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Towards a multilevel approach of employee well-being

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In this commentary, I respond to Ilies, Aw & Pluut's (Intraindividual models of employee well-being: What have we learned and where do we go from here?, *European Journal of Work and Organizational Psychology*, in press) call for a theory that distinguishes between traits and states of employee well-being. I use Job Demands–Resources theory to illustrate how we may integrate within- and between-person approaches and findings to design an overall multilevel model of employee well-being. My perspective builds on Ilies et al. and recent findings of research combining relatively stable “traits” with fluctuating states of employee well-being. My goals with this commentary are three-fold: (1) give more insight into possible differences between variables at different levels of analysis; (2) use research to show how trait and state levels of (predictors of) employee well-being may interact; (3) propose a multilevel model that may stimulate future research on the topic.

Keywords: affective events; diary studies; employee well-being; job demands–resources theory; work engagement.

Employee well-being is one of the most popular research areas among organizational psychologists. Well-being markers such as job satisfaction, burnout, work engagement, and positive/negative affect have been studied for several decades—either as outcome variables, or as important mediators between working conditions/personality and job performance. The article of Ilies and colleagues published in this issue of the *European Journal of Work and Organizational Psychology* is an inspiring contribution to this research area. It is a timely call for theories and research that distinguish between traits and states of employee well-being. Ilies, Aw & Pluut (in press) argue that the vast majority of research has examined between-individual differences in employee well-being, although such research is limiting because it ignores within-individual variation in well-being states.

The article has a lot of positives. The authors did an excellent job in discussing important theories of employee well-being and summarizing core findings from past research. Moreover, the authors present some stimulating new ideas for future research. I particularly liked the proposed analogy between allostatic load and organizational psychological processes. In addition, I was very much inspired by the elegant idea of testing accumulation effects over the course of days by using load effects of the previous day as a moderator of the link between next day job demands and well-being. The article stimulates multilevel thinking, and inspires

researchers to integrate theories addressing state and general well-being (e.g., Affective Events, Job Demands–Resources, and Allostatic Load theories).

I agree with Ilies and his colleagues that studies of intraindividual change add great value to understanding well-being and its causes and consequences. In this commentary, I will use Job Demands–Resources theory to illustrate how we may integrate within- and between-person approaches and findings to design an overall multilevel model of employee well-being. My perspective builds on Ilies et al.'s position paper and recent findings of research combining relatively stable “traits” with fluctuating states of employee well-being. My goals with this commentary are three-fold: (1) give more insight into possible differences between variables at different levels of analysis; (2) use research to show how trait and state levels of (predictors of) employee well-being may interact; (3) propose a multilevel model that may stimulate future research on the topic.

JOB DEMANDS–RESOURCES THEORY

According to Job Demands–Resources (JD-R) theory (Bakker & Demerouti, 2014; Demerouti & Bakker, 2011), employee well-being is a function of the work environment, which has stable but also malleable elements. The work environment of all types of organizations (e.g., small vs. large, public vs. private, white-

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collar vs. blue-collar, national vs. international) can be characterized using two categories of job characteristics, namely job demands and job resources. Job demands are aspects of the job that require considerable energy. These demands can either be challenging (e.g., workload, complex tasks), or they may be hindering and obstruct the attainment of organizational goals (e.g., bureaucracy and role ambiguity; LePine, Podsakoff, & LePine, 2005). In contrast, job resources are aspects of the job that have motivational potential, help to reach organizational goals, and can be used to deal with job demands (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Examples of job resources are autonomy, opportunities for growth, and performance feedback.

JD-R theory proposes that job demands are most likely to result in strain and reduced performance, whereas job resources are most likely to result in work engagement and excellent performance. Job demands require the investment of energetic resources, and can be straining, particularly when the pool of available job resources is limited. In contrast, when there is an abundance of job resources available, the impact of job demands on strain is buffered. Moreover, JD-R theory argues that when there are sufficient job resources available, job demands may boost employee work engagement and performance. The reason is that employees experience such working conditions as challenging and meaningful, which satisfies their need for competence. Research of the past decade has provided evidence for these main and interaction effects of job demands and resources at the trait and state levels of analyses (Bakker, 2014; Bakker, Demerouti, & Sanz-Vergel, 2014; Tadic, Bakker, & Oerlemans, *in press*). This means that the processes proposed by JD-R theory act at the general between-person level, but also at the daily or weekly within-person level.

