meta-analytic evidence demonstrates that the more someone identifies with their group or the organization, the higher their hedonic well-being (Steffens et al., 2017). An explanation for the finding on the overall benefit of social identification is that social support becomes more effective when it is provided by others with whom the individual identifies (Häusser et al., 2020).

#### 5.1.2 | Eudaimonic well-being

Working in a team—as opposed to working alone—can be seen as a highly resourceful situation that increases the experienced meaningfulness of one's work (Strubler & York, 2007). According to Wrzesniewski et al. (2003), daily interactions with coworkers foster interpersonal sensemaking processes. Employees look for and interpret cues in their work that are essential in construing meaning. Empirical research supports this perspective that interpersonal processes are important for experiencing meaning at work. For instance, having the opportunity to give to others at work (Colbert, Bono, et al., 2016) or sharing a leadership role (Liang et al., 2021) are significant predictors of meaning.

#### 5.1.3 | Physical health

With respect to the association between social support and physical health indicators, findings are mixed. Similar to the findings on job control, one recent meta-analysis did not find a significant relationship between social support and physical strain indicators (Gonzalez-Mulé et al., 2021). Other meta-analyses reported that social support was related

to better self-reported health, a lower rate of back and shoulder pain, a lower level of physician-diagnosed health conditions, and a lower mortality rate (Goh et al., 2016; Lang et al., 2012; Viswesvaran et al., 1999). In recent years, when researchers aimed to uncover mechanisms underlying the relationship between social support and health, they found that better sleep (Kent de Grey et al., 2018) and biological processes related to low inflammation (Uchino et al., 2018) are essential. In addition to social support, also social-identification processes were found to be related to physical health (Steffens et al., 2017).

#### 5.1.4 | Conclusion

By building on earlier findings on the benefits of social support, research made progress in identifying the underlying mechanisms and highlighting the circumstances (i.e., high social identification) when social support is beneficial. Meta-analytic research finding a lack of buffer effects of social support points to the need to think more deeply about social support, for instance, by taking the reverse buffering effect (i.e., social support strengthening the relationship between stressors and poor well-being, for instance, when “support” is provided in an ineffective way) into account and by putting more emphasis on the match between specific stressors and specific types of social support (Jolly et al., 2021).

### 5.2 | Teamwork factors that threaten health and well-being

Negative interpersonal processes occurring within teams threaten health and well-being. Such processes include interpersonal conflicts, harassment, incivility, and ostracism.

#### 5.2.1 | Hedonic well-being

Research during the past decades clarified that a differentiated picture of the relationship between interpersonal conflict and hedonic well-being is needed. Meta-analytic evidence suggests that relationship conflicts (i.e., conflicts around different interpersonal styles and personality), in particular, have a strong negative association with well-being outcomes. In contrast, task conflicts (i.e., disagreements about the best way to pursue a goal and accomplish tasks) show less negative or even weak positive associations with hedonic well-being (DeChurch et al., 2013; De Dreu & Weingart, 2003). Moreover, competing and avoiding conflict-handling styles are negatively related to these outcomes (DeChurch et al., 2013).

Meta-analyses showed that harassment experiences are associated with impaired hedonic well-being, such as reduced life satisfaction, depression, and post-traumatic stress disorders (Bowling & Beehr, 2006; Willness et al., 2007). Similarly, incivility—defined as “low-intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace norms for mutual respect” (Andersson & Pearson, 1999, p. 457)—can undermine hedonic well-being (Han et al., 2022; Yao et al., 2021). More specifically, ostracism (i.e., an individual’s perception of being ignored or excluded by others) as a particular aspect of incivility is associated with impaired hedonic well-being (Howard et al., 2020).

#### 5.2.2 | Eudaimonic well-being

With respect to teamwork factors that threaten eudaimonic well-being, research is scarce. However, it is very plausible that experiences of mistreatment at work can undermine the meaning of one’s work (McIntosh et al., 2010).

One primary study that addressed this phenomenon found that workplace incivility is negatively related to work meaningfulness (Peng et al., 2020).

### 5.2.3 | Physical health

Research on the relationship between workplace mistreatment experiences and physical health largely mirrors the findings on hedonic well-being. Specifically, harassment and incivility are positively related to physical symptoms and impaired physical health (Bowling & Beehr, 2006; Han et al., 2022; Willness et al., 2007). Notably, the relationships between incivility and impaired physical health are stronger in time-lagged studies than in cross-sectional studies (Han et al., 2022), suggesting that it takes some time until these mistreatment experiences find expression in impaired physical health.

### 5.2.4 | Conclusion

Despite developments that aim at an increased focus on positive processes (Cameron et al., 2003, Seligman & Csikszentmihalyi, 2000), research during the past decades demonstrated that negative interpersonal interactions at work strongly correlate with impaired health and well-being. As recent research increasingly addressed instigated incivility as a well-being-related phenomenon in organizations (L. S. Park & Martinez, 2022), negative interpersonal interactions must be seen as one facet of a generally unfavorable work environment.

## 6 | LEADERSHIP FACTORS ASSOCIATED WITH HEALTH AND WELL-BEING

Leadership plays a vital role in employee health and well-being. Whereas most research focused on hedonic well-being, leadership can also impact eudaimonic well-being and physical health.

### 6.1 | Leadership factors that promote and protect health and well-being

Most research that examined leaders' role in employee health and well-being focused on positive aspects of leadership.

#### 6.1.1 | Hedonic well-being

For decades, leadership research has examined leadership factors associated with subordinate job satisfaction as an indicator of hedonic well-being. Meta-analytic evidence suggests that employees whose leaders pursue a transformational, relationship-oriented, task-oriented, or empowering leadership style are more satisfied with their jobs (Judge & Piccolo, 2004; Judge et al., 2004; Kim et al., 2018), with transformational leadership showing particular substantial effect sizes (Judge & Piccolo, 2004). In addition, good exchange relationships between leaders and followers are associated with job satisfaction (Rockstuhl et al., 2012). Meta-analyses that include a broader set of hedonic well-being indicators show that transformational leadership, relationship-oriented leadership, task-oriented leadership, change-oriented leadership, ethics-oriented leadership, and leader-member exchange are positively related to positive well-being states, and negatively related to affective distress and burnout (Harms et al., 2017; Montano et al., 2017; Pajic et al., 2021). In addition to broad leadership behaviors (e.g., transformational leadership) and the provision of resources, leaders may also directly influence subordinates' hedonic well-being by helping them

to achieve a better work-life balance (Kossek et al., 2011). Significantly, leadership behavior does not only influence employees' job satisfaction and other well-being indicators over longer periods of time (Volmer et al., 2011) but exerts its impact at the day level as well (Kelemen et al., 2020).

