Being mindful at work and at home

Citation for published version (APA):

Haun, V. C., Nübold, A., & Rigotti, T. (2020). Being mindful at work and at home: A diary study on predictors and consequences of domain-specific mindfulness. *Journal of Occupational Health Psychology*, 25(5), 315-329. <https://doi.org/10.1037/ocp0000263>

Document status and date:

Published: 01/10/2020

DOI:

[10.1037/ocp0000263](https://doi.org/10.1037/ocp0000263)

Document Version:

Publisher's PDF, also known as Version of record

Document license:

Taverne

Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

www.umlib.nl/taverne-license

Take down policy

If you believe that this document breaches copyright please contact us at:

repository@maastrichtuniversity.nl

providing details and we will investigate your claim.

Being Mindful at Work and at Home: A Diary Study on Predictors and Consequences of Domain-Specific Mindfulness

Verena C. Haun

Johannes Gutenberg-University Mainz

Annika Nübold

Maastricht University

Thomas Rigotti

Johannes Gutenberg-University Mainz and Leibniz Institute for Resilience Research, Mainz, Germany

Although previous research on mindfulness predominantly focused on benefits of mindfulness, this study investigates quantitative and emotional demands as contextual antecedents of mindful awareness and acceptance both in the work and home domains. In addition, we examine goal attainment and satisfaction in the work and home domains as consequences of mindful awareness and acceptance. Results of a diary study across 5 workdays with 2 daily measurement occasions among 233 employees revealed that both in the work and home domains, quantitative demands were positively associated with awareness, but not with acceptance, whereas emotional demands were positively associated with acceptance, but not with awareness. Awareness and acceptance were both associated with increased goal attainment and satisfaction in both life domains. We did not find strong evidence for cross-domain relations between demands and mindfulness on the one hand and between mindfulness and goal attainment and satisfaction on the other hand. In sum, this study contributes to a more comprehensive understanding of mindfulness by shedding light on contextualized forms of mindfulness and considering both the awareness and acceptance facets of mindfulness and their contextual predictors and consequences.

Keywords: mindfulness, emotional demands, quantitative demands, goal attainment, satisfaction

Mindfulness—a state of nonjudgmental attentiveness and awareness of present-moment experiences (Bishop et al., 2004; Brown, Ryan, & Creswell, 2007)—has gained increasing attention in the past years, both in research and practice (Van Dam et al., 2018). Research on mindfulness has also surged in work and organizational contexts showing its beneficial effects for employee health and performance (Bartlett et al., 2019; Lomas, Medina, Ivtzan, Rupprecht, & Eiroa-Orosa, 2019; Mesmer-Magnus, Manapragada, Viswesvaran, & Allen, 2017). Mindfulness at work has been studied as a skill that can be trained through interventions (Hülshager, Feinholdt, & Nübold, 2015; Querstret, Cropley, & Fife-Schaw, 2017), as stable personality trait (Hülshager, Alberts, Feinholdt, & Lang, 2013), or as a momentary state (state or daily mindfulness; Haun, Nübold, & Bauer, 2018; Hülshager et al., 2013, 2014; Tuckey, Sonnentag, & Bryan, 2018).

Although initial findings suggest that individuals' capacity to be mindful may vary across situations (Suelmann, Brouwers, &

Snippe, 2018), the context in which mindfulness is experienced and enacted has been largely neglected. This is surprising, as it seems likely that employees may experience different levels of mindfulness in different life domains because the factors facilitating or hampering mindfulness may be different across contexts (Haun et al., 2018). For example, organizational factors (e.g., little job control) may hinder mindful working, and employees may have more autonomy to craft an environment that supports their mindfulness at home. A recent study by Haun et al. (2018) provided initial evidence for the merit of distinguishing context- or domain-specific forms of mindfulness (i.e., mindfulness in the work and in the home domain) by demonstrating their differential role in the stressor–detachment model. Knowledge about such differential effects is not only important for a better understanding of the nomological network of mindfulness but also for improving the prediction of important outcomes in these domains.

Furthermore, although prominent mindfulness theories suggest that mindfulness consists of both awareness (i.e., focused attention to internal and external present-moment experiences) and acceptance (i.e., nonjudgmental attitude) of one's experiences (Bishop et al., 2004), empirical research has largely operationalized mindfulness as unidimensional construct and mainly focused on the awareness facet of mindfulness, particularly when assessing state mindfulness in the workplace (Haun et al., 2018; Hülshager et al., 2013; Hülshager et al., 2014; Lawrie, Tuckey, & Dollard, 2018). Initial evidence suggests, however, that state mindfulness can be conceptualized as multidimensional construct (Blanke & Brose, 2017) in which different mindfulness facets play differential roles for atti-

Verena C. Haun, Institute of Psychology, Johannes Gutenberg-University Mainz; Annika Nübold, Faculty of Psychology and Neuroscience, Maastricht University; Thomas Rigotti, Institute of Psychology, Johannes Gutenberg-University Mainz, and Leibniz Institute for Resilience Research, Mainz, Germany.

We thank Elena Büdenbender, Zoé Kröckel, and Sabine Müller for their help during data collection.

Correspondence concerning this article should be addressed to Verena C. Haun, Institute of Psychology, Johannes Gutenberg-University Mainz, Wallstraße 3, 55122 Mainz, Germany. E-mail: verena.haun@uni-mainz.de

tudes and behaviors and also have differential predictors (Suelmann et al., 2018). Shedding further light onto the differential roles of awareness and acceptance for individuals' attitudinal and behavioral outcomes at work and at home is helpful for disentangling the processes through which mindfulness impacts individuals' well-being and behavior (Kohls, Sauer, & Walach, 2009; Liang et al., 2018). This is not only important for a better theoretical understanding but also enables more attuned interventions that can target specific aspects of mindfulness and, in turn, particular outcomes.

Finally, although most research has focused on the consequences of mindfulness at work, only few studies examined situational or contextual predictors of mindfulness (Hülshager, Walkowiak, & Thommes, 2018; Lawrie et al., 2018). Initial research has already identified that mindfulness may be influenced through daily job characteristics, such as the experience of high workload, psychological demands, and job control (Hülshager et al., 2018; Lawrie et al., 2018). Knowing about the situational predictors of mindfulness is important, as it expands our knowledge about naturally occurring predictors of mindfulness and may, thus, inform organizations and employees how to promote mindfulness at work and at home apart from planned interventions (i.e., mindfulness-based meditation programs) in the most effective way.

In the present study, we aim to further our understanding of the conceptual makeup and nomological network of mindfulness by investigating the role of domain-specific forms of both mindful awareness and acceptance at work and at home for important outcomes in the work and home domain (i.e., goal attainment and satisfaction). Furthermore, given that knowledge about situational or contextual antecedents of mindfulness is limited (Sutcliffe,

Vogus, & Dane, 2016), we aim to broaden our understanding of the predictor space of mindfulness by examining daily quantitative (i.e., time pressure) and emotional demands at work and at home as situational antecedents of employees' daily fluctuations in mindful awareness and acceptance in these domains.

In doing so, our study makes several contributions to the literature. First, by investigating mindful awareness and acceptance in both the work and home domain and their consequences for attitudinal and behavioral outcomes in these domains, we contribute to a more nuanced and comprehensive understanding of different facets of mindfulness in different contexts. A more holistic understanding of the interplay between demands, mindful awareness and acceptance, and outcomes that does not only focus on the work context but also incorporates the home domain allows us to refine our understanding of and our predictive models for employees' attitudes and behaviors in a significant way. Second, by identifying different situational predictors of mindful awareness and acceptance both in the work and home domain, we additionally further our understanding of the predictor space for different facets of mindfulness in a meaningful way. This is important, as, to date, research has largely focused on deliberately planned interventions as antecedents of mindfulness, ignoring alternative ways of enhancing employee mindfulness and, in turn, their goal attainment and well-being. Third, our study makes important practical contributions, as knowledge about predictors of different facets of mindfulness in different domains can be used to design better-tailored domain- and facet-specific (mindfulness) interventions but also work design strategies that may improve employees' work behavior and well-being. The conceptual model of our study is displayed in Figure 1.

Figure 1. The domain-specific model of antecedents and consequences of mindful awareness and acceptance in the work or the home domain. Black lines refer to hypothesized paths, whereas gray lines indicate cross-domain paths that were not hypothesized but estimated to test domain-specific effects. Unstandardized coefficients at the within-person level are displayed. Solid lines indicate significant paths, and dashed lines indicate nonsignificant paths. This figure does not include day of week as control variable for brevity. For these estimates and the estimates of the cross-domain paths, please refer to Table 2. * $p < .05$. ** $p < .01$. *** $p < .001$.

Mindfulness

Although mindfulness has been defined in various ways, most scientific conceptualizations acknowledge that mindfulness includes the two main components of *present moment attention and awareness* and a *nonjudgmental and accepting mindset* (Baer, Smith, & Allen, 2004; Bishop et al., 2004; Brown et al., 2007). Thus, mindfulness is about simply noticing what is, without evaluating it (Brown & Ryan, 2003). When being mindful, one pays attention to internal experiences, such as thoughts, feelings, and bodily sensations, or external events with an open and curious mindset (Bishop et al., 2004; Shapiro, Carlson, Astin, & Freedman, 2006).

Domain-Specific Mindfulness

Interestingly, beyond the differentiation of mindfulness as a trait, state, or skill, past research has not much acknowledged the context or life domain in which mindfulness is experienced and enacted. However, initial research by Haun et al. (2018) has distinguished daily mindfulness at work and at home and has shown that both function as moderator in the stressor–detachment model (Sonnentag & Fritz, 2015). Drawing on this literature, we also distinguish between domain- or context-specific forms of mindfulness, namely, daily mindfulness at work and at home (i.e., during leisure after work). Although mindfulness at work refers to paying attention to one's work activities (e.g., attending to customers, drafting a report) with an accepting mindset, mindfulness at home implies paying full attention to one's activities in the home domain (e.g., spending time with the family, household tasks, hobbies) without judging these experiences.

