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Well-Being from Home to Work: The Role of Mindfulness

A dissertation submitted in partial fulfillment of the requirements for the Doctor of Philosophy degree of Management at Virginia Commonwealth University.

by

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## ABSTRACT

Considering the growing spillover of work and home and its impact on well-being, I draw from the Work-Home Resources Model and Attention Restoration Theory to examine the effects of evening recovery experiences at home on mindfulness at work and eudaimonic workplace well-being. Specifically, I focus on two indicators of eudaimonic well-being—one indicator of psychological functioning (work meaningfulness) and one indicator of social functioning (high-quality connections; HQCs). Further, I introduce a boundary condition, distance from work, of the relationship between evening recovery experiences and mindfulness. I suggest that due to alternative work arrangements in today's workforce (i.e., that permit increased overlap between work and home domains), it is important to consider contextual characteristics of evening recovery. Using daily diary methodology, I found that having a sense of control over one's evening predicted next-day mindfulness at work, but engaging in evening relaxation and mastery activities did not. Daily work mindfulness did predict both intrapersonal and interpersonal indicators of well-being, work meaningfulness and HQCs, which subsequently predicted less turnover and counterproductive work behaviors and greater organizational citizenship behaviors. I did not find support for moderation effects. This work is important for practitioners to understand the role of evening recovery and mindfulness on work well-being and outcomes, as well as future organizational researchers to consider how recovery experiences and their effects have changed in recent times.

**VITA**

Alisha Gupta received her Bachelor of Arts in Public Health from the University of Virginia in 2018. She received her Master of Public Health from the University of Virginia in 2019.



## INTRODUCTION

*“I believe that a tectonic shift has already taken place, and the “great spillover” between work and life is happening one video conference at a time. – Kashif Zaman, Aisle Rocket, Chief Vision Officer*

Meta-analytic evidence suggests the important role of well-being on work effectiveness, performance, and engagement (Carolan et al., 2017; Nielsen et al., 2017; Sutton, 2020). As of 2017, nearly half of U.S. work sites offered a health or wellness program to their employees in efforts to improve employee well-being (Linnan et al., 2019). Although practical efforts like these have become commonplace, the 2021 Annual Psychological Association’s Work and Well-being Survey found that 71% of respondents reported still feeling tense or stress during the workday, implying that employee well-being remains a challenge. Indeed, as the introductory quote suggests, the modern nature of work has blurred the line between the work and home domains, which only exacerbates the preexisting challenges to effectively address employee well-being. Considering the growing spillover of work and home and its impact on well-being (e.g., stress; Westman et al., 2009), I take a work-home process perspective (i.e., an approach that considers the interplay between home and work domains) to examine workplace well-being.

Workplace well-being is comprised of cognitive (i.e., thinking) and affective (i.e., feeling) components (Inceoglu et al., 2018), and has been conceptualized primarily as either *eudaimonic* or *hedonic* in the management literature. Eudaimonic well-being (EWB) captures the cognitive component and is characterized as a developmental state consisting of fulfillment or meaning, development and growth, and social health, whereas hedonic well-being (HWB) captures the affective component and is an overall affective evaluation (e.g., positive and negative affect, life or job satisfaction, Diener et al., 1985). Interestingly, about half of the population is either high on EWB *or* HWB, but not both (Bartels et al., 2019; Keyes et al., 2002).

In addition, management researchers have tended to focus on HWB and less so on EWB (Bartels et al., 2019; Inceoglu et al., 2018). One possible explanation for this is that job satisfaction is often used as a proxy to HWB and it is one of the oldest, most studied concepts in management (Judge et al., 2020; Locke, 1969), and as a result, inflates the amount of research on HWB.

While HWB indicators such as job satisfaction are important for work outcomes, this reflects just one component of workplace well-being. Indeed, meta-analytic work has highlighted the importance of EWB indicators such as feeling connected and purposeful in the workplace (Allan et al., 2019; Van den Broeck et al., 2016), and the exclusion of in-depth examination of EWB is a critical limitation of the workplace well-being literature. To optimize overall work well-being, it is equally important to examine strategies that may enhance or help manage developmental cognitive aspects of well-being in addition to the affective aspects of well-being.

The purpose of this study is to examine predictors of EWB using a work-home process perspective. In doing so, I follow the approach outlined in Bartels et al. (2019) of a two-dimensional conceptualization of EWB, which suggests two components of EWB, 1) psychological functioning and 2) social functioning. I choose to follow this conceptualization as opposed to other conceptualizations that include components of EWB such as, for example, Seligman's (2011) Positive Emotion, Engagement, Relationships, Meaning, and Accomplishment (PERMA) model. While this model encompasses aspects of EWB, researchers have recently found that it highly correlates ( $r = .98$ ) with HWB well-being (a composite formed of positive affect, negative affect, and life satisfaction) (Goodman et al., 2018), thus, there is concern as to whether PERMA truly captures components of EWB or if it simply is another model of HWB. To this end, I adopt Bartel et al.'s (2019) conceptualization of EWB at work.