Notably, leadership behaviors are not only related to subordinate well-being (Montano et al., 2017) but also to supervisors' well-being. Specifically, meta-analytic evidence suggests that relationship-oriented and change-oriented (e.g., transformational) leadership behaviors are positively related to positive well-being indicators in leaders (Kaluza et al., 2020). However, conclusions about causality remain ambiguous. For instance, it could be that enacting specific leadership behavior influences leaders' well-being or that well-being enables leaders to show desirable leadership behaviors.

### 6.1.2 | Eudaimonic well-being

Leadership also matters for eudaimonic well-being. Leadership implies communicating an organization's purpose and explaining why the pursuit of this purpose is meaningful (van Knippenberg, 2020). Accordingly, when leaders articulate the organization's purpose and associated meaning, subordinates will experience their work as meaningful. Empirical research showed that transformational leadership, in particular, can increase subordinates' experienced meaning at work (Grant, 2012; Schermuly et al., 2022).

### 6.1.3 | Physical health

Most positively-framed leadership behaviors (i.e., transformational leadership, relationship-oriented leadership, leader-member exchange) are related to physical health as well (Montano et al., 2017). In addition, leaders may also have a direct impact on subordinates' health by emphasizing the role of a healthy lifestyle and supporting the implementation of health interventions (Rudolph et al., 2020).

### 6.1.4 | Conclusion

In research conducted over the past decades, there is increased awareness that leadership does not matter only for employee job satisfaction but also for other well-being indicators. Moreover, the emphasis shifted from behaviors described in leadership theories (e.g., transformational leadership) to more specific behaviors by which leaders can influence employee health and well-being, for instance, by acting as role models for health awareness and health behavior (Kranabetter & Niessen, 2017) and by emphasizing good work-life balance (Kossek et al., 2011).

## 6.2 | Leadership factors that threaten health and well-being

With the broader perspective on leadership that emerged during the past decades, also specific aspects of leadership that threaten followers' health and well-being received research attention.

### 6.2.1 | Hedonic well-being

Meta-analyses document that abusive supervision and other forms of destructive leadership (e.g., laissez-faire leadership) are negatively related to follower job satisfaction (Fosse et al., 2019; Mackey et al., 2017) and well-being

indicators (Harms et al., 2017; Montano et al., 2017; Pajic et al., 2021; Zhang & Liao, 2015). Moreover, destructive leadership behaviors are negatively related to leaders' hedonic well-being (Kaluza et al., 2020), which can impact follower well-being downstream.

### 6.2.2 | Eudaimonic well-being

To our knowledge, there is little research on the relationship between destructive leadership and follower eudaimonic well-being. One primary cross-sectional study showed that abusive supervision is negatively related to followers' experienced meaning of work (Rafferty & Restubog, 2011).

### 6.2.3 | Physical health

A few studies examined the relationship between destructive leadership and physical health. Meta-analytic findings are inconsistent, and the confidence intervals around the usually negative relationships between destructive leadership and follower physical health are large (Montano et al., 2017; Pajic et al., 2021; Zhang & Liao, 2015), suggesting that the impact of destructive leadership on physical health is contingent on additional factors.

### 6.2.4 | Conclusion

Taken together, there is clear evidence that abusive supervision and other forms of destructive leadership show a strong negative association with hedonic well-being. Although destructive leadership behaviors can be expected to undermine eudaimonic well-being and physical health, research evidence is still inconclusive.

## 7 | INDIVIDUAL BEHAVIORS THAT IMPACT JOB-RELATED HEALTH AND WELL-BEING

One of the progress areas in the last 25 years was moving from a perspective that saw employees as passive receivers of job conditions, to a perspective in which employees at work and outside of work, are active agents that have an impact on their health and well-being. For example, while job control was previously seen as a characteristic of the job (Karasek, 1979), more recent views acknowledge that employees can actively gain job control (e.g., by engaging in job crafting; Wrzesniewski & Dutton, 2001). Moreover, there is an increased awareness that employees can behave in a prosocial way (e.g., helping their coworkers; Glomb et al., 2011), which, in turn, has consequences on their own health and well-being. Being able to engage in active behaviors might be seen as a personal resource that is available to employees to promote their well-being (Hobfoll, 1998). Supporting this view, we review empirical studies showing how active behaviors affect well-being in a positive way. Nonetheless, being aware of potential threats, we will also note that active behaviors might sometimes have negative consequences for individual well-being.

### 7.1 | Proactive behavior

Employees can actively change their work by engaging in proactive behavior (Parker et al., 2019). Proactive behavior constitutes a set of different behaviors in which employees try to influence their own work environment (Thomas

et al., 2010). A central work-related proactive behavior is job crafting (Wrzesniewski & Dutton, 2001). When engaging in job crafting, employees shape their job's physical, cognitive, and/or relational boundaries with the intention to fulfill need satisfaction, manage demands, and gain resources (De Bloom et al., 2020). Integrated theoretical models suggest that one type of job crafting is approach-focused crafting, which is a functional, active behavior related positively both to hedonic well-being (e.g., career satisfaction; Dubbelt et al., 2019) and eudaimonic well-being (e.g., meaningfulness; Lichtenthaler & Fischbach, 2019). The second type of job crafting is avoidance-focused crafting, in which employees try to actively reduce or avoid certain tasks or interpersonal relationships at work. Avoidance-focused crafting might have negative well-being consequences, including strain and reduced job satisfaction (Rudolph et al., 2017).

Employees may also use other types of proactive behaviors, for example, voice behaviors, that include communication of ideas, information, or criticism with higher-level actors within the organization (Morrison, 2011). When enacting voice, employees may feel that they gain control which has positive hedonic outcomes (Thomas et al., 2010).

## 7.2 | Prosocial behavior

When focusing on how employees can promote their health and well-being by actively engaging positively with others at work, prosocial behavior is important (Bolino & Grant, 2016). At work, employees can help others, for example, by engaging in organizational citizenship behavior (Koys, 2001) and providing support (Jolly et al., 2021). Empirical evidence from meta-analyses (Hui et al., 2020; LePine et al., 2002) and daily investigations (Glomb et al., 2011; Sonnentag & Grant, 2012) found that prosocial behaviors are related to hedonic well-being outcomes. Acting prosocially might also enhance eudaimonic well-being (e.g., meaningfulness; Lin et al., 2020), and is related positively to physical health (Hui et al., 2020). As a resource-consuming activity, however, prosocial behavior might also put employees at risk of depletion (Gabriel et al., 2018).