Facets of Mindfulness

Despite their common distinction on a theoretical level (Bishop et al., 2004; Kabat-Zinn, 1982), until now, few studies have differentiated between different components of mindfulness. In the present study, we draw on the most prevalent differentiation in the literature, namely, between the distinction between mindful awareness and acceptance (Sauer et al., 2013). Mindful awareness is a form of focused attention to internal and external present-moment experiences without drifting off to the future or past. Mindful acceptance can be defined as a nonjudgmental attitude toward those present-moment experiences and the lack of the wish to change them. As mentioned by Liang et al. (2018), empirical research has typically either assessed only one component (in organizational psychology mostly the awareness component; Brown & Ryan, 2003; Hülshager et al., 2013, 2014) or has combined both dimensions into one single construct (Huffziger & Kuehner, 2009). Those studies that did investigate both dimensions simultaneously have shown that the dimensions differ in their relations to important outcomes. For example, although Kohls et al. (2009) found that mindful acceptance is more important for buffering distress than awareness, Liang et al. (2018) found that awareness, not acceptance, plays the key role for regulating one's aggression in reaction to hostile emotions.

Predictors of Mindful Awareness and Acceptance at Work and at Home

Since Brown and Ryan's (2003) call to study psychological and social conditions that facilitate and hinder individuals' naturally occurring levels of daily mindfulness, only few studies investigated such conditions (Suelmann et al., 2018). In line with the broad literature on personality state fluctuations (Fleeson, 2001; Jayawickreme, Zachry, & Fleeson, 2019), initial evidence shows that, beyond individual characteristics, also contextual factors (e.g., work characteristics) play an important role for individuals' current level of mindfulness. For example, a recent study has evidenced that daily work load makes it more difficult for employees to be mindful at work, due to higher levels of fatigue (Hülshager et al., 2018).

Importantly, contextual and situational factors promoting or hindering mindfulness may differ in their extent across the work and home domain (e.g., due to more or less constraints). Research has already evidenced that environmental resources (e.g., social support) as well as stressors (e.g., interrole conflict) differ across life domains and may differentially impact domain specific outcomes, such as satisfaction, performance, or strain in the respective domain (Amstad, Meier, Fasel, Elfering, & Semmer, 2011; Fu & Shaffer, 2001). In line with these findings, we assume that certain situational predictors at work differ in strength from those same situational predictors at home and may differentially relate to awareness and acceptance in the respective domain. Following a "matching hypothesis," assuming that cognitive, affective, and behavioral reactions should be more dominant in the domain that is seen as the primary source of a stressful situation (Amstad et al., 2011), a specific set of situational predictors at work should be more closely linked to mindfulness at work and that set of situational predictors in the home domain should particularly be related to mindfulness at home.

In the present study, we focus on job and home demands as naturally occurring predictors of mindful awareness and acceptance in the respective domain. Job and home demands refer to different aspects of one's job or private life (e.g., physical, psychological, or social) that require sustained physical, cognitive, and emotional effort and are, thus, associated with physiological and psychological costs (Bakker & Demerouti, 2007; Peeters, Montgomery, Bakker, & Schaufeli, 2005). In the present study, we specifically focus on quantitative and emotional job and home demands and propose that they draw on different types of self-regulatory capacities (i.e., attention regulation or emotion regulation), thus, influencing mindful awareness and acceptance in differential ways. We propose that time pressure—a quantitative demand (Haun et al., 2018; Peeters et al., 2005)—particularly draws on one's attentional self-regulatory resources, making it hard for individuals to focus on the present moment and, thus, impairing the awareness component of mindfulness (Sauer et al., 2013). In contrast, we propose that emotionally challenging situations (i.e., emotional demands; Haun et al., 2018; Peeters et al., 2005) will particularly impair individuals' emotion regulation and their ability to keep an open and nonjudgmental attitude, thus, influencing the acceptance component of mindfulness (Sauer et al., 2013). In the following, we will elaborate on the proposed relationships in more detail.

Quantitative Demands and Awareness

Quantitative demands may be defined as situational affordances with high workload and/or time pressure (Peeters et al., 2005). Time pressure may be defined as individuals' perception of insufficient time for meeting certain role requirements or the experienced pressure to fulfill one's tasks at an abnormally fast pace (Ohly & Fritz, 2010). Although time pressure specifically refers to time-related demands, conceptualizations of workload often include a combination of time-related aspects and the amount of work (Hülshager et al., 2018). In our study, we particularly focus on the quantitative demand of time pressure, as time pressure, both at work and at home, is one of the most central stressors that individuals face in industrial societies today (Dugan & Barnes-Farrell, 2017; Zuzanek, 1998, 2017). Most employees experience work time pressure and the associated negative consequences for their well-being (e.g., feelings of stress, overload, exhaustion, and physical and mental health problems) on a frequent, if not daily, basis (Dugan & Barnes-Farrell, 2017). Likewise, the feeling of being pressed for time due to home/family demands has also increased in the past years, and research has continuously recognized its importance (Dugan & Barnes-Farrell, 2017; Zuzanek, 1998, 2017).

When feeling pressed for time, no matter if at work or at home, individuals strongly draw on their attentional resources to meet the respective demands and complete their assigned or self-chosen tasks (Bakker & Demerouti, 2007; Dugan & Barnes-Farrell, 2017). According to conservation of resources theory (Hobfoll, 1989), this continuous investment will lead to a loss of attentional resources, making it more difficult to invest resources in other attention related self-regulatory processes (Ilies, Huth, Ryan, & Dimotakis, 2015), such as bringing one's attention to the present moment (Bishop et al., 2004). Mindful awareness, thus, requires the regulation of attentional resources that time pressed individuals lack at that moment. Stimulated by the finding that resource depletion effects for self-control are rather small (Hagger et al., 2016), more recent accounts have provided alternative explanations for self-regulation impairments over time (Inzlicht & Schmeichel, 2012; Kurzban, Duckworth, Kable, & Myers, 2013). For example, Inzlicht and Schmeichel (2012) suggested that shifts in motivation and attention—instead of the lack of resources—explain how initial taxing of self-control undermines self-control at a later point. Following this line of argumentation, employees who have invested their attentional resources for dealing with time pressure, will feel less motivated to expend further efforts on focusing their attention on the present moment, thus, shifting their attention away from this self-regulatory goal. Furthermore, time pressure increases individuals' levels of arousal and psychological distress (Lundberg, Granqvist, Hansson, Magnusson, & Wallin, 1989; Maule & Svenson, 1993), making automatic processing (i.e., the default mode of information processing that requires little to no conscious awareness) more likely (Bargh & Morsella, 2008; Strack & Deutsch, 2004). Automatic processing is the opposite of mindfulness and describes "states of habitual or automatic functioning" (Brown & Ryan, 2003, p. 823). In contrast, when people experience low time pressure and attentional self-regulatory resources are high, individuals are able to align their thoughts, emotions, and behaviors according to more reflective goal standards and intentions (Hofmann, Friese, & Strack, 2009).

Recent studies by Hülshager et al. (2018) and Lawrie et al. (2018) provided first support for the link between daily quantitative demands (i.e., workload) and daily mindful awareness. Suelmann et al. (2018) also showed that being in a hurry or being busy was negatively associated with present-moment experiences. We therefore hypothesize as follows:

Hypothesis 1: Daily quantitative demands (i.e., time pressure) (a) at work and (b) at home are negatively related to mindful awareness at work and at home, respectively.

Emotional Demands and Acceptance

Emotional demands result from emotionally challenging interactions with other people, at work for example with supervisors, colleagues, or customers, and at home for example with one's spouse, children, or parents (Haun et al., 2018; Peeters et al., 2005). Emotional demands at work and at home tax individuals' emotional capacities, as they require emotion regulation and may, in turn, lead to a state of feeling emotionally drained (Beehr, Johnson, & Nieva, 1995; Hülshager & Schewe, 2011; Yanchus, Eby, Lance, & Drollinger, 2010). Research has evidenced, for example, that emotional demands at work and at home and the subsequent emotion regulation processes are negatively related to a host of well-being measures, such as emotional exhaustion, psychological strain, depersonalization, and psychosomatic complaints (Beehr et al., 1995; Hülshager & Schewe, 2011; Peeters et al., 2005; Yanchus et al., 2010).

Again drawing on conservation of resources theory (Hobfoll, 1989) and similar to the negative link between quantitative demands and attentional resources, we propose that a high level of emotional demands will make it more difficult for individuals to invest any further resources into the regulation of emotional processes that are intertwined with the judgment of situations. Allowing one's feelings to occur without judging their existence or content while staying in contact with them (Bishop et al., 2004; Dreyfus, 2011) may be achieved through the process of *reperceiving* (Shapiro et al., 2006). Reperceiving means to mentally step back and, thus, be less immersed in the emotional content of one's thoughts. This allows individuals to appraise emotional demands, such as emotionally challenging interactions, in a more objective and accepting way. Initiating this process may be particularly difficult, however, when one already feels emotionally drained and depleted, as this requires the investment of additional emotional resources that individuals then lack. Again, acknowledging recent alternative explanations, shifts in motivation and attention may explain why individuals confronted with emotional demands, may be less inclined to expend further efforts on regulating their emotions, establishing a nonjudgmental attitude, and accepting the situation as it is (Inzlicht & Schmeichel, 2012).

Furthermore, emotional demands and associated strain experiences may make it more likely that individuals will evaluate their experiences in a certain way. As mentioned by Hülshager et al. (2013), when confronted with emotionally challenging situations, individuals tend to process information in a more heuristic way. An unpleasant interaction with a customer who is complaining or one's spouse who is unhappy may trigger a host of cognitive, emotional, and behavioral response tendencies, including the judgment of the situation as threatening or insulting, in turn, leading to

fear or anger. Thus, when being emotionally drained and depleted, it will be difficult to sustain a nonjudgmental attitude toward one's thoughts and emotions and to simply notice things as they occur (Bishop et al., 2004; Shapiro et al., 2006). A number of scholars have argued for and provided evidence for a positive link between emotion-regulation resources, automaticity, and mindfulness (Brown & Ryan, 2003; Brown et al., 2007; Glomb, Yang, Bono, & Duffy, 2011; Shapiro et al., 2006). We therefore hypothesize as follows:

Hypothesis 2: Daily emotional demands (a) at work and (b) at home are negatively related to mindful acceptance at work and at home, respectively.