Specifically, I focus on two specific indicators, one indicator of psychological functioning (work meaningfulness) and one indicator of social functioning (high-quality connections). The psychological dimension is characterized by having feelings of meaning or purpose in one's work and having the ability to learn and grow at work. In line with this conceptualization, I investigate work meaningfulness, a positive subjective experience in which individuals perceive their work as significant and purposeful (Blustein et al., 2023; Pratt & Ashforth, 2003). Further, I follow recent work that suggests that work meaningfulness fluctuates daily (Bailey & Madden, 2017; Mitra & Buzzanell, 2017). I choose this variable over other related variables such as thriving, which includes a EWB component (learning) but also a HWB component (vitality), both of which should be considered in concert (Spreitzer et al., 2012). The aim of this study is to isolate EWB and thriving excludes the interpersonal (or social) dimension of EWB as detailed by Bartels et al. (2019).

The second dimension of EWB is a social dimension, which reflects individuals' feelings of social acceptance and integration at work. That is, abilities to achieve psychosocial flourishing such that individuals, for example, develop positive relationships over time and feel a sense of social connection at work. The workplace has traditionally been a means of developing stable connections, however, maintaining work connections has now become a source of challenge in remote/hybrid environments. In line with the definition of the social dimension by Bartels et al. (2019), I investigate high-quality connections (HQCs), or short interactions in which individuals are respectful and open with one another, and are engaged and energized in the conversation (Dutton, 2003). I choose HQCs because Waters et al. (2022) highlights that HQCs may keep people connected in a physically-distant workplace, which is of growing prevalence in today's workforce.

The proposed study is grounded in the Work-Home Resources model (W-HR; Ten Brummelhuis & Bakker, 2012a), which takes a resource spillover perspective in understanding how home (work) resources and demands affect individuals' resources needed for optimal functioning, which in turn, affects outcomes in the work (home) domain. According to the W-HR model, I posit EWB as the work outcome of interest, and examine a resource from the home domain which might replenish individuals' resources. Specifically, I highlight one important resource-giving experience in the home domain, evening recovery experiences, that may positively relate to attentional resources such as mindfulness (broadened perspective of and reduced reactivity to the present moment, Quaglia et al., 2015) that then influence workplace EWB (i.e., work meaningfulness, HQCs), and ultimately key work outcomes including contextual performance (i.e., organizational citizenship behaviors; OCBs, counterproductive work behaviors; CWBs) and turnover intentions. Further, I introduce a boundary condition of the relationship between evening recovery experiences and mindfulness. I suggest that due to alternative work arrangements in today's workforce (i.e., that permit increased overlap between work and home domains), it is important to consider contextual characteristics of evening recovery. Indeed, Allen and French (2023) note that it is important to examine boundary management strategies across different work arrangements to balance work and home lives, and I argue that the location in which one recovers as a possible boundary management strategy to create a separation between work and home lives in order to recover from work effectively. In doing so, I draw from Attention Restoration Theory (ART; Kaplan, 1995), which highlights characteristics of one's recovery environment as a key factor in effective restoration. Specifically, I suggest that the effectiveness of individuals' evening recovery and subsequent

mindfulness depends on the environment (i.e., spatial and psychological distance) in which one recovers. My theoretical model is presented in *Figure 1*.

The proposed study contributes to the management literature in the following ways. First, I contribute to the workplace well-being literature. Despite the growing interest in workplace well-being, the majority of scholars examine HWB (Bartels et al., 2019), and the literature regarding components of HWB with respect to the variables studied here such as evening recovery and mindfulness is well-established (Mesmer-Magnus et al., 2017; Sonnentag et al., 2022). Thus, I advance whether evening recovery experiences and mindfulness can also support EWB. In doing so, I take a work-home process perspective to shed light on how we care for ourselves at home may influence our EWB *at work*. Indeed, Sonnentag et al. (2022) note that the recovery literature widely documents the positive direct effects of recovery experiences to well-being outcomes at bedtime (i.e., the same day that which one recovers) and at the start of the next morning. However, considering that the large majority of the American workforce reported to feel stress *during* the workday (*The American workforce faces compounding pressure: APA's 2021 Work and Well-being Survey results*, 2021), I examine the effects of evening recovery experiences on well-being during the next workday through an underlying mechanism of mindfulness.

More specifically, in regard to the indicators of EWB, scholars have advanced primarily contextual conditions on the antecedents of work meaningfulness as they relate to organizational conditions and values, social cues (including leader behaviors), job design characteristics, and employment features—external aspects of the work environment that can be manipulated (De Boeck et al., 2019). However, what is less studied is the role of cognitive or attentional attributes such as mindfulness that may impact work meaningfulness. Importantly, work meaningfulness is

a perception, thus, how we attend to, or “tune-in” with, our work is important in finding meaning in and forming perceptions of our work. Indeed, individuals engage in “meaning-making” as “perceptions of meaningfulness must necessarily travel through the self” (De Boeck et al., 2019; Rosso et al., 2010, p. 15). To this end, I advance mindfulness as an antecedent of work meaningfulness. In addition, I build on previous work by empirically advancing work meaningfulness as a fluctuating, state-level variable, as recent qualitative data indicates variability across work experiences (Bailey & Madden, 2017; Mitra & Buzzanell, 2017). Second, researchers have long believed that feeling connected with others at work is important (Dutton, 2003; Ferris et al., 2009), and the workplace has traditionally been a means to establish stable connections. However, maintaining a sense of connection in the modern workforce is a growing challenge due to remote and/or hybrid work environments. While HQCs have been suggested to keep people connected in a physically-distant workplace (Waters et al., 2022), the majority of work on HQCs is theoretical in nature, and thus, limiting the evidence of the processes that motivate employees to strengthen their workplace connections (Heaphy et al., 2018; Reina et al., 2022). I suggest that evening recovery experiences and next-day mindfulness may be important predictors of HQCs.