## 7.3 | Emotional labor

When interacting with others at work (i.e., customers, coworkers, and leaders), employees may actively manage their emotional displays by engaging in emotional labor (Grandey & Melloy, 2017), which has health and well-being consequences. Although mainly negative well-being outcomes were reported (Hülsheger & Schewe, 2011), some forms of emotional labor (e.g., antecedent-focused strategies such as deep acting) might positively affect employees' hedonic well-being (Kammeyer-Mueller et al., 2013; Zhan et al., 2016).

## 7.4 | Recovery activities and physical exercise

Employees can actively promote their health and well-being, for example, by engaging in recovery activities at work (e.g., taking breaks; Trougakos et al., 2008) and during their leisure time (e.g., engaging in social activities). Such activities relate positively to health outcomes, as well as to hedonic well-being indicators like vigor and positive affect (Steed et al., 2019). Active recovery also predicts eudaimonic well-being, especially a sense of meaning that might be enhanced by engaging in meaningful break experiences during work and pursuing hobbies after work (Sonnentag et al., 2022). Employees can actively promote their health and well-being when engaging in physical activities during leisure (Steed et al., 2019) and during work breaks (e.g., by taking a walk in the park during lunch break; Sianoja et al., 2018).

## 7.5 | Boundary management between work and private life

On the line between work and non-work, employees can use active boundary tactics and manage work-family issues to promote their health and well-being (Edwards & Rothbard, 2000). Work-family conflict has been associated with impaired health and hedonic well-being, for instance, negative affect and lower job satisfaction (Nohe et al., 2015). However, employees can actively take care of boundary management, by reducing job-related technology use at home, for example (Y. A. Park et al., 2011). From another angle, work and family can enrich each other, and work-family enrichment is related to health and hedonic well-being (e.g., positive affect; Greenhaus & Powell, 2006). Therefore, by actively promoting their well-being at home, employees can also enhance their well-being at work.

## 7.6 | Conclusion

The multiplicity of factors affecting health and well-being, along with recognition of how employees themselves can shape their well-being, has led to insightful research on how employees can actively change their behaviors at work and beyond work. Such progress has also led to more interventions that encourage and facilitate such behaviors, as we discuss in the next section.

# 8 | INTERVENTIONS TO PROTECT AND IMPROVE HEALTH AND WELL-BEING

Interventions are a promising tool to actively protect employee health and well-being. Empirical evidence, however, shows that interventions differ in their ability to maintain or improve health and well-being. Broadly speaking, interventions (1) can target workplace and organizational factors and (2) try to influence behaviors that are relevant to health and well-being. Related to theoretical progress with its emphasis on resources (Demerouti et al., 2001; Hobfoll, 1998), interventions do not only refer to job stressors but various types of resources as well (Tetrick & Winslow, 2015), covering a multiplicity of factors in the work environment and the behavioral domain. Reflecting methodological progress, evidence on the benefits of interventions has been synthesized in meta-analyses. Table 2 provides an overview of exemplary meta-analyses.

## 8.1 | Interventions focusing on workplace and organizational factors

Interventions that address workplace and organizational factors are typically described as organizational job-design interventions (Parker, 2014). Such interventions are “defined as planned, behavioural, theory-based actions that aim to improve employee health and well-being through changing the way work is designed, organized and managed” (Nielsen, 2013, p. 1030). More specifically, such interventions range from ergonomic job redesign (May & Schworer, 1994) to an increase in personal control over one’s schedule and supervisor support (Leger et al., 2021) and the reduction of job stressors (Rydstedt et al., 1998).

Empirical evidence for the effectiveness of organizational job redesign interventions is mixed. For instance, the meta-analysis by Richardson and Rothstein (2008) did not find a significant effect of organizational interventions on a diverse set of well-being outcomes. Similarly, a meta-analysis that focused on burnout in healthcare providers reported no significant effect of organizational interventions after removing the favorable impact of training and education from the meta-analytic effect size (Dreison et al., 2018). However, a meta-analysis focusing on resources points to more optimistic results. Interventions targeting autonomy, team resources (e.g., social support), and favorable leadership styles had positive effects on a broad set of hedonic and physical well-being indicators (Nielsen et al., 2017). Despite



**TABLE 2** Exemplary meta-analyses summarizing intervention studies

Authors (Year)	Type of intervention	Number of studies	Effect size	Outcome variable studied
Interventions focusing on workplace and organizational factors				
Richardson and Rothstein (2008)	Increasing job resources (e.g., social support), partly coupled with the promotion of personal resources	5	$d = .14$	Mainly hedonic well-being and perceptions of stressors and job resources
Nielsen et al. (2017)	Increasing group-level resources	18	$r = .25$	Hedonic and physical well-being
Nielsen et al. (2017)	Improving leadership	32	$r = .27$	Hedonic and physical well-being
Nielsen et al. (2017)	Increasing organization-level resources (e.g., autonomy)	54	$r = .31$	Hedonic and physical well-being
Dreison et al. (2018)	Increasing job resources (e.g., social support)	6	$g = .07$	Emotional exhaustion
Behavioral interventions: Stress management				
Richardson and Rothstein (2008)	Cognitive-behavioral	7	$d = 1.16$	Mainly hedonic well-being
Richardson & Rothstein (2008)	Relaxation	17	$d = .50$	Mainly hedonic well-being
Richardson & Rothstein (2008)	Multimodal	19	$d = .24$	Mainly hedonic well-being
Maricuțoiu et al. (2016)	Cognitive-behavioral	12	$d = .15$	Exhaustion
Maricuțoiu et al. (2016)	Relaxation	6	$d = .51$	Exhaustion
Dreison et al. (2018)	Mainly stress management	6	$g = .38$	Emotional exhaustion
Monzani et al. (2021) <sup>a</sup>	Mindfulness	192	$g = .74$	Hedonic well-being
Monzani et al. (2021) <sup>a</sup>	Mindfulness	119	$g = .58$	Eudaimonic well-being
Behavioral interventions: Resource building				
Maricuțoiu et al. (2016)	Training of interpersonal soft skills	4	$d = -.01$	Exhaustion
Maricuțoiu et al. (2016)	Training of role-related hard skills	5	$d = .39$	Exhaustion
Nielsen et al. (2017)	Increasing individual resources (e.g., self-efficacy)	41	$r = .24$	Hedonic and physical well-being
Dreison et al. (2018)	Training and education	9	$g = .19$	Emotional exhaustion
Lichtenthaler & Fischbach (2019)	Job crafting: Promotion focused	13	$r = -.11$	Emotional exhaustion
Lichtenthaler & Fischbach (2019)	Job crafting: Prevention focused	13	$r = .20$	Emotional exhaustion
Donaldson et al. (2019)	Positive-psychology interventions (e.g., focusing on gratitude and individual strengths)	16	$g = .30$	Positive well-being indicators

(Continues)

**TABLE 2** (Continued)

Authors (Year)	Type of intervention	Number of studies	Effect size	Outcome variable studied
Donaldson et al. (2019)	Positive-psychology interventions (e.g., focusing on gratitude and individual strengths)	9	$g = -.28$	Negative well-being indicators
Díaz-Benito et al. (2020)	Physical activities	18	$g = .21$	Various indicators of (mainly) physical health

Note.  $d$  = Cohen's  $d$ .  $g$  = Hedges'  $g$ .  $r$  = averaged weighted correlation.