Research within the JD-R framework has shown that job demands and resources have stable properties, but are also malleable. Working conditions can be influenced in a top-down way by management, for example when leaders set goals and provide job resources to their followers (e.g., Breevaart et al., 2014). Importantly, JD-R theory proposes that employees can also proactively modify the working environment themselves. This bottom-up behaviour is called job crafting, and refers to employee efforts to change the content of their work and their relationships at work (Wrzesniewski, Loughlin, Dutton, & Berg, 2013).

Using JD-R theory, we have conceptualized job crafting as proactive attempts to optimize job demands and job resources. By participating in challenging new projects, and by proactively asking for feedback and support, employees can optimize the fit between their needs and abilities and the job itself. Our research has shown that job crafting facilitates employee well-being, namely work engagement, job satisfaction, and reduced job burnout (Tims, Bakker, & Derks, 2013). Again, the

evidence shows that these effects hold across levels—favourable effects of job crafting have been observed at the between- and within-person level (Demerouti, 2014).

Recently, we have argued that whereas engaged employees are motivated to stay engaged, and therefore show job crafting behaviour in the form of increasing their job resources and challenges; exhausted employees who are stressed by their work are likely to show self-undermining behaviour (e.g., make mistakes, cause conflicts). This self-undermining contributes to a further increase in job demands, producing a loss cycle of demands (Bakker & Costa, 2014). Thus, in addition to a gain cycle of job resources, work engagement, and job crafting, JD-R theory also proposes a loss cycle of job demands, exhaustion, and self-undermining. The readers are referred to our recent articles about JD-R theory for more details, and for the role of personal resources (Bakker & Demerouti, 2014; Bakker et al., 2014).

BUILDING STONES OF A MULTILEVEL MODEL OF EMPLOYEE WELL-BEING

Our Job Demands–Resources theory can be used to illustrate how we may integrate within- and between-person approaches and findings to design an overall multilevel model of employee well-being. As can be seen in the lower part of Figure 1, all JD-R variables are now modelled at the lowest, within-person level. We expect the JD-R relationships to hold at the momentary, daily, and weekly level. Thus, it is expected that exhaustion and work engagement will fluctuate from day to day, depending on job demands and resources, which also depends on what employees do from day to day (their job crafting or self-undermining behaviours; Bakker, 2014; Bakker & Costa, 2014; Demerouti, 2014). The multilevel version of the JD-R model includes all variables of the original JD-R model, but adds three important features. The multilevel model: (1) differentiates between state and trait variables, (2) integrates personality in the model, and (3) outlines how trait and state variables interact.

A first important feature of the multilevel model of employee well-being (see Figure 1) is the phenomenological difference between traits and states. Phenomenology is a compound word that combines the Greek word *phainómenon* (“that which appears”) with the word *lógos* (“study”), and it refers to the study of the structures of experience. Let’s compare state and trait negative affect. Whereas negative affect (e.g., anger, disgust) during a short episode of 10 minutes may be very similar to an emotion that is functional in guiding our behaviour and that quickly disappears, persistent negative affect may be more trait-like and have lasting negative consequences. In a similar vein, whereas a high workload may be challenging when it lasts for one or two days, workload may become stressful when it is