Consequences of Mindful Awareness and Acceptance at Work and Home

In the present work, we consider goal attainment and satisfaction as performance-related and attitudinal outcomes of daily mindfulness in the work and home domains. Specifically, we propose that awareness and acceptance at work and at home will both be related to satisfaction and goal attainment in the respective domain. Goal attainment at work or at home refers to the extent to which individuals achieve all the goals they set for themselves on a respective day in the work domain (e.g., finishing a report, preparing for a meeting on the next day) or in the home domain (e.g., doing the laundry, attending a yoga class). Being aware of what is happening in the present moment is an important prerequisite for staying attentive and present while being engaged in a task (Good et al., 2016). In contrast, in situations where people lack this awareness and focused attention, individuals' goal attainment may be impaired, either in quality or in quantity. For example, writing a report while one's thoughts are drawn to the past or future (e.g., to all the tasks that yet need to be completed) will be distracting and may cost time and slow down the process, thus decreasing the speed of goal attainment. Likewise, when running errands while being on autopilot it is more likely that one or two items from one's list will slip one's attention, thus, fulfilling one's goal only insufficiently (e.g., forgetting to pick up the shirts from the laundry shop), thereby decreasing the quality of goal attainment.

In addition to mindful awareness, also acceptance may be important for goal attainment. An open, nonjudgmental, and accepting attitude may protect individuals from emotional reactivity and automatic responses (Bishop et al., 2004; Shapiro et al., 2006), thus, increasing cognitive and behavioral flexibility (Carmody, Baer, Lykins, & Olendzki, 2009; Moore & Malinowski, 2009). Acceptance may facilitate less intense responses to conflict or rejection (e.g., lower anxiety or hostility) because such individuals are less identified with self-relevant outcomes (Brown, Ryan, Creswell, & Niemiec, 2008). For example, when experiencing difficulties or obstacles when striving to complete a task, acceptance may help people to react with less negative affect and lower strain, thus, being better able to reach one's goal. At work, one may still be able to focus on goal completion after critical feedback from a colleague, at home, one may be better able to come up with a creative solution for a conflict with one's spouse when being less emotionally reactive.

Initial research supports the idea that mindfulness may promote goal pursuit through awareness and, to a lesser extent, acceptance.

Studies by Smallwood and Schooler (2015) and van den Hurk, Giommi, Gielen, Speckens, and Barendregt (2010) have shown, for example, that mindfulness is associated with reduced error rates due to lower attention lapses, that is, a higher control and stability of attention. In addition, research has shown that mindful awareness may protect people against distractions and encoding mistakes (Herndon, 2008) and may be related to greater goal attainment (Olafsen, 2017). Furthermore, a small number of studies has demonstrated that mindful awareness may increase insight-related problem-solving and task performance (Dane & Brummel, 2014; Ostafin & Kassman, 2012; Shao & Skarlicki, 2009). As an exception, Moore and Malinowski (2009) could evidence that not only awareness, but also acceptance, is related to higher performance and cognitive flexibility. Thus, we propose the following:

Hypothesis 3: Mindful awareness (a) at work and (b) at home will be related to daily goal attainment at work and at home, respectively.

Hypothesis 4: Mindful acceptance (a) at work and (b) at home will be related to daily goal attainment at work and at home, respectively.

In addition to the beneficial effects of mindful awareness and acceptance on goal attainment, research has also indicated that mindful awareness and, again to a smaller extent, mindful acceptance, are related to satisfaction. Mindful awareness may help individuals to be fully present in the current moment, allowing them to not worry about the future or ruminate about the past (Bishop et al., 2004; Shapiro et al., 2006). By paying attention to what is, rather than what could be, individuals turn to the experience itself, a process which has been claimed to be curative in itself (see Shapiro et al., 2006). Furthermore, present moment awareness may relate positively to satisfaction by promoting value congruent behavior. As mindful awareness of one's basic values and needs (Shapiro et al., 2006) helps to foster individuals' self-determination (Brown & Ryan, 2003; Glomb et al., 2011), individuals may, as a consequence, feel more satisfied. Being aware of one's needs in a specific moment allows people to act in congruence to them, for example, by telling one's boss or spouse that one needs more help and support.

Likewise, a nonjudgmental and accepting attitude toward a certain situation and one's own reactions to it may also be related to higher satisfaction. In contrast, when not being able to witness one's thoughts and emotions objectively, but instead perceiving them as interlinked with the ego (Bishop et al., 2004; Glomb et al., 2011; Shapiro et al., 2006), individuals rather attenuate their negative reactions to these thoughts (Marcks & Woods, 2005; Siegel, 2010). For example, when judging and rejecting one's feelings of arousal and anger as a response to a difficult customer, one should also have a lower level of satisfaction. Likewise, negatively judging one's inability to complete all household chores will lead to less satisfaction as well.

Research has provided some evidence that mindfulness interventions are able to increase well-being and satisfaction in different domains (Bartlett et al., 2019; Grossman, Niemann, Schmidt, & Walach, 2004; Hofmann, Sawyer, Witt, & Oh, 2010; Lomas et al., 2017), for example, job satisfaction (Hülshager et al., 2013), satisfaction at work and at home (Crain, Schonert-Reichl, & Roesser, 2017), relationship satisfaction (Carson, Carson, Gil, & Bau-

com, 2004), or satisfaction with one's life in general (Poulin, Mackenzie, Soloway, & Karayolas, 2008).

Furthermore, initial diary studies have evidenced that daily awareness is associated with daily satisfaction in one's job (Hülshager et al., 2013) as well as daily happiness levels during nonwork hours and relationship satisfaction (Montes-Maroto, Rodríguez-Muñoz, Antino, & Gil, 2018). As an exception, one study could show that not only the awareness component of mindfulness but also the acceptance component was related to daily well-being, namely, less negative mood (Iida & Shapiro, 2019). In sum, we propose the following:

Hypothesis 5: Mindful awareness (a) at work and (b) at home will be related to daily satisfaction at work and at home, respectively.

Hypothesis 6: Mindful acceptance (a) at work and (b) at home will be related to daily satisfaction at work and at home, respectively.

Method

Overview

This study was part of a larger data collection effort on recovery at work and at home among employees with and without small children.¹ Participants filled in one general web-based survey and completed three daily web-based surveys (before work, after work, before bedtime) over 5 consecutive workdays. For this study, data from the after work and bedtime surveys are used.

Sample and Procedure

To recruit employees with small children, we contacted organizations that offer child care (e.g., nursery schools) and leisure time activities for children (e.g., sports clubs) and asked to distribute information leaflets about our study among the parents. In addition to this recruiting strategy, we also recruited participants directly via social media postings, such as Facebook, which included study information and the link to register for study participation as well as via personal social networks. To be eligible for participation, respondents had to work at least 20 hr per week and should not work in shifts. As an incentive for study participation, feedback on study results and a lottery with online gift cards as prizes (12 gift cards à 25 Euro) were offered. Interested individuals could sign up for study participation online. During study registration, participants could select one week for study participation out of several options and chose whether they wanted to receive reminders for the daily surveys via SMS or e-mail. After registration, participants received an e-mail with a link to a general survey assessing demographic information that should be completed before the daily diaries started. In addition, participants were asked to invite colleagues without children to participate in the study as well. As incentive for recruiting colleagues, we offered to donate 5 Euros to charity organizations for each additional participant that was recruited by another participant. Participants were instructed to complete three daily surveys over the course of 5 consecutive workdays. As some employees worked less than 5 days in one week, they completed their daily surveys on consecutive workdays during 2 weeks.

Initially, 264 persons registered for study participation; however, only 233 persons completed daily diaries on 817 days (average of 3.51 days per person). Overall, the 233 participants provided diary entries both after work and at bedtime on 572 days, after work only on 174 days, and at bedtime only on 71 days. Of the 233 individuals completing the daily diaries, 41 did not provide any demographic information, either because they did not complete the trait survey assessing demographic information (32 persons) or because they did not answer these questions (nine persons). Thus, the sample size description is based on data from 192 persons. Of these persons, 78.1% were female. On average, participants were 36.3 years old ($SD = 8.4$ years). Half of the participants had children under the age of six, living in their household. The sample was well-educated, with 73.3% holding a university degree. Participants worked in diverse organizations and occupations (e.g., teacher, psychologist, bank employee). Their average professional experience was 12.6 years ($SD = 10.6$) and average organizational tenure was 7.1 years ($SD = 6.6$). During the period of data collection, people worked 34.4 hr ($SD = 11.2$) per week on average.

Measures

All items had to be rated on a 5-point Likert-type scale ranging from 1 (*not at all*) to 5 (*extremely*). Quantitative and emotional job demands, mindfulness (i.e., awareness and acceptance) at work, job satisfaction, and goal attainment at work were measured at the end of the workday, whereas quantitative and emotional home demands, mindfulness at home, satisfaction, and goal attainment at home were measured in the bedtime survey. Following Geldhof, Preacher, and Zyphur (2014), we calculated separate within and between-person α for each variable. Multilevel reliability estimates are displayed in Table 1.

Quantitative job and home demands. We assessed time pressure at work with three items developed by Semmer (1984) and Zapf (1993). A sample item was "Today, I was required to work fast at my work." Time pressure at home was measured with a three item-scale by Peeters et al. (2005). A sample item was "Did you find that you are busy at home?"

Emotional job demands and home demands. We assessed emotional demands with three items of the respective subscale of the German version of the demand-induced strain compensation questionnaire (for a recent validation study, see Bova, De Jonge, & Guglielmi, 2015; De Jonge et al., 2004). Participants indicated the levels of emotional demands they experienced with respect to "Today at work" and "Today after work." A sample item was "Today at work (Today after work), I had to deal with persons who got angry at me easily."

Awareness at work and at home. Following Liang et al. (2018), daily levels of mindful awareness were assessed with the German version (Michalak, Heidenreich, Ströhle, & Nachtigall, 2008) of the five-item state measure of the Mindful Attention and Awareness Scale (Brown & Ryan, 2003). This scale focuses on attentional processes of mindfulness without tapping into the dimension of acceptance and has been shown to be a reliable and valid measure of mindful awareness. Participants indicated their awareness levels with respect to "Today at work" and "Today after

¹ This is the first publication from this data set.