<sup>a</sup>Second-order meta-analysis.

these promising findings, more research on workplace and organizational interventions is needed. Intervention success depends on many factors, such as the combination of various intervention types, persistence in implementation efforts, learning throughout the implementation and adaptation process, and effective governance (Daniels et al., 2021; Tetrick & Winslow, 2015).

## 8.2 | Interventions focusing on behavior

Stress-management and resource-building interventions target workers' behavioral approaches to their work. Stress-management interventions have a long tradition in organizational practice and teach workers how to respond to stressful situations. They include approaches such as cognitive-behavioral techniques (e.g., interventions addressing appraisal processes), relaxation, and a mixture of different techniques. Meta-analyses show that particularly cognitive-behavioral techniques successfully improve hedonic well-being by reducing feelings of stress and anxiety, but relaxation and mixed approaches also are beneficial (Richardson & Rothstein, 2008). Relaxation proved particularly effective in reducing exhaustion (Maricuțoiu et al., 2016). Moreover, interventions that help employees to manage stress by being mindful positively impact hedonic and eudaimonic well-being (Monzani et al., 2021).

Resource-building interventions are often rooted in the tradition of positive psychology. They comprise a broad set of approaches that support individual strengths and create personal resources (e.g., skills, self-efficacy). Meta-analyses show that interventions that target personal resources improve hedonic and physical well-being (Nielsen et al., 2017). Trainings that focus on job-related skills (Dreison et al., 2018; Maricuțoiu et al., 2016) and interventions that support approach-focused job-crafting behaviors can help reduce burnout symptoms (Lichtenthaler & Fischbach, 2019). Interventions grounded in the positive-psychology framework used gratitude or savoring exercises (Neumeier et al., 2017), and meta-analytic findings for hedonic well-being outcomes are encouraging (Donaldson et al., 2019).

Many organizations aim to improve employee health and well-being through programs that address physical activity as a health-promoting behavior. Meta-analyses suggest that such programs can positively affect physical health (Díaz-Benito et al., 2020), as well as hedonic well-being (e.g., "quality of life"; Díaz-Benito et al., 2020, p. 248). In recent years, intervention programs addressing health behaviors have been increasingly offered online, with promising results (Nifadkar & Bhagavatula, 2021).

## 8.3 | Conclusion

Interventions can benefit employee health and well-being, with interventions directly targeting individual behavior generally being most effective. Intervention research reflects the general trend of studying a multitude of factors that

potentially influence health and well-being, with the trend of adding resource-building approaches to stress-reduction approaches.

## 9 | HEALTH AND WELL-BEING HAVING AN IMPACT ON WORK AND ORGANIZATIONAL LIFE

As presented earlier, health and well-being have typically been studied as outcomes of individual workplaces and behaviors, interpersonal and team aspects, and organizational leadership. However, the field has increasingly recognized the importance of health and well-being as causes of valued work outcomes. This perspective has arisen in part because of a pragmatic emphasis. Organizational stakeholders believe that health and well-being can help the “bottom-line” (Harter et al., 2010). Growing empirical and conceptual work supports this view, and an integrative consideration of health and well-being needs to examine this (Diener et al., 2020).

Several prominent theories present how health and well-being can promote work outcomes. As the name suggests, the broaden-and-build theory (Fredrickson, 2001) posits that positive emotions broaden the array of actions and thoughts that, over time, lead to the building of personal capacities and social resources. Complementing the broaden-and-build theory, a functionalist perspective within the health literature states that decrements in health impair people’s functions to perform their roles and responsibilities (World Health Organization, 2002). Beyond the individual, positive emotions enhance social functioning that helps to achieve goals and enhance motivation in others (Sels et al., 2021).

In our view, these general theories leverage the concept of health and well-being as emergent *resources* leading to positive work outcomes and contribute to the theoretical progress that has integrated the concept of resources into our understanding of health and well-being. Indeed, health and well-being can be construed as personal resources (Xanthopoulou et al., 2007) that mediate the relationship between job resources and valued work outcomes. Moreover, having better health and well-being can lead one to construe work and work characteristics more positively, for instance, via job crafting (Tims et al., 2013). In the following, we present evidence surrounding the positive effects of health and well-being on work outcomes focusing on perceived job characteristics, performance and productivity, creativity, and financial outcomes for organizations.

### 9.1 | Perceived job characteristics

Excessive job demands and/or low job resources create burnout and a lack of engagement (Demerouti et al., 2001). Yet, more recent research suggests that burnout can create negative perceptions of job characteristics. A longitudinal meta-analysis showed reciprocal effects between job characteristics and burnout, such that both job demands and resources were not only predictive of burnout but that burnout was also predictive of them (Lesener et al., 2019). Another longitudinal meta-analysis found that the effects of burnout were stronger on job stressors compared to the other way around (Guthrie et al., 2020); health and well-being may affect not only perceptions of job characteristics but also create scenarios where employees have worse jobs through unemployment or transfers, or higher workloads because of their accumulating work backlog.

### 9.2 | Performance and productivity

Having higher well-being can lead to higher job performance. Multiple reviews have shown a robust relation between job satisfaction and job performance (e.g., Judge et al., 2001), and a meta-analysis of longitudinal studies shows that greater job satisfaction predicted job performance downstream but not the other way around (Ricketta, 2008). Direct

causal evidence was demonstrated through experimental research showing that individuals induced by positive moods have higher levels of productivity, whereas naturalistic negative life events (e.g., bereavement and family illness) were associated with lower productivity (Oswald et al., 2015). Indeed, a meta-analysis on state-level affect and different components of performance also generally corroborated this (Shockley et al., 2012).