Next, this study contributes to the recovery literature in two ways. First, the extant recovery literature has widely recognized that recovery is positively related to energetic (e.g., depletion, fatigue, vitality) or affective resources (i.e., components of HWB), but the literature is less clear on the impacts of recovery experiences on attentional resources. Thus, drawing from the W-HR model, I advance mindfulness as an attentional resource that is potentially gained from evening recovery experiences. This is important for two reasons. First, to advance the recovery literature, we should develop an understanding of whether evening recovery has effects

beyond energetic or affective outcomes. Examining attention in the context of evening recovery is a ripe area, considering the only work I found that related recovery and attention focused on *at-work* recovery, none of which examined mindfulness (Bennett et al., 2020; Conlin et al., 2021; Ten Brummelhuis et al., 2022), or sleep quality and mindfulness (Hülshager et al., 2018). Second, mindfulness researchers have accumulated evidence regarding the consequences of mindfulness, but have paid less attention to the factors that influence its experience (Reina & Kudesia, 2020; Shahbaz & Parker, 2022), especially from a work-home process perspective. This is a contribution to not only the recovery literature, but also the mindfulness literature.

Second, Sonnentag et al. (2017) highlight that researchers have rarely questioned whether the home domain is a suitable environment for recovery, but given the increasingly blurry lines between home and work, home as an effective recovery environment is now uncertain. Sonnentag et al. (2010) started to examine spatial distance between home and work (i.e., if individuals have a home office) and found that low spatial distance was negatively related to psychological detachment from work. However, I aim to build on earlier work as there are more aspects to spatial distance in today's work environment than the presence of a home office and link spatial distance to attentional resources at work. Importantly, Shahbaz and Parker (2022) note that rather than merely individual and organizational factors that predict mindfulness, researchers should consider more macro-level influences. For example, the natural environment has shown to facilitate the experience of mindfulness (Van Gordon et al., 2018), thus, other characteristics of the environment may also influence mindfulness. To this end, I address these recent calls and examine recovery environment (spatial and psychological distance from one's work space) as a key macro-level factor that may amplify the relationship between evening recovery experiences and next-day mindfulness.

Finally, I contribute to the mindfulness at work literature. Mindfulness at work is of growing importance to scholars and practitioners alike given its benefits in the workplace (Shahbaz & Parker, 2022). I link mindfulness with the W-HR model and propose that evening recovery experiences can promote subsequent mindfulness at work by replenishing attentional resources, as previous work that finds a positive relationship between other forms of recovery such as sleep and mindful states (Hülshager et al., 2018). Thus, with rejuvenated attentional resources, mindful individuals are better able to direct their resources into their work—to find more meaning in their work and create higher-quality connections. Second, Good et al. (2016) call for researchers to examine how mindfulness may impact relational outcomes (as compared to intrapersonal outcomes). Relatedly, Reina et al. (2022) recently advanced a framework of mindful relating, which characterizes how individuals' mindfulness during social interactions at work influences the trajectory of relationship quality. Extending this line of work, I empirically examine this phenomenon by investigating whether individuals' daily mindfulness influences the quality of their short-term interactions (HQCs). Finally, U. Hülshager and H. Alberts (2021) recently developed a trait-level scale of mindfulness at work, however, given that mindfulness varies situationally (Reina & Kudesia, 2020), I conceptualize mindfulness at work at the state (i.e., daily) level with within-person variance.

The remainder of this proposal unfolds as follows: First, I explicitly state the aims of the proposed study. Then, I explain the conceptualization of and review the literature on two indicators of EWB, work meaningfulness and HQCs. I next discuss the theoretical background used to explain the relationships between the focal variables in the hypothesized model and explain each link. Finally, I propose a study to test these hypotheses.

### **Study Aims**



The objective of this dissertation is to assess predictors of EWB at work, that have previously been related to practical outcomes of interest (turnover intentions, CWBs, OCBs), using a home-work process approach. Specific aims that guide the hypotheses developed here are:

1. To examine mindfulness at work as an attentional resource in the context of the W-HR model by evaluating whether evening recovery experiences is positively related to mindfulness at work.
2. To evaluate whether mindfulness at work is related to two key indicators of EWB including work meaningfulness (psychological EWB) and HQCs (social EWB).
3. To evaluate whether recovery environment affects the relationship between evening recovery experiences and attentional resources. Stated differently, to evaluate whether a distanced-from-work recovery environment strengthens the relationship between evening recovery experiences and mindfulness at work.