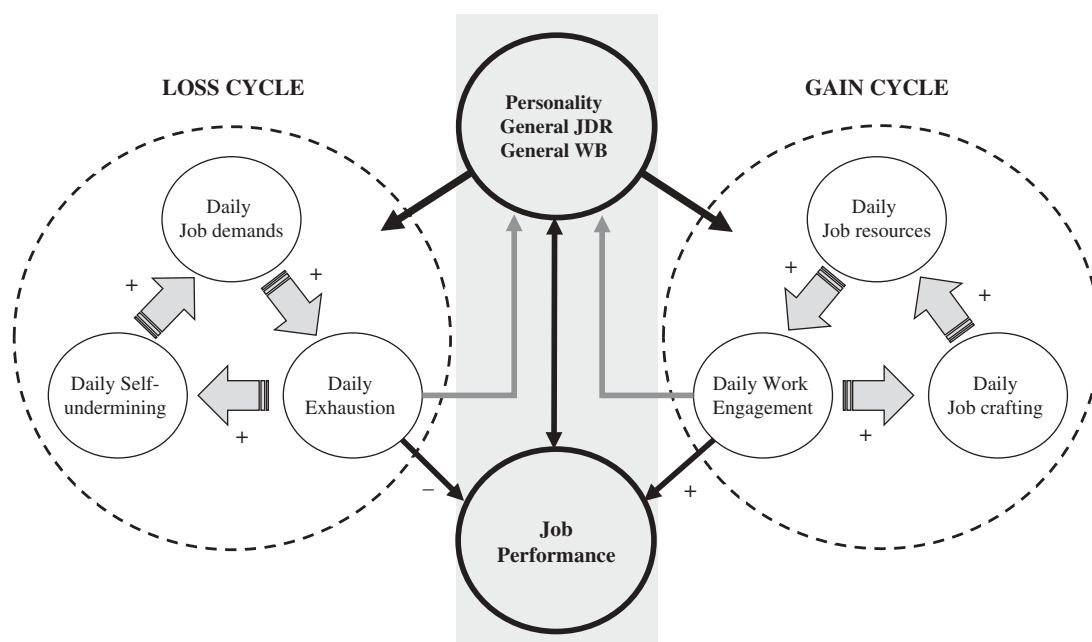


Figure 1. Multilevel model of employee well-being.
 Note: JDR = Job Demands and Resources; WB = Well-Being.

chronic and employees need to invest extremely high effort in their work for longer periods of time. As a final example, trait work engagement is different from state work engagement, because the momentary enthusiasm and vigour that is indicative of daily engagement may disappear once daily triggers of daily engagement disappear (e.g., the support and enthusiasm of colleagues; Bakker, 2014). In addition, as argued by Ilies and his colleagues (*in press*), employees who are generally engaged may also have their off-days, during which they are tired and cynical.

Second, in the multilevel model of employee well-being (Figure 1), personality is a higher-order variable that influences what job demands and resources employees select or mobilize from day to day. Personality refers to characteristic, enduring patterns of thought, emotion, and behaviour that are expressed in a variety of situations (Costa & McCrae, 1989). Although personality is stable over time, a meta-analysis of behavioural genetic studies shows that personality characteristics can change as a function of the environment (Briley & Tucker-Drob, 2014). The five-factor model of personality can be used to describe the most salient aspects of personality: Openness, Conscientiousness, Extraversion, Agreeableness, and Emotional Stability; Costa & McCrae, 1989). Those with a high score on these five factors have a favourable personality that relates positively to employee well-being and job performance (Steel, Schmidt, & Shultz, 2008). The explanation for this provided by personality researchers is that employees with a favourable personality use their

stable traits (e.g., extraversion) to deal with all types of (changing) circumstances (e.g., demanding clients that come and go). In the multilevel model of employee well-being proposed in the current article, this person \times environment moderation effect is explicitly modelled.

For instance, it can be expected that extraverted (vs. introverted) individuals who find interpersonal relationships more rewarding, are better able to mobilize social support from colleagues. This increases their job resources, and reduces their job demands (e.g., the workload). In addition, it can be argued that personality moderates the impact of daily job demands and resources on well-being. In their day reconstruction study, Oerlemans and Bakker (2014) found that individuals who scored high (vs. low) on Extraversion were happiest on days they spent considerable time on paid work activities or on athletic activities, particularly when they carried out these activities with other people.