Table 1
Means, Standard Deviations, Reliabilities, and Correlations Between Study Variables

Variables	M	SD _w	SD _b	1	2	3	4	5	6	7	8	9	10	11	12
1. Quantitative job demands	2.46	0.83	0.83	(.50)	.40***	-.50***	-.18*	-.19*	-.15	.31***	.18	-.33***	-.12	-.15	-.07
2. Emotional job demands	1.84	0.60	0.64	.16***	(.40)	-.21*	-.34***	-.14	-.09	.15	.40***	-.20*	-.17	-.15	-.15
3. Awareness at work	3.86	0.64	0.60	-.27***	.13***	(.46)	.61***	.35***	.30*	-.26*	-.16	.59***	.43***	.32**	.36**
4. Acceptance at work	4.43	0.59	0.70	.04	-.14***	.05	(.46)	.42***	.28***	-.19*	-.29*	.45***	.80***	.37***	.47***
5. Job satisfaction	4.42	0.88	0.83	-.07	-.12***	.19***	.23***	(.47)	.45***	-.10	-.19	.37***	.29***	.81***	.52***
6. Goal attainment at work	78.09	15.28	12.66	.00	-.07	.15***	.17***	.43***	(.41)	.07	-.06	.16	.24*	.18	.50***
7. Quantitative home demands	2.81	0.73	0.79	-.01	-.01	.01	.09	.05	-.01	(.54)	.46***	-.72***	-.29*	-.15	-.01
8. Emotional home demands	1.89	0.69	0.56	-.07	-.03	.10*	-.01	-.05	-.03	.13***	(.40)	-.49***	-.46***	-.19	.00
9. Awareness at home	3.81	0.68	0.72	-.02	.02	.11*	-.01	.10*	-.05	-.26*	-.09	.53***	.56***	.47***	.36***
10. Acceptance at home	4.28	0.74	0.69	.03	-.09	.04	.11*	.22***	.12*	-.05	-.33***	.22***	(.46)	.36***	.36***
11. Satisfaction at home	4.51	0.98	0.86	.05	-.02	-.02	-.06	.13**	.13**	-.08	-.24***	.29***	.32***	(.44)	.57***
12. Goal attainment at home	74.61	20.87	13.21	-.05	-.03	-.04	.00	.11*	.20***	-.07	-.14*	.22***	.18***	.41***	(.29)
13. Time (day of week) ^a	1.78	1.47	—	.03	-.12***	.15***	.88	.13***	.11*	-.03	-.00	.016**	.91	.010*	.010*
α _{within}				.87	.58	.73	.99	—	—	.77	.60	.77	.99	—	—
α _{between}				.96	.83	.95	—	—	—	.92	.79	.97	—	—	—

Note. Correlations above the diagonal refer to between-person (Level 2) correlations. Correlations below the diagonal refer to within-person (Level 1) correlations. Intraclass correlation coefficients (ICC) are presented in parentheses in the diagonal.

^a 0 = Monday.

* $p < .05$. ** $p < .01$. *** $p < .001$.

work.” A sample item was “I found it difficult to stay focused on what was happening in the present” (reverse coded).

Acceptance at work and at home. Similar to Liang et al. (2018), we had to assess mindful acceptance with a different measure than the Mindful Attention and Awareness Scale (Brown & Ryan, 2003). Acceptance at work and at home was measured with three items of the Kentucky Inventory of Mindfulness Skills (Baer et al., 2004). Participants indicated their acceptance levels with respect to “Today at work” and “Today after work.” A sample item was “I told myself that I shouldn’t be feeling the way I’m feeling” (reverse coded).

Satisfaction at work and at home. We used a single-item measure from Baillod and Semmer (1994) referring to employees’ overall satisfaction with their job to assess daily job satisfaction (“How satisfied or unsatisfied were you with your job today?”). The item was answered on a 7-point Likert scale ranging from 1 (*extremely dissatisfied*) to 7 (*extremely satisfied*). We adapted the one-item job satisfaction measure by Baillod and Semmer (1994) to also assess satisfaction at home (“How satisfied or unsatisfied were you with your private life today?”). The item was answered on a 7-point Likert scale ranging from 1 (*extremely dissatisfied*) to 7 (*extremely satisfied*).

Goal attainment at work and at home. Goal attainment was assessed with one item from Claessens, van Eerde, Rutte, and Roe (2010). The respondents were requested to indicate the degree of attainment of today’s work (private) goals on a slider ranging from 0% to 100% with the following question: “Please indicate the percentage of completed goals in comparison to what you wanted to complete today.”

Day of week. We included day of week as control variable to take weekly cycles into account. Monday was coded as 0, Tuesday as 2, Wednesday as 2 and so forth.

Construct validity. We tested the construct validity of our measures with multilevel confirmatory factor analyses, using Mplus 7.3 (Muthén & Muthén, 1998–2014), running separate analyses for the work domain data and for the home domain data. For the work domain data, a six-factor model² (Emotional Demands, Cognitive Demands, Awareness, Acceptance, Goal Attainment, Satisfaction) with all items loading on their respective factors on both levels had a good to acceptable fit, $\chi^2 = 305.11$, $df = 130$, scaling correction factor (SCF) = 1.16, $p < .001$, comparative fit index (CFI) = .95, Tucker-Lewis index (TLI) = .93, root mean square error of approximation (RMSEA) = .04, standardized root-mean-square residual (SRMR) within-person = .05, SRMR between-person = 0.11,³ and fit the data better than an alternative four-factor model (Job Demands, Mindfulness, Goal Attainment, Satisfaction), $\chi^2 = 1,142.46$, $df = 148$, SCF = 1.18, $p < .001$, CFI = .71, TLI = .65, RMSEA = .10, SRMR within-person = .15, SRMR between-person = .21, Satorra Bentler $\Delta\chi^2 = 767.49$, $\Delta df = 18$, $p < .001$.

For the home data, a six-factor model (Emotional Demands, Quantitative Demands, Awareness, Acceptance, Goal Attainment, Satisfaction) with all items loading on their respective factors on

² When testing this model, we fixed the residual variance of one emotional demands item and one acceptance item to zero.

³ The SRMR value at the between-level indicates poor fit. However, as our study focus on within-person relationships exclusively, model fit at the within-person level is of primary interest here.

both levels had a good fit, $\chi^2 = 269.47$, $df = 130$, $SCF = 1.09$, $p < .001$, $CFI = .96$, $TLI = .94$, $RMSEA = .04$, $SRMR$ within-person = .05, $SRMR$ between-person = .05, and fit the data better than an alternative four-factor model (Home Demands, Mindfulness, Goal Attainment, Satisfaction), $\chi^2 = 1,085.29$, $df = 148$, $SCF = 1.11$, $p < .001$, $CFI = .73$, $TLI = .66$, $RMSEA = .10$, $SRMR$ within-person = .16, $SRMR$ between-person = .20, Satorra Bentler $\Delta\chi^2 = 717.37$, $\Delta df = 18$, $p < .001$.

Data Analyses

To account for the nested nature of our data (daily measures nested within persons), we conducted multilevel path analyses in Mplus 7.3 (Muthén & Muthén, 1998–2014). In this approach, the variance of the manifest day-level measures is decomposed into latent within- and between-person variance components thus ensuring that the estimation of the within-person effects and between-person effects will not contaminate each other (i.e., similar to the person-mean centering used in hierarchical linear modeling that ensures the accurate estimation of within-person effects). Accordingly, the path coefficients on the within-person level represent mere day-level relationships, whereas the path coefficients on the between-person level represent mere person-level relationships. To deal with missing values (participants did not complete both the work and home diaries on all days), all models were estimated applying the full information maximum likelihood estimation approach.

To test our hypotheses, we estimated an integrative model (M1) including both the work and the home domain. In addition to the proposed domain-specific paths displayed in Figure 1 as black lines, we included cross-domain effects in the model (i.e., the gray lines in Figure 1) to test the domain specificity of the proposed effects of demands and mindfulness facets. First, we estimated paths from work demands to awareness and acceptance at home as well as paths from awareness and acceptance at work to goal attainment and satisfaction at home. Second, we controlled for the respective work variable when predicting home variables (e.g., we controlled for awareness at work when predicting awareness at home). Moreover, at both levels of analysis we allowed correlations between quantitative and emotional demands at work and home, as well as between the residuals of awareness and acceptance at work, between the residuals of job satisfaction and goal attainment at work, between the residuals of awareness and acceptance at home and between satisfaction and goal attainment at home. Further, given that previous research suggested that variables may follow weekly cycles (Haun & Oppenauer, 2019; Hülshager et al., 2014), we controlled for day of week in all analyses.

Results

Table 1 displays means, standard deviations at the within and between-person level, and correlations between the study variables. Moreover, we examined the variability of all variables across the 5 days. The intraclass correlation coefficients (see Table 1) of the variables ranged from .29 to .54. This indicates that between 46 and 71% of the variance of the study variables is within-person variance, suggesting that using multilevel modeling techniques is appropriate.

Results of the Integrated Work–Home Model

The integrated work–home model (M1) had good fit, $\chi^2 = 92.71$, $df = 60$, $SCF = 1.05$, $p < .005$, $CFI = .97$, $TLI = 0.93$, $RMSEA = .026$, $SRMR$ within-person = .04, $SRMR$ between-person = 0.06⁴. Relationships were analyzed at both the within-person and the between-person level. However, as we are mainly interested in daily within-person relationships in this study, we focus on the within-person levels results (see Figure 1), but report both within-person and between-person relations in the tables for completeness (see Table 2). In the work domain, quantitative job demands were negatively related to awareness at work, but not to acceptance at work, whereas emotional job demands were negatively related to acceptance and awareness at work. Thus, Hypotheses 1a and 2a were supported. Both acceptance and awareness at work were positively associated with goal attainment at work and job satisfaction, supporting Hypotheses 3a, 4a, 5a, and 6a.