### **Eudaimonic Well-Being at Work**

Eudaimonic well-being reflects individuals' evaluation of their abilities to optimally function and develop at work (Bartels et al., 2019; Ryff, 1989). EWB encompasses both a psychological (also referred to as internal or intrapersonal) component (e.g., experience of fulfilling goals, growth) and a social (also referred to as external or interpersonal) component (e.g., social support, social coherence/integration). The psychological dimension is characterized by having feelings of meaning or purpose in one's work and having the ability to learn and grow at work. The social dimension reflects individuals' feelings of social acceptance and integration at work. That is, abilities to achieve psychosocial flourishing such that individuals, for example, feel positive relationships and engage in healthy interpersonal interactions. Considering the

psychological and social nature of EWB, I focus one indicator of each dimension, work meaningfulness and HQCs. In the following sections, I review conceptualizations and the extant evidence on these two indicators of EWB at work.

## **Meaningful Work: What Is It?**

### ***Conceptualization of Meaningful Work***

Meaningful work is a subjective experience in which individuals perceive their work as significant and purposeful (Blustein et al., 2023; Pratt & Ashforth, 2003). It is also referred to as “work meaningfulness”, “meaningfulness at work”, “meaningfulness of work”, and “meaning of work.” I use work meaningfulness and meaningful work interchangeably in this dissertation. These terms characterize the way we experience meaning and purpose of our lives through work and refers to the actual work that invokes a state of meaningfulness for individuals. Experiencing meaningful work brings a sense of fulfillment to our overall lives (Chalofsky, 2003). The literature has generally described work meaningfulness as a positive phenomenon, but Blustein et al. (2023) note that meaningful work can also arise in moments of tension or conflict that are associated with negative feelings or sacrifices. Work meaningfulness has traditionally been conceptualized and measured as a unidimensional construct (Blustein et al., 2023), however, others have further developed dimensions of work meaningfulness such as unity with others, developing the inner self, serving others, and expressing full potential (Lips-Wiersma et al., 2020). In this proposal, I follow the traditional conceptualization of meaningful work as a unidimensional indicator of EWB such that it assesses individuals’ sense of purpose or meaning at work, a building block of well-being (Seligman, 2018). Importantly, recent qualitative data indicates that the amount of perceived or felt significance of work can vary greatly (e.g., a single

work experience can be more or less meaningful) (Bailey & Madden, 2017; Mitra & Buzzanell, 2017; Rosso et al., 2010).

### ***Antecedents of Meaningful Work***

The extant literature finds that organization-, social context-, job design-, and employment-related working conditions are common antecedents of work meaningfulness (Blustein et al., 2023). Examples of organizational factors that predict work meaningfulness include corporate social responsibility (Aguinis & Glavas, 2019), a social-moral climate (Schnell et al., 2013), utilization of datafication systems (through enhanced self-reflection and development of employees) (Stein et al., 2019), and human resource practices aimed at personal growth and development (Fletcher, 2019). Examples of social predictors include receiving cues from others that provide information about their worth at work (Wrzesniewski et al., 2003), leadership styles and behaviors (Bailey & Madden, 2016; Cai et al., 2018; Demirtas et al., 2017; Lips-Wiersma et al., 2020), and one's positive relationships, connections, and belongingness in the workplace (Colbert et al., 2015; Fouché et al., 2017; Pratt & Ashforth, 2003).

Next, job design conditions also relate to work meaningfulness. Perceptions of person-job fit (specifically, self-concept-job fit; Scroggins, 2008) and the type of work predict work meaningfulness. For instance, particular job types call for specific personality traits that can influence work meaningfulness, indeed, conscientiousness and openness to experience within the context of sales jobs positively related to perceived meaningfulness, which ultimately related to increased sales performance (Frieder et al., 2018). Along these lines, Allan et al. (2018) find that those who worked to benefit someone else, as compared to benefit themselves, reported greater task meaningfulness and work meaningfulness generally. Moreover, these authors reported that individuals who helped others many times in a single day reported greater work meaningfulness

over time. Relatedly, Colbert et al. (2015) and Meng et al. (2023) found that giving to others (i.e., prosocial impact) was associated with meaningful work. Thus, the extant literature shows that a relational nature of work improves perceptions of work meaningfulness (Grant, 2007), whereas a sense of alienation, disconnection, or powerlessness hinders the possibility that individuals will experience work meaningfulness (Bailey & Madden, 2019). Furthermore, job features such as autonomy, task significance, skill variety, task identity, feedback, and challenging job demands positively predict experiences of meaningful work (Humphrey et al., 2007; Kim & Beehr, 2020).

Finally, employment conditions such as job insecurity (Arnoux-Nicolas et al., 2016), gig or platform work (Kost et al., 2018), and underemployment (Kim & Allan, 2020) have been shown to limit experiences of work meaningfulness. Interestingly, work meaningfulness can be induced. For example, a meaningfulness intervention facilitated not only meaningfulness in/at work, but also job engagement and personal initiative (Fletcher & Schofield, 2021).