While psychological well-being appears to have stronger effects on job performance than physical well-being, both aspects' effects are robust (Ford et al., 2011). There is substantial work linking physical health to performance and productivity, particularly when viewed from the lens of absenteeism. In multiple countries, it has been estimated that poor health and personal illness are linked to billions of dollars lost in productivity (e.g., Davis et al., 2005). Primary research has estimated that workers with chronic diseases have absenteeism rates of more than six times those without chronic diseases (Fouad et al., 2017). Meta-analytic evidence has also revealed that physical illness is correlated to absenteeism in terms of frequency and time loss, and psychological illness may be an antecedent of physical illness (Darr & Johns, 2008).

### 9.3 | Creativity

Creativity is often viewed as foundational for organizational innovation and performance. Positive emotions facilitate creative decision-making and increase creative thinking (Ivcevic & Hoffmann, 2019). Meta-analysis further revealed that positive-activated emotions with an approach motivation (e.g., excited) rather than positive avoidance motivation (e.g., relaxed) were associated with creativity (Baas et al., 2008). Further, research from daily diary research of employees suggests that positive emotions can have effects on creativity downstream (Amabile, 1988).

While there is robust evidence surrounding positive emotions and creativity, and more broadly around psychological well-being (Liu et al., 2011) and creativity, the relation between physical health and creativity is less clear. Some evidence suggests that lower physical and mental health decreases creativity because of a decreased preference for complexity (Eisenman, 1990). There are a variety of perspectives, and the relationship is complex, as illness, disability, and suffering can lead to exceptional creative accomplishments. It may be dependent on how we define creativity—as exceptional accomplishments (potential negative relation) or as everyday adaptation (potential positive relation) (see Runco & Richards, 1997).

### 9.4 | Financial outcomes

More research is now showing that worker health and well-being may be directly related to a company's financial performance and outcomes. For example, longitudinal analyses of work perceptions (e.g., job satisfaction) were found to predict the financial performance of companies (e.g., revenue, percent profit) (Harter et al., 2010) rather than the other way around. A recent meta-analysis also found that employee satisfaction was positively associated with organizational profitability (Krekel et al., 2019).

Fascinatingly, several studies also point to how organizations that invest more in worker health and well-being have better stock performance. This has been observed in stock price compared to the S&P 500, higher dividend yields, and better price-to-equity ratio (e.g., Goetzel et al., 2016). Stock market performance was better, too, for companies that receive awards for their health and safety programs (Fabius et al., 2013). Part of the reason may be that expenditures on wellness programs substantially reduce health-related costs and enhance profitability. For example, a meta-analysis estimated that medical costs fall by \$3.27 for every dollar spent on wellness programs; and absenteeism costs fall by \$2.73 for every dollar spent (Baicker et al., 2010). Such research is tantalizingly suggestive of the potential effects on worker health and well-being.

## 10 | EMERGING TOPICS

The changing nature of work has led to new issues to consider in worker health and well-being. Not exhaustively, we discuss some areas of growing interest in the field. These topics are partly stimulated by external factors (e.g., COVID-19 pandemic) and partly reflect an increased interest in the underlying processes that contribute to health and well-being—as opposed to surface-level associations between job and individual factors that relate to health and well-being.

### 10.1 | Emerging topic 1: Job-related health and well-being during the COVID-19 pandemic

A dramatic new factor that affected job-related well-being was the outbreak of the COVID-19 pandemic that invoked changes to employees' life, and, consequently, to their job-related health and well-being (Rudolph et al., 2021). Almost immediately, researchers made use of advanced methodological approaches (e.g., experience sampling methods, longitudinal studies) to start investigating well-being in the rapidly changing world of the pandemic.

Surveys comparing the same people's well-being before and after the pandemic outbreak showed a decrease in hedonic well-being and an increase in depressive symptoms (Wanberg et al., 2020). Also, the change in the pandemic situation around the world was found to be related to changes in hedonic well-being and mental health (Lin et al., 2021). More specifically, one major issue that was highlighted during the pandemic is work family-conflict and boundary violations between work and home. Many employees had to work primarily from home during lockdowns, often involving childcare and other family obligations while working. This new reality resulted in employee well-being costs (Allen et al., 2021; Kerman et al., 2022). Moreover, technology-related challenges emerged, affecting employee well-being. Intensive use of video-conference tools, for example, was found to predict lower hedonic well-being ("Zoom fatigue"; Bennett et al., 2021). On the brighter side, job and personal resources during the pandemic were identified. Social support at work and autonomy during the pandemic was related to challenge perceptions, which might reflect eudaimonic well-being (Wang et al., 2020). These resources were also related to specific well-being indicators such as life satisfaction (Wang et al., 2020).

Even when experiencing an explicit threat to well-being, such as losing one's job during the pandemic, employees gained recovery times which reduced somatic symptoms (Grandey et al., 2021). Also, other threatening situations (e.g., "code blue" for nurses) were found to predict eudaimonic well-being (e.g., occupational calling; Zhu et al., 2021). Overall, findings from the pandemic time highlight that employees can be active agents with some control over their well-being even in times of global crisis.

### 10.2 | Emerging topic 2: Technology and constant connectivity to work

The growing use of technology for work tasks and communication has led to substantial changes that impact health and well-being. There is a significant opportunity for researchers to better understand the double-edged nature of technology. Charting out the implications of a digital workforce, Colbert, Yee, et al. (2016) note how it can create greater normative workplace demands and blur the lines between work and non-work. Higher normative workloads—due to expectations in productivity, response immediacy, and availability not constrained by location (Colbert, Yee, et al., 2016)—may have downstream consequences for employee health and well-being.

In addition, constant connectivity can also negatively impact health and well-being, as recovery and psychological detachment are vital for maintaining well-being and work engagement (Sonnentag et al., 2022). More research needs to examine the interface between work-nonwork and how it is impacted by technology availability and use. This

issue is complex (Ren et al., 2021) and requires a consideration of multiple perspectives and the multiplicity of factors, including work processes, recovery, and boundary management.

The increasing reliance on technology for workplace communication can enable greater convenience and flexibility. For instance, on the one hand, polls show that remote work is not only growing, but such flexibility is increasingly attractive and promotes worker engagement (Hickman & Robison, 2020). Moreover, technology-based communication can broaden social capital (i.e., online networks) and foster well-being (Magsamen-Conrad et al., 2014). On the other hand, technology-mediated communication can decrease sociability (e.g., face-to-face interactions) and reduce workplace social relations and support, trust, and culture-building, which can negatively impact well-being by increasing loneliness (Wang et al., 2021). There is a need to develop programmatic research around the types of technology-mediated communication tools (e.g., emails, video calls, messaging) and their impact on well-being.