In the home domain, quantitative home demands were positively related to awareness at home, but not to acceptance at home, whereas emotional home demands were positively related to acceptance at home, but not to awareness at home. Thus, Hypotheses 1b and 2b were supported. Quantitative and emotional job demands were not associated with acceptance and awareness at home. In support of Hypotheses 3b, 4b, 5b, and 6b, both acceptance and awareness at home were positively associated with goal attainment and satisfaction at home. Awareness and acceptance at work were not related to satisfaction and goal attainment at home except for a negative relation between awareness at work and goal attainment at home and between acceptance at work and satisfaction at home. Day of week was positively associated with awareness and acceptance both at work and at home, indicating increases from Monday to Friday.

Supplementary Analyses

To investigate possible cross-domain effect from the home domain to the work domain, we estimated a second integrative model (M2) including home domain variables and next-day work variables to further check the domain-specific relations between demands and mindfulness and between mindfulness and outcomes, respectively. This model had good fit, $\chi^2 = 65.09$, $df = 60$, $SCF = 1.04$, $p < .304$, $CFI = .99$, $TLI = 0.99$, $RMSEA = .01$, $SRMR$ within-person = .04, $SRMR$ between-person = 0.07. The results are displayed in Table 3. The results confirmed the results from the work-home model (M1) with one exception: Acceptance at work was not significantly associated with goal attainment at work.

To check the robustness of our findings, we included negative affect before work as control variable. Negative affect was measured in the before work survey with six items from the Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988)

⁴ This model does neither include direct paths from job demands to satisfaction and goal attainment at work nor from home demands to satisfaction and goal attainment in the home domain. We compared this model with a model including direct paths ($\chi^2 = 78.90$, $df = 44$, $SCF = 1.01$, $p < .001$, $CFI = .97$, $TLI = .90$, $RMSEA = .031$, $SRMR$ within-person = .04, $SRMR$ between-person = .05). As deleting the direct paths did not significantly worsen model fit (Satorra Bentler $\Delta\chi^2 = 15.02$, $\Delta df = 16$, $p < .523$), we decided to present the more parsimonious model without direct paths.

Table 2
Results From Multilevel Path Models (Model 1)

Predictor variables	Work domain (day <i>t</i>)				Home domain (day <i>t</i>)			
	Awareness	Acceptance	Goal attainment	Satisfaction	Awareness	Acceptance	Goal attainment	Satisfaction
Day of week (time)	0.068*** (0.018)	0.049** (0.018)	0.635 (0.438)	0.049 (0.026)	0.072*** (0.023)	0.045* (0.023)	0.845 (0.587)	0.040 (0.026)
Work domain				Within-person relationships				
Quantitative demands	-0.209*** (0.038)	0.040 (0.035)			-0.024 (0.040)	0.004 (0.042)		
Emotional demands	-0.069 (0.046)	-0.128* (0.058)			0.069 (0.048)	-0.084 (0.056)		
Awareness			3.101* (1.273)	0.210** (0.067)	0.070 (0.051)		-3.525* (1.531)	-0.112 (0.073)
Acceptance			3.742** (1.381)	0.314*** (0.064)		0.112 (0.062)	-1.319 (1.753)	-0.182* (0.074)
Goal attainment							0.238** (0.082)	
Satisfaction								0.078 (0.056)
Home domain								
Quantitative demands					-0.231*** (0.044)	-0.015 (0.042)		
Emotional demands					0.069 (0.048)	-0.347*** (0.068)	6.965* (1.418)	0.335*** (0.064)
Awareness							3.337* (1.445)	0.339*** (0.073)
Acceptance								
Work domain				Between-person relationships				
Quantitative demands	-0.343*** (0.079)	-0.378*** (0.115)			0.145 (0.103)	0.006 (0.064)		
Emotional demands	-0.033 (0.081)	-0.025 (0.087)			-0.010 (0.100)	0.247 (0.100)		
Awareness			4.355 (3.017)	0.304 (0.194)	0.677*** (0.137)		-1.336 (4.272)	-0.079 (0.195)
Acceptance			3.154 (2.855)	0.359* (0.159)		0.770*** (0.094)	7.837 (6.359)	-0.069* (0.250)
Goal attainment							0.528*** (0.103)	
Satisfaction								0.749 (0.088)
Home domain								
Quantitative demands					-0.261*** (0.124)	-0.054 (0.087)		
Emotional demands					-0.518*** (0.082)	-0.396*** (0.142)	3.229* (3.240)	0.267* (0.130)
Awareness							-3.448 (6.174)	0.064*** (0.216)
Acceptance								

Note. Unstandardized estimates and standard errors (in parentheses) are displayed.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 3
Results From Multilevel Path Models (Model 2)

Predictor variables	Home domain (day <i>t</i>)				Work domain (day <i>t</i> + 1)			
	Awareness	Acceptance	Goal attainment	Satisfaction	Awareness	Acceptance	Goal attainment	Satisfaction
Day of week (time)	0.077** (0.022)	0.055* (0.023)	0.789 (0.558)	0.025 (0.026)	0.055* (0.024)	0.025 (0.021)	-0.388 (0.677)	0.043 (0.035)
Home domain				Within-person relationships				
Quantitative demands	-0.227*** (0.045)	-0.016 (0.043)			-0.031 (0.054)	-0.013 (0.032)		
Emotional demands	-0.047 (0.046)	-0.351*** (0.070)			0.045 (0.046)	-0.058 (0.041)		
Awareness			6.359* (1.399)	0.348*** (0.066)	0.084 (0.052)		-0.209 (1.081)	0.073 (0.065)
Acceptance			2.814* (1.425)	0.309*** (0.069)		0.093 (0.057)	-0.323 (1.245)	-0.125 (0.067)
Goal attainment							-0.040 (0.036)	
Satisfaction								0.013 (0.041)
Work domain								
Quantitative demands					-0.234*** (0.045)	0.058 (0.043)		
Emotional demands					-0.001 (0.051)	-0.150* (0.073)	4.414* (1.738)	0.272* (0.084)
Awareness							2.248 (1.738)	0.322** (0.103)
Acceptance								
Home domain				Between-person relationships				
Quantitative demands	-0.568*** (0.090)	-0.063*** (0.133)			0.328 (0.129)	0.004 (0.073)		
Emotional demands	-0.292 (0.154)	-0.512 (0.183)			0.246 (0.155)	0.233 (0.141)		
Awareness			1.405 (2.911)	0.354* (0.146)	0.722*** (0.157)		-5.240 (3.077)	-0.251 (0.186)
Acceptance			8.232* (3.636)	0.348* (0.150)		0.858*** (0.115)	4.904 (5.589)	0.080 (0.331)
Goal attainment							0.543*** (0.120)	
Satisfaction								0.862*** (0.099)
Work domain								
Quantitative demands					-0.319*** (0.084)	-0.024 (0.066)		
Emotional demands					-0.049 (0.082)	-0.279** (0.095)	8.376* (3.942)	0.242* (0.224)
Awareness							-4.969 (6.256)	0.090*** (0.317)
Acceptance								

Note. Unstandardized estimates and standard errors (in parentheses) are displayed.

* $p < .05$. ** $p < .01$. *** $p < .001$.

on a 5-point scale. Including negative affect before work did not change the results with one exception: The relation between awareness and goal attainment at work became marginally significant when including negative affect before work.

Discussion

In this daily diary study, we examined situational predictors and consequences of two facets of mindfulness (i.e., awareness and acceptance), both in the work and the home domain. We found that both in the work and in the home domain, quantitative demands were negatively associated with awareness, whereas emotional demands were negatively associated with acceptance. Both awareness and acceptance at work and at home were positively associated with goal attainment and satisfaction in the work and home domains, respectively.

Theoretical Implications

Our work contributes to the literature in three important ways. First, we advance knowledge about domain-specific forms of daily mindfulness and their situational antecedents and consequences (Haun et al., 2018). Although one initial study suggested, but did not explicitly test the idea, that individual' capacity to be mindful should differ across specific contexts or domains (Haun et al., 2018), the life domain in which mindfulness is experienced or enacted has not been considered empirically yet. Because the work and home domains are characterized by unique demands and resources that may fluctuate from day to day (ten Brummelhuis & Bakker, 2012), employees may on the same day have trouble being mindful at work, but may find it easy to be mindful at home. Given that both employees' mindfulness at work and at home were shown to buffer relations between job demands and employees' impaired recovery after work (Haun et al., 2018), facilitating mindfulness in both the work and the home domain offers two independent points of interventions to foster employees' recovery and well-being. We found that awareness and acceptance at work and at home were associated with quantitative and emotional demands in the respective domain, whereas quantitative and emotional demands were not associated with awareness and acceptance across life domains. These findings support the notion that different contexts as well as different demands may differentially hamper the experience of daily mindfulness.

Second, our study provides a more nuanced perspective on mindfulness at work and at home by considering both mindful awareness and acceptance. Previous studies on state mindfulness, particularly those on state mindfulness in the workplace, largely focused on the awareness component only and neglected the facet of acceptance (Hülshager et al., 2013; Lawrie et al., 2018; Montes-Maroto et al., 2018; Olafsen, 2017; Tuckey et al., 2018). The findings of our study underline the value of assessing both mindful awareness and acceptance because both mindful awareness and acceptance at work and at home predicted goal attainment and satisfaction in the work and home domain, respectively. On days when employees paid attention to their present-moment experiences and had an accepting nonjudgmental attitude, they felt more satisfied with their work or home life and attained more of their goals. Hence, with these findings we extend previous research that showed positive relations between awareness and satisfaction and

performance-related outcomes (Hülshager et al., 2013; Montes-Maroto et al., 2018; Olafsen, 2017) as we highlight that both awareness and acceptance are relevant for satisfaction and goal attainment. This finding implies that fostering goal attainment and satisfaction can be achieved through promoting awareness or acceptance, offering two unique points for interventions. This particularly holds true, as our study further revealed that awareness and acceptance have different antecedents and are unrelated in the work domain and only weakly related in the home domain.