### ***Consequences of Meaningful Work***

Meaningful work has been related to a number of key work outcomes. Meta-analytically, meaningful work positively relates to motivation, hope, self-efficacy, positive affect, job performance, and work relationships, and negatively related to turnover intentions, burnout, stress, and CWBs (Hu & Hirsh, 2017). More recently, a meta-analysis by Allan et al. (2019) found that meaningful work showed strong positive correlations ( $r > .70$ ) with engagement, commitment, and job satisfaction, moderate to large positive correlations ( $r \approx .44$ ) with life satisfaction, life meaning, general health, and (negatively with) withdrawal intentions, and small to moderate correlations ( $r \approx .33$ ) with OCBs, self-rated job performance, and (negatively with) negative affect. Interestingly, Vogel et al. (2020) find that the effect of meaningfulness and

engagement differs based on whether work meaningfulness is considered between-person or within-person, such that at the between-person level, work meaningfulness increased daily engagement via attentiveness, but at the within-person level, too little and too much meaningful work results in fatigue, thereby reducing engagement levels. This work shows the nuanced, fluctuating nature of work meaningfulness.

## **High-Quality Connections: What Are They?**

### ***Conceptualization of High-Quality Connections***

High-quality connections are short, dyadic interactions. These interactions do not require extensive interaction, rather, HQCs can be fostered in momentary interactions (e.g., one hallway conversation) (Dutton, 2003). Broadly, these interactions are characterized by three subjective, or emotional, features and three structural, or that which specifies the extent of engagement between two individuals, features (Stephens et al., 2012). I describe each in turn.

The subjective features include vitality, positive regard, and felt mutuality. To be considered a HQC, *vitality* is required such that individuals feel positive arousal and positive energy. HQCs also require *positive regard*, or a feeling of feeling cared for, valued, and respected during the interaction (Rogers, 1951). Third, *felt mutuality* reflects mutual vulnerability, responsiveness, and engagement during the interaction. Taken together, feeling these three characteristics during an interaction would characterize it as a HQC.

In addition, for an interaction to be considered a HQC, three structural features must be present: emotional carrying capacity, tensility, and connectivity (Dutton & Dukerich, 2006; Stephens et al., 2012). *Emotional carrying capacity* reflects the tendency to express both positive and negative emotion during an interaction. *Tensility* of a connection indicates the capacity for resilience, or whether or not the connection can withstand during times of strain or stress.

Finally, *connectivity* is the extent of openness between two people – whether they are open to new ideas, thoughts, or opinions. In sum, an interaction is considered a HQC when both parties engage with mutual respect, are engaged in the conversation, and open towards one another (Dutton, 2003).

### ***Antecedents of High-Quality Connections***

A myriad of antecedents have been discussed to foster HQCs. Broadly, Stephens et al. (2012) suggested cognitive (e.g., other-awareness, impression formation, perspective-taking), emotional (e.g., positive emotions, emotional contagion, empathy), and behavioral antecedents (e.g., respectful engagement, helping) of HQCs. More specifically, Cooper and Sosik (2012) suggested humor is one attribute that can foster HQCs. The empirical research on the antecedents of HQCs is starting to grow. For example, Chhajer and Dutta (2021) and Akgün et al. (2016) show that gratitude predicts HQCs at the individual and unit level, respectively. At the team level, a joyful team atmosphere predicted aspects of HQCs (team mutuality and reflexivity), which then increased team resilience capacity (Hartmann et al., 2021). In addition, high-stakes projects, or those that require urgency and dependency, result in increased caring questioning and shared knowledge (Aarrestad et al., 2015), both features of HQCs. HQCs can also be especially useful under certain circumstances. For example, HQCs strengthened the positive relationship between coaching and feelings of resilience (Mosteo et al., 2016). Considering prior research, although attentional attributes such as other-awareness and perspective-taking have been suggested as predictors of HQCs, little to no work has further investigated this phenomenon.

### ***Consequences of High-Quality Connections***

With regard to the consequences of HQCs, extant theoretical work suggests that high-quality interactions can enrich individuals' overall well-being at work (Dutton, 2017), as well as their social identity (Roberts, 2005). Specifically, Dobrow et al. (2012) suggest that mutuality, a specific characteristic of HQCs, is important for the growth of individuals' developmental network (e.g., career development network). Moving beyond subjective experiences or attributes as outcomes of HQCs, Heaphy and Dutton (2008) suggest that HQCs can result in physiological changes as well such as decreased cardiovascular activity, strengthened immune responsiveness to stress, and the release of oxytocin.

Empirically, research has shown that HQCs can have benefits at the individual, team, leader, and firm levels of the organization. On an individual level, HQCs have been positively related to thriving and subsequent employee voice behavior (Koçak & Hazel, 2019), affective commitment, innovative behaviors, psychological availability, creative self-efficacy (Vinarski-Peretz et al., 2011), mental health, and flourishing (Major et al., 2018), and negatively related to loneliness and illness symptoms (Major et al., 2018). Across the individual and team levels, Stephens et al. (2013) found that teams' relational closeness and team trust was positively related to individuals' emotional carrying capacity (a structural feature of HQCs), which in turn, positively predicted individual and team resilience. Later, Stephens and Carmeli (2016) found that individuals' emotional carrying capacity, in the form of expressing negative emotions, positively related to team knowledge sharing, ultimately for improved performance outcomes. HQCs have also been related to improved psychology safety, and subsequently, learning behaviors on the individual and team levels (Brueller & Carmeli, 2011; Carmeli & Gittell, 2009). At the leader level, HQCs between leaders and followers were positively related to task and contextual performance (Chhajer & Dutta, 2021). Finally, on the organizational level, HQCs

have been related to improved firm innovation, and ultimately, firm performance (Akgün et al., 2016).