### 10.3 | Emerging topic 3: Micro-Interventions

Nudge theory proposes that people may positively change daily behavioral choices about health and well-being through “choice architecture” that subtly guides human decisions (Thaler & Sunstein, 2009). With the increased availability of technology-enabled methods, nudges such as reminders can be implemented through smartphone apps. Extending experience sampling research, these ecological momentary interventions (EMIs) have some levels of effectiveness in improving hedonic well-being (e.g., lowering depression and anxiety; Schueller et al., 2017). A meta-analysis has shown that EMIs had small to moderate effects on hedonic and eudaimonic outcomes (Versluis et al., 2016).

Organizational research has begun to adopt these methods and perspectives to design EMIs. For example, micro-interventions help leaders reduce depletion and enhance work engagement and meaning through a brief positive self-reflection (Lanaj et al., 2019) or the activation of a self-compassionate mindset (Jennings et al., 2022) in the morning. Indeed, a recent special issue on “positive psychology interventions in organizations” covers innovative EMIs implemented through smartphone apps and daily surveys to improve hedonic and eudemonic well-being (Woerkom et al., 2021). As both researchers and practitioners seek to use EMIs, the way EMIs are implemented (e.g., app design, incentives, privacy, and timing of nudges) may be as important as the intervention content itself. More research will need to investigate the moderating impact of these implementation factors (Shim et al., 2022).

### 10.4 | Emerging topic 4: Dynamic approaches to health and well-being

During the last decades, organizational scholars became increasingly aware that research should pay more attention to dynamic aspects of health and well-being both with respect to intraindividual fluctuations and intraindividual change (Sonnentag, 2015; Xanthopoulou et al., 2020). Fluctuation in health and well-being refers to within-person variability in health symptoms and well-being that can occur within relatively short-term periods such as days or weeks. Research has shown that around 50% of the total variance in stress and well-being measures can be attributed to within-person fluctuation (Podsakoff et al., 2019), implying that within-person variability is substantial. An increasing number of day-level studies identified fluctuating predictors and outcomes of dynamism in health and well-being. For instance, researchers have examined how daily fluctuations in pain predict daily fluctuation in withdrawal behavior at work (Christian et al., 2015) and how daily fluctuating mistrust at work predicts daily fluctuation in emotional exhaustion (Lanaj et al., 2018). Interestingly, people differ in the degree to which their well-being fluctuates. For instance, research on emotional inertia has shown that individuals differ in their ability to overcome negative emotional states and that being exhausted makes it more likely to remain in inert negative emotional states (Alessandri et al., 2021).

Whereas fluctuations in health and well-being refer to a relatively short-term variability, change refers to longer-term increases or decreases in health symptoms and well-being. Empirical research typically examines processes over

time intervals of one to several years (Ford et al., 2014). While earlier research mainly examined if changes in health and well-being are happening and if changes can be attributed to an individual's work situation (Zapf et al., 1996), more recently, researchers addressed the question of how long it takes for these change processes to unfold (Dormann & Griffin, 2015). This approach has already been applied to meta-analyses on job stressors and well-being (Ford et al., 2014; Guthrie et al., 2020). Exciting developments in statistical analysis (e.g., continuous-time meta-analysis, Dormann et al., 2020) make it possible to expand this critical line of research.

## 11 | ISSUES RELATED TO DIVERSITY AND INCLUSION IN ORGANIZATIONS AND WELL-BEING

Topics related to diversity and inclusion of different demographic groups within organizations flourished during the past 25 years (Shore et al., 2011). Acknowledging that diversity and inclusion have the potential to influence health and well-being, we will review some of the existing conceptual views and notable findings.

Different demographics (e.g., gender, age) and different sub-factors within this research (e.g., women-specific health issues) represent a multiplicity of factors affecting job-related health and well-being. Research on gender and well-being suggests that women and men may have unique health and well-being issues (Purvanova & Muros, 2010). A recent stream of research discusses issues pertaining to women. Studies focus, for example, on women going to work when suffering from pain related to monthly menstruation (Motro et al., 2019). And the three Ms (menstruation, maternity, and menopausal processes; Grandey et al., 2020) are described as factors related to lower hedonic well-being. Research also looked at women workers as active agents influencing their own health and well-being. Holding and being committed to multiple roles at work and home was positively related to hedonic and eudaimonic well-being (i.e., life satisfaction and self-acceptance; Ruderman et al., 2002). Moreover, when embracing a growth mindset, women dealt better with challenges related to gender bias, and their well-being was improved (Rattan & Dweck, 2018).

Moving beyond binary gender, job-related well-being of sexual and gender minorities receives increasing research attention. Sexual and gender minorities seem at risk of lower hedonic well-being (e.g., job satisfaction), perhaps because of unique stress factors at work and in the work-family interface (Murphy et al., 2021). However, supportive practices in organizations, for example, when members of the majority are willing to take risks to support minority employees (i.e., by showing "oppositional courage"), promote hedonic well-being (Thoroughgood et al., 2021).

Research on well-being of older workers, including meta-analytic evidence, showed that although older employees might be at risk of health problems, age is positively related to several hedonic well-being outcomes (Li et al., 2021; Ng & Feldman, 2010; Truxillo et al., 2015). Most likely, various mechanisms (e.g., physical vulnerabilities, emotion regulation; Zacher & Rudolph, 2022) lead to the interesting pattern of declining physical health and stable or even increasing well-being (Beier et al., 2022). Also, a country's health system and country-level labor-market participation of older workers may contribute to this complex phenomenon (Shao et al., 2022).

Focusing on employees identifying as racial or ethnic minorities, those employees are at risk of suffering from well-being costs, for example, because of perceived discrimination (Dhanani et al., 2018; Pascoe & Smart Richman, 2009). However, organizations can take action to reduce this threat by creating a welcoming and respectful work environment for racial or ethnic minorities and providing diversity training for all employees (Lindsey et al., 2013). Further, members of racial or ethnic minorities can be empowered when facing discrimination, for example, by using active coping behaviors such as problem-solving (Triana et al., 2015).

When focusing on the inclusion of employees with disabilities, research about well-being is relatively scarce in I-O psychology and organizational behavior. However, it appears that being part of the workforce itself can be a source of eudaimonic well-being for people with disabilities. The reason might be that people attach significance to having a job and taking an active part in society (Bonaccio et al., 2020), highlighting the importance of inclusion.

In general, substantial research remains to be done with different less represented and minority groups to understand and assess if the effects and mechanisms are generalizable from past research primarily focused on majority group workers. Moreover, additional critical issues of discrimination, prejudice, and bias that have been less considered in the past will need to be integrated (Hebl et al., 2020), along with lived experiences and concepts that have not been incorporated (e.g., Grandey et al., 2020).