Although initial research supports the idea that an individual's capacity to be mindful on a certain day or in a particular moment depends on situational characteristics (e.g., being involved in social interaction, being exposed to job demands; Hülshager et al., 2018; Lawrie et al., 2018; Suelmann et al., 2018), research on naturally occurring predictors of mindfulness is still scarce. By investigating quantitative and emotional demands both at work and at home, we significantly broaden the predictor space of mindful awareness and acceptance in different life domains. Specifically, in line with the matching principle (i.e., the notion that relations between stressors, strains, and resources are stronger when they are all within the same functional domain; de Jonge & Dormann, 2006), we found that quantitative demands, drawing on individuals' attentional resources, were more closely associated with mindful awareness. In contrast, emotional demands, drawing on individuals' emotion regulation capacities, were more closely associated with mindful acceptance. This pattern was consistent across the work and home domains. On days when employees are under time pressure, it becomes difficult for them to be mindfully aware either at work or at home. Similarly, on days when employees face many emotional demands, they find it hard to maintain an accepting and nonjudgmental attitude.

These findings point to a paradoxical situation that has also been described in the recovery literature (Sonnentag, 2018). Employees find it particularly hard to detach from job demands and recover during leisure time when days are stressful, that is, when they would need it most. Similarly, our study revealed that employees find it particularly hard to be mindful in the work or home domains when they face lots of stressors in these domains, that is, when they would benefit most from decoupling themselves from the stressors they face to remain calm and complete their tasks. Hence, it is particularly important to identify factors that mitigate the demands-mindfulness relationships. Research on the matching hypothesis (de Jonge & Dormann, 2006) suggests that attentional and emotional resources should have the power to buffer the quantitative demands-awareness and the emotional demands-acceptance relations, respectively. Accordingly, fostering attentional and emotional resources should help to counter the harmful effects of high job demands.

Limitations and Implications for Future Research

Despite the strengths of our study, it also has a number of limitations. First, demands, mindfulness and outcome variables were all assessed at the same measurement occasions (at work and at home, respectively), which may raise concerns about common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Future research should separate measurement occasions or make use of different sources (e.g., assessing objective work demands, using other-ratings of goal attainment) for alleviating

concerns about common method variance (Podsakoff et al., 2003). For example, measuring mindfulness during the workday and outcomes at the end of the workday or in the evening (Hülshager et al., 2013; Tuckey et al., 2018).

Relatedly, due to the correlational design, causal inferences cannot be drawn, and it remains unclear if job and home demands truly decrease mindfulness at work and home. The directions of the effects could be reversed or reciprocal. It could be that on days when employees are more mindful, they perceive certain situations (e.g., dealing with a difficult customer, having many household chores) as less stressful than on days when they are less mindful. Experimental research that manipulates different levels of demands and assesses participants' levels of mindful awareness and acceptance under these conditions is needed to clearly answer this question. Similarly, the causal direction of the relation between mindfulness and satisfaction and goal attainment could be reciprocal. Intervention research supports the notion, however, that increasing mindfulness via trainings increases job satisfaction and performance-related outcomes (Hülshager et al., 2013; Lomas et al., 2019; Slutsky, Chin, Raye, & Creswell, 2019). Nevertheless, when mindfulness increases satisfaction, individuals may build up resources that may in turn lead to even higher levels of mindfulness, hinting to a potential gain spiral.

Second, we only focused on daily demands as contextual predictors of mindfulness and neglected daily resources as potential antecedents. Previous research by Lawrie et al. (2018) supports the notion that resources may function as predictors of mindfulness as well. They found that daily job control was positively associated with mindful awareness. Given that different types of demands have differential associations with mindful awareness and acceptance, it seems promising to look at different types of resources for predicting each facet of mindfulness. Following the matching principle (de Jonge & Dormann, 2006), emotional resources (e.g., emotional support) might be particularly predictive of mindful acceptance, whereas attentional resources (e.g., instrumental support) may be particularly predictive of mindful awareness.

Third, in this research, we only focused on mindful awareness and acceptance as two main facets of mindfulness. However, previous research has also proposed multidimensional conceptualization with three (or more) factors including, for example, acting with awareness, nonjudgmental acceptance and present-moment attention (Blanke & Brose, 2017). Future research might consider to use other measures of mindfulness, such as the Multidimensional State Mindfulness Questionnaire (Blanke & Brose, 2017) or the Five Facet Mindfulness Questionnaire (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006) to disentangle the different mindfulness facets and investigate whether they have distinct antecedents and consequences.

Fourth, including day of week as control variable in our analyses revealed that mindful awareness and acceptance at work and at home increased across the workweek. These findings point to an interesting avenue for future research. Considering not only contextual, but also temporal, predictors of mindfulness (e.g., day of week) could help advancing theory development.

Practical Implications

Given that both mindful awareness and acceptance were associated with increased satisfaction and goal attainment in the work

and home domains, both organizations and employees should be motivated to increase employee mindfulness. Mindfulness-based training programs are one way to increase employee mindfulness (Bartlett et al., 2019). A recent meta-analysis suggests that even low-dose interventions appear to be effective and that the benefits are not limited to education and health care professionals (Bartlett et al., 2019).

For example, a recent study by Krick and Felfe (2020) revealed that mindfulness interventions also work for male police officers, a population that is typically not inclined to practice mindfulness. Further, both face-to-face classes as well as online interventions were shown to be effective (Bartlett et al., 2019; Spijkerman, Pots, & Bohlmeijer, 2016). Hence, offering online interventions might be a cost-effective and flexible alternative that would allow many employees to develop their mindfulness skills.

Besides offering and attending mindfulness-based interventions, our results particularly point to the importance of job design. Organizations seeking to foster employee mindfulness should consider complement mindfulness training with job design interventions to ensure that employees have the opportunity to work mindfully. Organizations should address structural aspects of the job, such as reducing demands to a manageable degree and increasing resources, to help employees cope with quantitatively and emotionally demanding work situations. In addition, employees might actively craft their jobs and their home lives to reduce demands (Demerouti et al., 2020) and to have the freedom to engage in mindfulness practice whenever they need it most.

Conclusion

This study contributes to an enriched understanding of mindfulness by considering domain-specific forms of mindful awareness and acceptance at work and at home and by shedding further light on their situational antecedents and consequences. Our study suggests that employees' capacity to be mindful depends on certain domain-specific conditions (i.e., quantitative and emotional demands). Given that mindfulness in the work and home domains is associated with increased satisfaction and goal attainment, organizations should offer mindfulness trainings and design workplaces that allow employees to be mindful. Employees, on the other hand, should try to craft their work and home domains in a way that allows them to be mindful on a regular basis.

References

- Amstad, F. T., Meier, L. L., Fasel, U., Elfering, A., & Semmer, N. K. (2011). A meta-analysis of work-family conflict and various outcomes with a special emphasis on cross-domain versus matching-domain relations. *Journal of Occupational Health Psychology, 16*, 151–169. <http://dx.doi.org/10.1037/a0022170>
- Baer, R. A., Smith, G. T., & Allen, K. B. (2004). Assessment of mindfulness by self-report: The Kentucky Inventory of Mindfulness Skills. *Assessment, 11*, 191–206. <http://dx.doi.org/10.1177/1073191104268029>
- Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment, 13*, 27–45. <http://dx.doi.org/10.1177/1073191105283504>
- Baillo, J., & Semmer, N. (1994). Fluktuation und berufsvverläufe bei computerfachleuten [Turnover and career paths of computer specialists]. *Zeitschrift für Arbeits- und Organisationspsychologie, 38*, 152–163.

- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22, 309–328. <http://dx.doi.org/10.1108/02683940710733115>
- Bargh, J. A., & Morsella, E. (2008). The unconscious mind. *Perspectives on Psychological Science*, 3, 73–79. <http://dx.doi.org/10.1111/j.1745-6916.2008.00064.x>
- Bartlett, L., Martin, A., Neil, A. L., Memish, K., Otahal, P., Kilpatrick, M., & Sanderson, K. (2019). A systematic review and meta-analysis of workplace mindfulness training randomized controlled trials. *Journal of Occupational Health Psychology*, 24, 108–126. <http://dx.doi.org/10.1037/ocp0000146>
- Beehr, T. A., Johnson, L. B., & Nieva, R. (1995). Occupational stress: Coping of police and their spouses. *Journal of Organizational Behavior*, 16, 3–25. <http://dx.doi.org/10.1002/job.4030160104>
- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., . . . Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice*, 11, 230–241. <http://dx.doi.org/10.1093/clipsy.bph077>
- Blanke, E. S., & Brose, A. (2017). Mindfulness in daily life: A multidimensional approach. *Mindfulness*, 8, 737–750. <http://dx.doi.org/10.1007/s12671-016-0651-4>
- Bova, N., De Jonge, J., & Guglielmi, D. (2015). The Demand-Induced Strain Compensation Questionnaire: A cross-national validation study. *Stress and Health*, 31, 236–244. <http://dx.doi.org/10.1002/smi.2550>
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84, 822–848. <http://dx.doi.org/10.1037/0022-3514.84.4.822>
- Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry*, 18, 211–237. <http://dx.doi.org/10.1080/10478400701598298>
- Brown, K. W., Ryan, R. M., Creswell, J. D., & Niemiec, C. P. (2008). Beyond me: Mindful responses to social threat. In H. A. Wayment & J. J. Bauer (Eds.), *Transcending self-interest: Psychological explorations of the quiet ego* (pp. 75–84). Washington, DC: American Psychological Association. <http://dx.doi.org/10.1037/11771-007>
- Carmody, J., Baer, R. A., Lykins, E. L. B., & Olendzki, N. (2009). An empirical study of the mechanisms of mindfulness in a mindfulness-based stress reduction program. *Journal of Clinical Psychology*, 65, 613–626. <http://dx.doi.org/10.1002/jclp.20579>
- Carson, J. W., Carson, K. M., Gil, K. M., & Baucom, D. H. (2004). Mindfulness-based relationship enhancement. *Behavior Therapy*, 35, 471–494. [http://dx.doi.org/10.1016/S0005-7894\(04\)80028-5](http://dx.doi.org/10.1016/S0005-7894(04)80028-5)
- Claessens, B. J. C., van Eerde, W., Rutte, C. G., & Roe, R. A. (2010). Things to do today . . . : A daily diary study on task completion at work. *Applied Psychology*, 59, 273–295. <http://dx.doi.org/10.1111/j.1464-0597.2009.00390.x>
- Crain, T. L., Schonert-Reichl, K. A., & Roeser, R. W. (2017). Cultivating teacher mindfulness: Effects of a randomized controlled trial on work, home, and sleep outcomes. *Journal of Occupational Health Psychology*, 22, 138–152. <http://dx.doi.org/10.1037/ocp0000043>
- Dane, E., & Brummel, B. J. (2014). Examining workplace mindfulness and its relations to job performance and turnover intention. *Human Relations*, 67, 105–128. <http://dx.doi.org/10.1177/0018726713487753>
- de Jonge, J., & Dormann, C. (2006). Stressors, resources, and strain at work: A longitudinal test of the triple-match principle. *Journal of Applied Psychology*, 91, 1359–1374. <http://dx.doi.org/10.1037/0021-9010.91.5.1359>
- De Jonge, J., Dormann, C., van Vegchel, N., von Nordheim, T., Dollard, M. F., & Cotton, S. (2004). *Disq 1.1: The Disc Questionnaire*. Eindhoven, the Netherlands: Eindhoven University of Technology.
- Demerouti, E., Hewett, R., Haun, V. C., De Gieter, S., Rodríguez-Sánchez, A., & Skakon, J. (2020). From job crafting to home crafting: A daily diary study among six European countries. *Human Relations*, 73, 1010–1035. <http://dx.doi.org/10.1177/0018726719848809>
- Dreyfus, G. (2011). Is mindfulness present-centred and non-judgmental? A discussion of the cognitive dimensions of mindfulness. *Contemporary Buddhism*, 12, 41–54. <http://dx.doi.org/10.1080/14639947.2011.564815>
- Dugan, A. G., & Barnes-Farrell, J. L. (2017). Time for self-care: Downtime recovery as a buffer of work and home/family time pressures. *Journal of Occupational and Environmental Medicine*, 59, e46–e56. <http://dx.doi.org/10.1097/JOM.0000000000000975>
- Fleeson, W. (2001). Toward a structure- and process-integrated view of personality: Traits as density distribution of states. *Journal of Personality and Social Psychology*, 80, 1011–1027. <http://dx.doi.org/10.1037/0022-3514.80.6.1011>
- Fu, C. K., & Shaffer, M. A. (2001). The tug of work and family: Direct and indirect domain-specific determinants of work-family conflict. *Personnel Review*, 30, 502–522. <http://dx.doi.org/10.1108/EUM000000005936>
- Geldhof, G. J., Preacher, K. J., & Zyphur, M. J. (2014). Reliability estimation in a multilevel confirmatory factor analysis framework. *Psychological Methods*, 19, 72–91. <http://dx.doi.org/10.1037/a0032138>
- Glomb, T. M., Yang, T., Bono, J. E., & Duffy, M. K. (2011). Mindfulness at work. In J. Martocchio, H. Liao, & A. Joshi (Eds.), *Research in personnel and human resources management* (pp. 115–157). Bingley, United Kingdom: Emerald Group Publishing Limited. [http://dx.doi.org/10.1108/S0742-7301\(2011\)0000030005](http://dx.doi.org/10.1108/S0742-7301(2011)0000030005)
- Good, D. J., Lyddy, C. J., Glomb, T. M., Bono, J. E., Brown, K. W., Duffy, M. K., . . . Lazar, S. W. (2016). Contemplating mindfulness at work: An integrative review. *Journal of Management*, 42, 114–142. <http://dx.doi.org/10.1177/0149206315617003>
- Grossman, P., Niemann, L., Schmidt, S., & Walach, H. (2004). Mindfulness-based stress reduction and health benefits. A meta-analysis. *Journal of Psychosomatic Research*, 57, 35–43. [http://dx.doi.org/10.1016/S0022-3999\(03\)00573-7](http://dx.doi.org/10.1016/S0022-3999(03)00573-7)
- Hagger, M. S., Chatzisarantis, N. L. D., Alberts, H., Anggono, C. O., Batailler, C., Birt, A. R., . . . Zwienerberg, M. (2016). A multilab preregistered replication of the ego-depletion effect. *Perspectives on Psychological Science*, 11, 546–573. <http://dx.doi.org/10.1177/1745691616652873>
- Haun, V. C., Nübold, A., & Bauer, A. G. (2018). Being mindful at work and at home: Buffering effects in the stressor-detachment model. *Journal of Occupational and Organizational Psychology*, 91, 385–410. <http://dx.doi.org/10.1111/joop.12200>
- Haun, V. C., & Oppenauer, V. (2019). The role of job demands and negative work reflection in employees' trajectory of sleep quality over the workweek. *Journal of Occupational Health Psychology*, 24, 675–688. <http://dx.doi.org/10.1037/ocp0000156>
- Herndon, F. (2008). Testing mindfulness with perceptual and cognitive factors: External vs. internal encoding, and the Cognitive Failures Questionnaire. *Personality and Individual Differences*, 44, 32–41. <http://dx.doi.org/10.1016/j.paid.2007.07.002>
- Hobfoll, S. E. (1989). Conservation of resources. A new attempt at conceptualizing stress. *American Psychologist*, 44, 513–524. <http://dx.doi.org/10.1037/0003-066X.44.3.513>
- Hofmann, S. G., Sawyer, A. T., Witt, A. A., & Oh, D. (2010). The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 78, 169–183. <http://dx.doi.org/10.1037/a0018555>
- Hofmann, W., Friese, M., & Strack, F. (2009). Impulse and self-control from a dual-systems perspective. *Perspectives on Psychological Science*, 4, 162–176. <http://dx.doi.org/10.1111/j.1745-6924.2009.01116.x>
- Huffziger, S., & Kuehner, C. (2009). Rumination, distraction, and mindful self-focus in depressed patients. *Behaviour Research and Therapy*, 47, 224–230. <http://dx.doi.org/10.1016/j.brat.2008.12.005>

- Hülshager, U. R., Alberts, H. J., Feinholdt, A., & Lang, J. W. B. (2013). Benefits of mindfulness at work: The role of mindfulness in emotion regulation, emotional exhaustion, and job satisfaction. *Journal of Applied Psychology, 98*, 310–325. <http://dx.doi.org/10.1037/a0031313>
- Hülshager, U. R., Feinholdt, A., & Nübold, A. (2015). A low-dose mindfulness intervention and recovery from work: Effects on psychological detachment, sleep quality, and sleep duration. *Journal of Occupational and Organizational Psychology, 88*, 464–489. <http://dx.doi.org/10.1111/joop.12115>
- Hülshager, U. R., Lang, J. W., Depenbrock, F., Fehrman, C., Zijlstra, F. R., & Alberts, H. J. (2014). The power of presence: The role of mindfulness at work for daily levels and change trajectories of psychological detachment and sleep quality. *Journal of Applied Psychology, 99*, 1113–1128. <http://dx.doi.org/10.1037/a0037702>
- Hülshager, U. R., & Schewe, A. F. (2011). On the costs and benefits of emotional labor: A meta-analysis of three decades of research. *Journal of Occupational Health Psychology, 16*, 361–389. <http://dx.doi.org/10.1037/a0022876>
- Hülshager, U. R., Walkowiak, A., & Thommes, M. S. (2018). How can mindfulness be promoted? Workload and recovery experiences as antecedents of daily fluctuations in mindfulness. *Journal of Occupational and Organizational Psychology, 91*, 261–284. <http://dx.doi.org/10.1111/joop.12206>
- Iida, M., & Shapiro, A. (2019). Mindfulness and daily negative mood variation in romantic relationships. *Mindfulness, 10*, 933–942. <http://dx.doi.org/10.1007/s12671-018-1056-3>
- Ilies, R., Huth, M., Ryan, A. M., & Dimotakis, N. (2015). Explaining the links between workload, distress, and work–family conflict among school employees: Physical, cognitive, and emotional fatigue. *Journal of Educational Psychology, 107*, 1136–1149. <http://dx.doi.org/10.1037/edu0000029>
- Inzlicht, M., & Schmeichel, B. J. (2012). What is ego depletion? Toward a mechanistic revision of the resource model of self-control. *Perspectives on Psychological Science, 7*, 450–463. <http://dx.doi.org/10.1177/1745691612454134>
- Jayawickreme, E., Zachry, C. E., & Fleeson, W. (2019). Whole trait theory: An integrative approach to examining personality structure and process. *Personality and Individual Differences, 136*, 2–11. <http://dx.doi.org/10.1016/j.paid.2018.06.045>
- Kabat-Zinn, J. (1982). An outpatient program in behavioral medicine for chronic pain patients based on the practice of mindfulness meditation: Theoretical considerations and preliminary results. *General Hospital Psychiatry, 4*, 33–47. [http://dx.doi.org/10.1016/0163-8343\(82\)90026-3](http://dx.doi.org/10.1016/0163-8343(82)90026-3)
- Kohls, N., Sauer, S., & Walach, H. (2009). Facets of mindfulness—Results of an online study investigating the Freiburg Mindfulness Inventory. *Personality and Individual Differences, 46*, 224–230. <http://dx.doi.org/10.1016/j.paid.2008.10.009>
- Krick, A., & Felfe, J. (2020). Who benefits from mindfulness? The moderating role of personality and social norms for the effectiveness on psychological and physiological outcomes among police officers. *Journal of Occupational Health Psychology, 25*, 99–112. <http://dx.doi.org/10.1037/ocp0000159>
- Kurzban, R., Duckworth, A., Kable, J. W., & Myers, J. (2013). An opportunity cost model of subjective effort and task performance. *Behavioral and Brain Sciences, 36*, 661–679. <http://dx.doi.org/10.1017/S0140525X12003196>
- Lawrie, E. J., Tuckey, M. R., & Dollard, M. F. (2018). Job design for mindful work: The boosting effect of psychosocial safety climate. *Journal of Occupational Health Psychology, 23*, 483–495. <http://dx.doi.org/10.1037/ocp0000102>
- Liang, L. H., Brown, D. J., Ferris, D. L., Hanig, S., Lian, H., & Keeping, L. M. (2018). The dimensions and mechanisms of mindfulness in regulating aggressive behaviors. *Journal of Applied Psychology, 103*, 281–299. <http://dx.doi.org/10.1037/apl0000283>
- Lomas, T., Medina, J. C., Ivztan, I., Rupprecht, S., & Eiroa-Orosa, F. J. (2019). Mindfulness-based interventions in the workplace: An inclusive systematic review and meta-analysis of their impact upon wellbeing. *The Journal of Positive Psychology, 14*, 625–640. <http://dx.doi.org/10.1080/17439760.2018.1519588>
- Lomas, T., Medina, J. C., Ivztan, I., Rupprecht, S., Hart, R., & Eiroa-Orosa, F. J. (2017). The impact of mindfulness on well-being and performance in the workplace: An inclusive systematic review of the empirical literature. *European Journal of Work and Organizational Psychology, 26*, 492–513. <http://dx.doi.org/10.1080/1359432X.2017.1308924>
- Lundberg, U., Granqvist, M., Hansson, T., Magnusson, M., & Wallin, L. (1989). Psychological and physiological stress responses during repetitive work at an assembly line. *Work and Stress, 3*, 143–153. <http://dx.doi.org/10.1080/02678378908256940>
- Marcks, B. A., & Woods, D. W. (2005). A comparison of thought suppression to an acceptance-based technique in the management of personal intrusive thoughts: A controlled evaluation. *Behaviour Research and Therapy, 43*, 433–445. <http://dx.doi.org/10.1016/j.brat.2004.03.005>
- Maule, A. J., & Svenson, O. (Eds.). (1993). Theoretical and empirical approaches to behavioral decision making and their relation to time constraints. In *Time pressure and stress in human judgment and decision making* (pp. 3–25). New York, NY: Springer. http://dx.doi.org/10.1007/978-1-4757-6846-6_1
- Mesmer-Magnus, J., Manapragada, A., Viswesvaran, C., & Allen, J. W. (2017). Trait mindfulness at work: A meta-analysis of the personal and professional correlates of trait mindfulness. *Human Performance, 30*, 79–98. <http://dx.doi.org/10.1080/08959285.2017.1307842>
- Michalak, J., Heidenreich, T., Ströhle, G., & Nachtigall, C. (2008). Die deutsche version der mindful attention and awareness scale (MAAS) psychometrische befunde zu einem achtsamkeitsfragebogen [The German version of the Mindful Attention and Awareness Scale (MAAS): Psychometric findings to a mindfulness questionnaire]. *Zeitschrift für Klinische Psychologie und Psychotherapie, 37*, 200–208. <http://dx.doi.org/10.1026/1616-3443.37.3.200>
- Montes-Maroto, G., Rodríguez-Muñoz, A., Antino, M., & Gil, F. (2018). Mindfulness beyond the individual: Spillover and crossover effects in working couples. *Mindfulness, 9*, 1258–1267. <http://dx.doi.org/10.1007/s12671-017-0868-x>
- Moore, A., & Malinowski, P. (2009). Meditation, mindfulness and cognitive flexibility. *Consciousness and Cognition, 18*, 176–186. <http://dx.doi.org/10.1016/j.concog.2008.12.008>
- Muthén, L. K., & Muthén, B. O. (1998–2014). *Mplus version 7.3* [Computer software]. Los Angeles, CA: Author.
- Ohly, S., & Fritz, C. (2010). Work characteristics, challenge appraisal, creativity, and proactive behavior: A multi-level study. *Journal of Organizational Behavior, 31*, 543–565. <http://dx.doi.org/10.1002/job.633>
- Olafsen, A. H. (2017). The implications of need-satisfying work climates on state mindfulness in a longitudinal analysis of work outcomes. *Motivation and Emotion, 41*, 22–37. <http://dx.doi.org/10.1007/s11031-016-9592-4>
- Ostafin, B. D., & Kassman, K. T. (2012). Stepping out of history: Mindfulness improves insight problem solving. *Consciousness and Cognition, 21*, 1031–1036. <http://dx.doi.org/10.1016/j.concog.2012.02.014>
- Peeters, M. C. W., Montgomery, A. J., Bakker, A. B., & Schaufeli, W. B. (2005). Balancing work and home: How job and home demands are related to burnout. *International Journal of Stress Management, 12*, 43–61. <http://dx.doi.org/10.1037/1072-5245.12.1.43>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*, 879–903. <http://dx.doi.org/10.1037/0021-9010.88.5.879>
- Poulin, P. A., Mackenzie, C. S., Soloway, G., & Karayolas, E. (2008). Mindfulness training as an evidenced-based approach to reducing stress and promoting well-being among human services professionals. *Inter-*