## HYPOTHESES DEVELOPMENT

### Theoretical Background

The hypothesized model is based in the W-HR model (Ten Brummelhuis & Bakker, 2012a) and ART (Kaplan, 1995). W-HR explains the spillover between home and work lives, implying that the home and work domains are an integrative, connected process. The W-HR model suggests that our work and home domains can be resource-depleting (e.g., working overtime, caring for young children) or resource-providing (e.g., advice from a coworker, participating in hobbies), and that individuals have limited available *personal resources* (e.g., physical energy, focus, mental resilience, or mood) to fulfill home and work demands. As a result, once individuals exert their personal resources towards work or home demands, they are left with reduced availability of personal resources to use in the opposite domain. In contrast, the home or work domains can also enhance individuals' personal resources, which then increases the availability of personal resources for use in the other domain. In addition, the W-HR model highlights that *key resources*, or resources that facilitate, alter, or can make use of other domain-specific resources more effective, can strengthen or weaken the domain-specific resource—personal resources relationship. Key resources can be micro (e.g., optimism, extraversion, goal pursuit, social power, status, etc.) or macro (e.g., economic, social, or cultural characteristics). Taken together, the W-HR model highlights that individuals have a finite amount of resources that spillover between the home and work domains, which can either deplete or replenish these resources, and that key resources can strengthen or weaken these processes.



In addition to the W-HR model, I integrate ART to examine the role of recovery environment in the proposed model. Kaplan's ART (1995) suggests that to permit restoration, individuals should "be away" from their demands, both spatially and psychologically. This theory implies that individuals attach meaning to their demands space (e.g., a room in which one works is associated with work demands), thus, recovering in the same space as individuals' demands, or in a different space but consumed with thoughts of demands, may undermine restoration. Taken together, I conceptualize evening recovery as a resource in the home domain, mindfulness as a personal resource, work meaningfulness and high-quality connections as indicators of work day well-being, and turnover and job performance as work outcomes, and suggest that recovery environment may strengthen the hypothesized relationships.

### **Evening Recovery**

Recovery refers to a process in which individuals, after having experienced a sense of stress or demands, regain their resources and return to their pre-stressor levels (Meijman & Mulder, 2013). Evening recovery, in particular, takes place after the work day in order to reduce feelings of depletion or stress associated with the work day, and is limited to recovery that happens during waking hours after work (i.e., between leaving work and going to bed). Given the scope of evening recovery, I do not review sleep research here. In addition, the W-HR model characterizes sleep as a personal resource, which would then conflate the resources gained from the home domain with personal resources.

In this study, I rely on the taxonomy of experiences of evening recovery (psychological detachment, relaxation, mastery, and control) put forth by Sonnentag and Fritz (2007). Each of these experiences aims to reduce stress associated with one's job demands and promotes restoration. *Psychological detachment* is a cognitive state of disengaging from work or leaving

work behind. When individuals detach from work, they do not think about work duties or responsibilities. *Relaxation* is a leisure process and is characterized by a state of low activation and high positive affect. This can form of recovery can include physical (e.g., muscle) or cognitive (e.g., meditation) relaxation strategies. *Mastery*-oriented strategies are those experiences that allow individuals to restore their sense of competency or proficiency or build up internal resources such as self-efficacy (e.g., learning a new hobby or language). Although these experiences may require individuals to exert additional demands or effort, these strategies ultimately increase their positive affect. *Control* is the ability to choose a recovery experience among options. Similar to mastery experiences, exerting control can increase individuals' self-efficacy or feelings of competence, and can enhance recovery because individuals can choose which recovery activities supports them best. I focus on relaxation, mastery, and control in this dissertation as evening recovery experiences because ART suggests that psychological detachment is a characteristic of restorative environment, thus, I examine psychological detachment in the context of recovery environment instead of as a recovery experience. Taken together, engaging in these recovery strategies can help individuals unwind from their work day and replenish resources for the following workday.

The extant recovery literature has supported the positive effects of evening recovery experiences on outcomes including well-being, affect, and depletion (for a comprehensive review, see Sonnentag et al., 2022; Sonnentag et al., 2017). In this section, I highlight influential previous research that examines the above-mentioned recovery experiences. Looking at the four experiences together, McGrath et al. (2017) found that higher engagement in evening recovery experiences resulted in improved sleep quality and next-morning positive affect. Moreover, recovery research finds the most consistent patterns for the effects of relaxation and