## 12 | CROSS-CULTURAL AND INTERNATIONAL ISSUES

As with much behavioral research, the bulk of findings reviewed has primarily focused on samples and theories emerging from Western, Educated, Industrialized, Rich, and Democratic (WEIRD) countries (Henrich et al., 2010). There is recognition that a more global and inclusive perspective on health and well-being at work is needed. Indeed, the United Nations Sustainable Development Goals (2022) emphasize health and well-being through decent work and productive employment across the globe. The recent COVID-19 pandemic has revealed disparate effects on work stress across different world regions (The Gallup Organization, 2021), highlighting a need for a deeper understanding of the contexts and cultures that undergird worker health and well-being.

It is vital to determine if the concepts of health and well-being are generalizable across different cultures in the first place. Recent research on multiple aspects of psychological well-being shows generalizability, although for some specific dimensions generalizability may be low (Wiese et al., 2018). Beyond that, norms and values asserted within a culture can impact the degree work factors influence well-being, such as income and status (Tay et al., 2018). Cultural norms in low-income countries (LICs) can also create well-being inequalities among workers, such as favoritism toward men (Jayachandran, 2015). Research shows that culture can exert subtle effects and that cultural extremes emphasizing freedom and autonomy or security and constraint reduce both psychological and physical national well-being (Harrington et al., 2015).

Moving from broader culture to work contexts, there are areas pertinent to LICs that impact worker health and well-being. Critically, occupational health and safety legislation and regulations are lacking in many LICs, leading to a lack of worker protections (Chirico et al., 2019). Moreover, WHO notes that such countries often do not have effective minimum wage laws and little job security (Barton, 2010). Therefore, there is a need for stronger worker advocacy in many LIC countries.

## 13 | LIMITATIONS OF PAST RESEARCH AND DIRECTIONS FOR FUTURE RESEARCH

Research reviewed in this article provided insights into how work is related to health and well-being. Despite the accumulated knowledge, there are still significant limitations in understanding health and well-being in the work context. Here, we discuss five areas where future research is needed to address prior gaps (Table 3).

### 13.1 | Research expanding and integrating components of health and well-being

A substantial amount of work reviewed on well-being has focused on the hedonic rather than the eudaimonic component of well-being, which is a substantial limitation in present well-being research. We propose that more research will need to examine how job factors affect experienced meaningfulness with longitudinal and experience-sampling methodologies. Further, recent research on well-being points to the concept of psychological richness as an important dimension beyond hedonic and eudaimonic well-being (Oishi & Westgate, 2022). The idea is that well-being also includes complex and varied experiences. More research is needed to examine the concept of psychological richness within organizational research and its relation to other well-being components.



**TABLE 3** Directions for future research

Area for future research	Suggested research questions
Components of health and well-being	<ul style="list-style-type: none"> <li>• What predicts eudaimonic well-being longitudinally and at the day level?</li> <li>• What contributes to the experience of psychological richness?</li> <li>• How are health, hedonic well-being, eudaimonic well-being, and psychological richness related and how do they interact?</li> </ul>
Individuals as active agents influencing their well-being and work	<ul style="list-style-type: none"> <li>• What are the processes by which individual well-being influences work situations?</li> <li>• Are proactive processes at work (e.g., job crafting) contagious within teams?</li> </ul>
Dynamic, temporally embedded processes	<ul style="list-style-type: none"> <li>• How do short-term health and well-being responses to job stressors or job resources develop into long-term changes in health and well-being?</li> <li>• How do anticipating and experiencing work situations interact and affect health and well-being states over time?</li> </ul>
Health and well-being as team and organizational phenomena	<ul style="list-style-type: none"> <li>• How can health and well-being at the team and organizational level be conceptualized and measured?</li> <li>• How to model bottom-up and top-down processes of health and well-being dynamics at different organizational levels?</li> </ul>
Contextualized and global perspective on work, health, and well-being	<ul style="list-style-type: none"> <li>• How to integrate macro-level research on societal and economic conditions into a psychological perspective focusing on individuals and organizations?</li> <li>• How can health and well-being interventions be designed and implemented in contexts with scarce resources?</li> </ul>

In addition, while there have been advancements in the types of methods used in terms of longitudinal designs and meta-analyses, these methods often do not focus on the interplay between the various health and well-being components. It is possible that these components may not always be positively related. For instance, work may be meaningful, but working conditions may be poor and do not contribute to hedonic well-being, particularly in jobs described as “dirty work” (Sharma et al., 2022). Moreover, we need to better understand if these different aspects of health and well-being contribute in additive (i.e., independent effects) or multiplicative (i.e., uniquely interact) ways to work outcomes.

### 13.2 | Research on individuals as active agents

Past organizational research on health and well-being has been dominated by a focus on how job conditions affect the individual. However, individuals are not passive victims of the workplace and organizational conditions affecting them but are active agents who can influence their thoughts, feelings, and behaviors, and often also the environment. Although research on proactive coping (Aspinwall & Taylor, 1997) and job crafting (Wrzesniewski & Dutton, 2001), for instance, has highlighted this human potential and although progress has been made during the past 25 years, we need more systematic, theory-driven research in this area. We need more fully developed theoretical accounts that describe the processes by which present strain levels impact future resources and stressors, such as perceptual processes, resource and stressor creation, and drift processes. Importantly, this research must meet high methodological standards and avoid the limitations of past research, such as cross-sectional designs, to infer causality and reverse causation within the stressor-strain framework, namely when examining how strain might influence future stressor levels (Guthrie et al., 2020). Behavioral measures will be needed beyond self-report measures to distinguish between behaviors and mindsets.

### 13.3 | Research on dynamic, temporally embedded processes

For a long time, most organizational studies have looked at health and well-being from an atemporal perspective. During the past decades, research has made progress in examining within-person fluctuations and longer-term changes in well-being. However, many questions about temporal factors are still unanswered. Future research will need to address how long it takes until unfavorable job conditions develop into impairments of health and well-being and how long it takes to restore health and well-being that might have been negatively affected by previous unfavorable conditions. It would also be helpful to know how short-term response patterns to unfavorable conditions develop into impairments of health and well-being over longer periods of time.

Related to this temporal aspect, research has traditionally examined work events and experiences that have already happened. Increasing evidence, however, suggests that also the anticipation of events and experiences can have an impact on well-being (Rosen et al., 2020) and that well-being states may influence anticipation processes (Casper & Wehrt, 2022). Accordingly, future studies will need to investigate the joint impact of anticipated and experienced workplace factors on health and well-being, along with potential reverse effects.