- national Journal of Health Promotion and Education*, 46, 72–80. <http://dx.doi.org/10.1080/14635240.2008.10708132>
- Querstret, D., Cropley, M., & Fife-Schaw, C. (2017). Internet-based instructor-led mindfulness for work-related rumination, fatigue, and sleep: Assessing facets of mindfulness as mechanisms of change. A randomized waitlist control trial. *Journal of Occupational Health Psychology*, 22, 153–169. <http://dx.doi.org/10.1037/ocp0000028>
- Sauer, S., Walach, H., Schmidt, S., Hinterberger, T., Lynch, S., Büssing, A., & Kohls, N. (2013). Assessment of mindfulness: Review on state of the art. *Mindfulness*, 4, 3–17. <http://dx.doi.org/10.1007/s12671-012-0122-5>
- Semmer, N. (1984). *Stressbezogene Tätigkeitsanalyse* [Stress-oriented task analysis]. Weinheim, Germany: Beltz.
- Shao, R., & Skarlicki, D. P. (2009). The role of mindfulness in predicting individual performance. [Special Section/Édition spéciale: New directions in industrial/organizational psychology/Nouvelles avenues en psychologie industrielle/organisationnelle]. *Canadian Journal of Behavioural Science*, 41, 195–201. <http://dx.doi.org/10.1037/a0015166>
- Shapiro, S. L., Carlson, L. E., Astin, J. A., & Freedman, B. (2006). Mechanisms of mindfulness. *Journal of Clinical Psychology*, 62, 373–386. <http://dx.doi.org/10.1002/jclp.20237>
- Siegel, R. D. (2010). *The mindful solution: Everyday practices for everyday problems*. New York, NY: Guilford Press.
- Slutsky, J., Chin, B., Raye, J., & Creswell, J. D. (2019). Mindfulness training improves employee well-being: A randomized controlled trial. *Journal of Occupational Health Psychology*, 24, 139–149. <http://dx.doi.org/10.1037/ocp0000132>
- Smallwood, J., & Schooler, J. W. (2015). The science of mind wandering: Empirically navigating the stream of consciousness. *Annual Review of Psychology*, 66, 487–518. <http://dx.doi.org/10.1146/annurev-psych-010814-015331>
- Sonnentag, S. (2018). The recovery paradox: Portraying the complex interplay between job stressors, lack of recovery, and poor well-being. *Research in Organizational Behavior*, 38, 169–185. <http://dx.doi.org/10.1016/j.riob.2018.11.002>
- Sonnentag, S., & Fritz, C. (2015). Recovery from job stress: The stressor-detachment model as an integrative framework. *Journal of Organizational Behavior*, 36, S72–S103. <http://dx.doi.org/10.1002/job.1924>
- Spijkerman, M. P., Pots, W. T., & Bohlmeijer, E. T. (2016). Effectiveness of online mindfulness-based interventions in improving mental health: A review and meta-analysis of randomised controlled trials. *Clinical Psychology Review*, 45, 102–114. <http://dx.doi.org/10.1016/j.cpr.2016.03.009>
- Strack, F., & Deutsch, R. (2004). Reflective and impulsive determinants of social behavior. *Personality and Social Psychology Review*, 8, 220–247. http://dx.doi.org/10.1207/s15327957pspr0803_1
- Suermann, H., Brouwers, A., & Snippe, E. (2018). Explaining variations in mindfulness levels in daily life. *Mindfulness*, 9, 1895–1906. <http://dx.doi.org/10.1007/s12671-018-0932-1>
- Sutcliffe, K. M., Vogus, T. J., & Dane, E. (2016). Mindfulness in organizations: A cross-level review. *Annual Review of Organizational Psychology and Organizational Behavior*, 3, 55–81. <http://dx.doi.org/10.1146/annurev-orgpsych-041015-062531>
- ten Brummelhuis, L. L., & Bakker, A. B. (2012). A resource perspective on the work-home interface: The work-home resources model. *American Psychologist*, 67, 545–556. <http://dx.doi.org/10.1037/a0027974>
- Tuckey, M. R., Sonnentag, S., & Bryan, J. (2018). Are state mindfulness and state work engagement related during the workday? *Work and Stress*, 32, 33–48. <http://dx.doi.org/10.1080/02678373.2017.1420707>
- Van Dam, N. T., van Vugt, M. K., Vago, D. R., Schmalzl, L., Saron, C. D., Olendzki, A., . . . Meyer, D. E. (2018). Mind the hype: A critical evaluation and prescriptive agenda for research on mindfulness and meditation. *Perspectives on Psychological Science*, 13, 36–61. <http://dx.doi.org/10.1177/1745691617709589>
- van den Hurk, P. A. M., Giommi, F., Gielen, S. C., Speckens, A. E. M., & Barendregt, H. P. (2010). Greater efficiency in attentional processing related to mindfulness meditation. *The Quarterly Journal of Experimental Psychology*, 63, 1168–1180. <http://dx.doi.org/10.1080/1747021.0903249365>
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063–1070.
- Yanchus, N. J., Eby, L. T., Lance, C. E., & Drollinger, S. (2010). The impact of emotional labor on work–family outcomes. *Journal of Vocational Behavior*, 76, 105–117. <http://dx.doi.org/10.1016/j.jvb.2009.05.001>
- Zapf, D. (1993). Stress-oriented analysis of computerized office work. *European Work and Organizational Psychologist*, 3, 85–100. <http://dx.doi.org/10.1080/09602009308408580>
- Zuzanek, J. (1998). Time use, time pressure, personal stress, mental health, and life satisfaction from a life cycle perspective. *Journal of Occupational Science*, 5, 26–39. <http://dx.doi.org/10.1080/14427591.1998.9686432>
- Zuzanek, J. (2017). What happened to the society of leisure? Of the gap between the “haves” and “have nots” (Canadian time use and well-being trends). *Social Indicators Research*, 130, 27–38. <http://dx.doi.org/10.1007/s11205-015-1133-0>

Received November 26, 2019

Revision received June 6, 2020

Accepted August 7, 2020 ■