psychological detachment experiences on well-being-related outcomes but less consistent patterns for mastery and control (Sonnentag et al., 2017). In addition, evening mastery experiences increased next-morning positive activation, and evening relaxation increased next-morning serenity (Sonnentag et al., 2008) and engagement (Sonnentag, 2003). More specifically, engaging in evening activities such as physical (e.g., sports) and social activities has been related to improved well-being (Rook & Zijlstra, 2006; Sonnentag & Natter, 2004), and recovering outdoors has been related to increased next-day work effort via increased positive affect and reduced depletion (Klotz et al., 2022). Further, Bennett et al. (2016) found that combinations of recovery experiences matter such that employees with a “leaving work behind” profile (i.e., high detachment, high relaxation, and low problem-solving pondering) reported lower levels of emotional exhaustion and somatic complaints in comparison with those employees with a “pondering” profile (i.e., low detachment, low relaxation, and high problem-solving pondering) or a “recovering ponderer” profile (i.e., moderate detachment, high relaxation, high problem-solving pondering). Although this seems positive, employees with the “leaving work behind” profile still reported low levels of work engagement. This research provides important insights into the evening recovery literature. Importantly, Sonnentag et al. (2022) note that the majority of recovery research examines affective well-being outcomes (i.e., HWB) at the end of the day (bedtime) or the next morning, rather than well-being during the work day. Considering the large majority of Americans feel stressed *during* the work day (APA, 2021), I aim to further develop this literature by examining the predicting effect of evening recovery experiences on next-day work mindfulness and subsequent workplace well-being. Furthermore, drawing from the W-HR model, I propose that an underlying attentional resource of mindfulness may be important to this process.

## **Evening Recovery and Mindfulness at Work**

According to the W-HR model, engaging in evening recovery strategies in one's home domain should replenish one's personal resources for use in the work domain. In this section, I advance mindfulness at work as a personal resource that follows evening recovery. Mindfulness is characterized by being open and aware to the present moment in a bias- and judgment-free manner that allows individuals to notice thoughts before assigning attitudes or emotions towards them (Quaglia et al., 2016). More recently, mindfulness has recently been conceptualized according to four, more nuanced dimensions: describing, acting with awareness, nonreactivity to inner experience, and nonjudging (U. Hülshager & H. Alberts, 2021). Describing is the ability to "tune in" and describe an experience. Acting with awareness involves being attentive to and engaged in the present moment. Nonreactivity builds on awareness such that it involves monitoring ongoing thoughts and feelings without attaching meaning to them (i.e., decentering, Bernstein et al., 2015; Reina et al., 2022), and bringing attention back to the present moment when one realizes distraction. And finally, nonjudging is experiencing thoughts and feelings without criticizing or labeling them in a particular way. Taken together, mindful individuals notice information that flows in during an experience, but do not ruminate, react, or form opinions about this information (U. R. Hülshager & H. J. E. M. Alberts, 2021). That is, they are attentive to the present moment and are able to maintain this detached presence as other thoughts and emotions arise to encourage reduced reactivity (Reina & Kudesia, 2020). Although there are multiple aspects to mindfulness, I discuss mindfulness as a whole in this paper such that mindful individuals are able to be engaged in the present moment and monitor ongoing thoughts and emotions in a nonjudgmental or opinionated way.

Mindfulness has shown benefits for individuals in the workplace (Shahbaz & Parker, 2022), for example, it is positively related to key work outcomes such as job performance (Forjan et al., 2020; Zhang et al., 2013) and job satisfaction (Forjan et al., 2020). Moreover, given that mindfulness can also be induced, practitioners have also been increasingly interested in mindfulness at work. Indeed, workplace mindfulness interventions have been positively related to prosocial behavior (Hafenbrack et al., 2020), task motivation and focus (Hafenbrack & Vohs, 2018), and task performance and aspects of HWB such as job satisfaction, vitality, and positive mood (Pang & Ruch, 2019). Considering the reviewed literature, it is evident that, until this point, the majority of the studies within the management literature have examined the outcomes of mindfulness at work, leaving virtually no understanding of what gives rise to mindful states at work (for exceptions, see Hülshager et al., 2018; Reina & Kudesia, 2020).

Importantly, mindfulness is of a volatile nature such that it fluctuates across situations (Reina & Kudesia, 2020). For instance, an individual may be mindful in one meeting, but maybe distracted or consumed with other thoughts or tasks in their next meeting. In other words, mindfulness is a particular way of paying attention or focusing on an experience, and it can be high on one day and low on the next day. According to the W-HR model, personal resources available depend on one's contextual demands and resources. Thus, home and work domains, if especially demanding, can reduce personal resources available for the other domain, whereas home and work domains that are resource-giving replenish personal resources for the other domain. Research on recovery, as reviewed previously, finds a positive relationship between evening recovery and energetic and affective resources (both components related to HWB). Beyond energetic and affective resources, I examine whether evening recovery experiences is positively related to attentional resources such as mindfulness. In fact, meta-analytic evidence

shows that recovery experiences positively relate to energy (higher vigor, lower fatigue), and that these energetic states influence attentional states (Bennett et al., 2018). Moreover, a more recent meta-analysis by Steed et al. (2021) find that engaging in recovery experiences does indeed lead to a state of feeling recovered. Thus, these findings suggest that evening recovery experiences may positively relate to attentional resources as well.