### 13.4 | Research about health and well-being as team and organizational phenomena

One limitation of current research is the focus on individual health and well-being. Future research needs to move toward a multilevel conception, where interpersonal, team, and organizational health and well-being are rigorously conceived and assessed. One direction is to better understand if the constructs at the individual level hold at higher levels of analysis (Tay et al., 2014). For instance, assessing if the hedonic and eudaimonic components of well-being (i.e., happiness, meaning) hold across organizational levels and whether they have similar relations to outcomes, even beyond individual well-being. In addition, more research needs to understand how other perceptions of well-being within a team or organization relate to self-perceptions of well-being and its distinct potential impact on outcomes.

Another direction is to move beyond a simple aggregation for indexing higher-level well-being. Barsade and Knight (2015) pioneered research on group affect, advocating for the use of unique collective-level constructs such as affective convergence (i.e., affect shared in common) and affective diversity (i.e., configuration of affect not shared). We encourage the exploration of well-being distributions (e.g., skewness, outliers) within a collective unit as it may have a substantive impact due to perceptions of inequality or role-modeling of well-being (or ill-being) by outliers.

### 13.5 | Research taking a more contextualized and global perspective

Most psychological research on job-related health and well-being only comes from a few world regions. Although this research is obviously limited in cultural and geographical scope, it is often presented as being relatively context-free, ignoring the broader societal and economic conditions in which individuals live and organizations operate. Of course, there have been notable exceptions in the past (Rattrie et al., 2020; Robbins et al., 2012). However, as the COVID-19 pandemic has shown and as ongoing political and economic turbulences demonstrate, health and well-being at work cannot be fully understood when neglecting the broader societal and economic context. We need to recognize the limited contexts when making claims. Moreover, more resources need to be invested in research on job-related health and well-being in low-income countries (McWha-Hermann et al., 2015).

**TABLE 4** Practical implications to foster health and well-being

General approach	Exemplary actions
Design workplaces that promote and protect well-being	<ul style="list-style-type: none"> <li>• Increase job control</li> <li>• Provide feedback and social support</li> <li>• Provide opportunities for learning and development</li> <li>• Encourage social identification with a team</li> <li>• Provide leadership training that encourage positive leadership behaviors</li> <li>• Build inclusive and diversity-sensitive workplaces</li> </ul>
Design workplaces that minimize threats to well-being	<ul style="list-style-type: none"> <li>• Reduce hindrance demands, for instance by increasing reliability of technology and by increasing role clarity</li> <li>• Keep challenge demands manageable</li> <li>• Reduce incivility and harassment, for instance by establishing explicit norms for respectful behavior and by sanctioning disrespectful behavior</li> <li>• Strive for occupational health and safety legislation, minimum wage laws, and job security in all countries</li> </ul>
Encourage individuals to be active agents managing their own health and well-being	<ul style="list-style-type: none"> <li>• Stimulate job crafting, particularly approach-focused crafting</li> <li>• Encourage prosocial behaviors that increase well-being, for instance helping others—without increasing citizenship pressure</li> <li>• Encourage mindfulness and be aware of the negative impact of surface acting</li> <li>• Support off-job recovery and a healthy lifestyle (physical exercise, healthy eating, good sleep)</li> <li>• Encourage boundary setting between work and non-work life, particularly for employees who prefer to separate work from non-work life</li> </ul>

## 14 | PRACTICAL IMPLICATIONS FOR ORGANIZATIONS

Research evidence indicates several areas for practical implications (Table 4). First, organizations should actively engage in promoting employee health and well-being. Importantly, they should prioritize changing *themselves* over trying to change their employees. These organizational practices should be based on accurate needs identification, driven by theoretical and empirical knowledge (Nielsen et al., 2017). Organizations can design work to provide employees control, adequate feedback, and social support (Parker & Jorritsma, 2021), positively affecting employees' hedonic well-being. These features are also related to eudaimonic well-being and psychological richness because they promote learning and development and can foster challenge and enrichment (Parker, 2014). Optimally, organizations can “design jobs in a way that prevents the emergence of strain-inducing demands in the first place” (Parker, 2014, p. 679). However, also when facing unavoidable stressors, organizations can manage demands (e.g., workload; Parker & Jorritsma, 2021) and provide resources (Nielsen et al., 2017) to protect employee well-being.

Overall, active organizational actions to enhance, protect, and maintain employee well-being have good potential to yield positive outcomes for organizations (e.g., enhanced performance; Ford et al., 2011). In an era of “great resignation” (Sull et al., 2022) and an increasing need to attract talented employees, maintaining and protecting health and well-being is a critical factor for organizational sustainability.

Second, in addition to these consequences driven by organizational initiatives, employees can be active agents influencing their own well-being. Employees may want to explore how they want to work and then adjust their work situation accordingly—within the constraints of what is feasible within an organization. For instance, they may engage in job crafting by creating resources and by bringing more meaning into their daily work (de Bloom et al., 2020). Of course, organizations need to be open to their employees' crafting behaviors.

While job crafting refers to how employees do their work, employees may enact additional strategies that help to promote health and well-being. For instance, employees may engage in helping others at work (Glomb et al., 2011), act mindfully (Bostock et al., 2019), and refrain from superficial emotion-regulation strategies (i.e., surface acting;

Hülshager & Schewe, 2011). In addition to these on-the-job behaviors, employees may want to protect and foster their health and well-being by embracing recovery during off-job time (Sonnentag et al., 2022) and by engaging in a healthy lifestyle that includes physical activities (Watkins & Umphress, 2020), healthy eating (Brookie et al., 2018), and sufficient sleep (Barnes & Watson, 2019). These suggestions, however, do not undermine the active role of organizations with respect to employee health and well-being. On the contrary, we believe that organizations should be mindful, responsible, and active in protecting and promoting the health and well-being of their employees.

## CONFLICT OF INTEREST

The authors do not have any conflict of interest to disclose.

## DATA AVAILABILITY STATEMENT

Does not apply as this is a review article.

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## ENDNOTES

<sup>1</sup> Although affective-events was introduced a bit earlier, it highlighted a new perspective on employee health and well-being that became largely influential during the past 25 years.

<sup>2</sup> We base our review on literature search in PsycInfo and Google Scholar, using ((well-being OR health OR strain OR burnout OR exhaustion OR satisfaction OR hedonic OR eudaimonic OR meaning) AND (job OR work OR employ\* OR organization\* OR occupation\*)) as key research term.

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