In a similar vein, using event and day reconstruction studies, Debusscher, Hofmans, and De Fruyt (2014) showed that trait Neuroticism (i.e., low Emotional Stability) moderated the relationship between momentary job demands (i.e., work pressure and task complexity) and state neuroticism. Momentary job demands were particularly positively related to state neuroticism when trait Neuroticism was high (vs. low). Put differently, trait Emotional Stability (low Neuroticism) buffered the impact of momentary job demands on momentary strain. Zhou, Yan, Che, and Meier (2015) found comparable results. They showed that daily workplace incivility experience was predictive of end-of-work negative

affect, but only for employees who were low (vs. high) in trait Emotional Stability and for employees with external (vs. internal) Locus of control.

Third, the model in Figure 1 builds on the sensitization effects described by Ilies et al. (in press), and proposes that general working conditions and well-being can also moderate the impact of daily job demands and resources on daily well-being. These propositions are consistent with two central tenets of conservation of resources (COR) theory. Hobfoll (2002) has argued that resource loss can trigger a “loss spiral”, whereas resource gain can trigger a “gain spiral”. Thus, consistent exposure to enduring high job demands may exacerbate the impact of daily job demands on exhaustion because accumulated job demands will increase the likelihood that all energetic resources available on a certain day are depleted (cf. Van Woerkom, Bakker, & Nishii, in press). In contrast, gaining resources increases the resource pool, which makes it more likely that additional resources will subsequently be acquired. This means that when people have access to an abundance of structural, enduring job resources, the impact of daily job resources on work engagement will be more strongly positive.

Some recent studies have provided evidence for a moderator effect of general well-being on the relationship between state job demands and state well-being. For example, Bakker and Oerlemans (2015) combined global measures with specific, experience-based measures to investigate how enduring job burnout and engagement influence the impact of daily work activities on momentary need satisfaction and happiness. Using work engagement and self-determination theories, they hypothesized and found that time spent on various activities (core work tasks, administrative work tasks, client interactions, interactions with colleagues, and meetings) was negatively related to task-level need satisfaction for employees high (vs. low) in enduring burnout; and positively related to need satisfaction for employees high (vs. low) in enduring work engagement. Task-level need satisfaction was subsequently predictive of happiness during the task. These cross-level interaction effects suggest that those with high levels of general burnout do not manage to satisfy their basic needs through their work, whereas those with high levels of general work engagement satisfy their needs and stay happy.

Finally, the research on affective events theory (AET; Weiss & Cropanzano, 1996) reviewed by Ilies et al. (in press) shows that an accumulated or aggregated score of momentary affect is predictive of general affect or job satisfaction (e.g., Weiss, Nicholas, & Daus, 1999). Taking AET and this evidence as a starting point, it can be argued that daily exhaustion and daily work engagement feed back to general well-being (see Figure 1; see also Bakker & Costa, 2014). Repeated exposure to daily job demands will result in high levels of aggregated daily exhaustion, which predicts chronic exhaustion. Repeated exposure to daily job resources will result in

high levels of aggregated daily engagement, which predicts general work engagement. These effects are also consistent with the allostatic load effects described by Ilies et al. (in press). Finally, as the authors of the position paper indicate, there is considerable evidence for a positive link between general well-being and job performance.

Future research should investigate the role of time in these processes, and find out how short-term experiences may accumulate and cause structural change. Additionally, as suggested by Ilies et al. (in press), scholars should also investigate whether high variability in intraindividual levels of job demands and resources (intraindividual process parameters) can explain interindividual differences in well-being (cf. Ilies, Huth, Ryan, & Dimotakis, in press).

CONCLUSION

In their lead article, Ilies and colleagues (in press) have argued that research on employee well-being needs a multilevel approach, in which researchers differentiate between general and daily levels of well-being and try to connect both levels. They offer several inspiring ideas for future research that can guide the field for the next decade. It is very exciting to investigate how phenomena act differently at different levels, and to find out how phenomena at different levels influence each other and interact. The multilevel version of the JD-R model presented in this article may help in organizing this research. It integrates principles from AET and JD-R theory, and builds on Ilies et al. to propose several specific hypotheses. Hopefully, the position paper and the commentaries will contribute to further development of this interesting and important research area of employee well-being.

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