When individuals engage in evening recovery, they engage in activities or coping strategies that allow them to break from their work demands. For example, engaging in exercise after work takes one's mind off of work (i.e., psychological detachment) and may be a form of mastery for some (e.g., feeling strong or competent in oneself). Moreover, if individuals choose to engage in a specific exercise, that is a form of control—they have the autonomy to decide how to spend their time in a way that makes them feel recovered from their work demands. Similarly, watching television in the evening may be a way for some individuals to relax and detach from their day. These are just some examples that allow individuals to feel recovered, which positively predicts mental (i.e., attentional) resources. Similarly, Bennett et al. (2020) found that recovery *during the work day* (i.e., microbreaks) increased attention at work, Ten Brummelhuis et al. (2022) found that physical activity improved work focus, and Hülshager et al. (2018) found a positive, reciprocal relationship between sleep quality and mindful states at work. Taken together, the extant findings suggest that different forms of recovery replenish attentional resources. According to the W-HR model, the capacity to focus is a psychological resource (Ten Brummelhuis & Bakker, 2012a), and mindfulness is a particular type of focus (nonjudgmental and present) and attention regulation, which requires cognitive effort to control one's information processing and responses. Importantly, there is a distinction between mindfulness interventions and actually experiencing or infusing mindfulness day-to-day that is relevant to

discuss in the context of evening recovery experiences. Mindfulness interventions are formal practices in which individuals allocate time to practice experiencing mindfulness through for example, a mindfulness meditation, body scan, or mindful movement (Birtwell et al., 2019)—all of which are intended to make individuals more mindful generally (i.e., trait mindfulness). In contrast, individuals can also informally experience or infuse mindfulness in their day-to-day responsibilities or interactions. For example, individuals can be mindful towards one task or towards another coworker. In this paper, I focus on the informal experience of mindfulness (i.e., state mindfulness) rather than formal mindfulness practices (e.g., such as yoga as a form of mindful movement, walking meditations) since these may be a way for individuals to decompress from work and alleviate stress in the evenings, and thus, be conflated with evening recovery experiences. I thus examine evening recovery experiences as a strategy of enhancing experiences of mindfulness the next work day. Further, Burgoon and Langer (1995) state that mindfulness is a form of active information processing. Simply, it takes deliberate effort to be nonjudgmental and maintain present-moment attention towards any given experience or situation. Further, it takes deliberate effort to observe from a decentered perspective, rather than immediately reacting to an experience or situation. To be mindful, individuals need to have attentional resources. Extending the extant recovery research with a particular type of attention characterized by openness and receptivity, I follow the W-HR model and expect that due to individuals' feelings of restoration from evening recovery, individuals will be better equipped with attentional resources, and more specifically, the ability to experience mindfulness at work the following day.

*Hypothesis 1: Evening recovery experiences of a) relaxation, b) mastery, and c) control will be positively related to next-day mindfulness at work.*

## **Mindfulness and Eudaimonic Work Well-Being**

Next, the Work-Home Resources model suggests that due an increase in personal resources from the home domain, individuals should see improved outcomes in the work domain. In this section, I explain the link between mindfulness as a personal resource and increased EWB at work. As mentioned previously, EWB includes an intrapersonal (i.e., psychological) and interpersonal (i.e., social) dimension. Similarly, mindfulness reflects the quality (i.e., how) of our attention and involves what we pay attention, and also how we interact with others (Reina et al., 2022). Considering this, mindfulness can be mapped onto the psychological aspect of EWB, that is, how we pay attention to our work tasks, as well as the social aspect of EWB, or how we interact with others at work, for optimal intrapersonal functioning and development. I explain each in turn.

### ***Mindfulness and Meaningful Work***

As reviewed previously, scholars have advanced primarily contextual conditions on the antecedents of work meaningfulness as they relate to organizational conditions and values, social cues (including leader behaviors), job design characteristics, and employment features. However, what is less studied is the role of cognitive or attentional attributes such as mindfulness that may impact work meaningfulness. The W-HR model suggests that when individuals are replenished of their resources from one domain, they are likely to see improved outcomes in the other domain through replenished personal resources. Due to an increased likelihood to be mindful after engaging in evening recovery experiences, I suggest mindful individuals will direct their resources into their work and perceive greater meaning in their work.

When individuals are mindful at work, they are in tune with the present moment. At work, mindful individuals attend to their work with intention and purpose, rather than routinely



completing assignments as to “check a box.” In addition, they do not react negatively to mundane work tasks, rather they are attentive and aware to each task. Furthermore, mindful individuals have a decentered mindset such that they do not attach meaning to thoughts that are flowing in or out of their minds while they are working on a task. That is, they do not cling on to thoughts associated with a past or future task and focus in on the present moment. For example, consider a mundane task such as doing the dishes. Typically, we might be thinking about our next task (e.g., another chore) *while* we are doing the dishes, however, if one is mindful while doing the dishes, they are paying attention to an otherwise monotonous, but necessary task, and intentionally noticing the sensations that may accompany that moment (e.g., the temperature of the water on their skin). Similarly, in the workplace, individuals engage in “meaning-making” such that they form perceptions of meaningfulness themselves, which implies that individuals can find meaning in any type of work (De Boeck et al., 2019). Due to a mindful presence at work, individuals will form a connection with their tasks, even mundane tasks, finding greater purpose or meaning behind each task. Relatedly, mindfulness promotes work engagement, or immersion in job activities, because individuals are positively engulfed in their activities (Leroy et al., 2013). In other words, mindfulness fosters presence in their work but also the potential to observe different, or novel, ways of completing tasks, which promotes this state of involvement or attentiveness to one’s work (Leroy et al., 2013). Similarly, Singh and Bamel (2020) suggest that mindfulness promotes abilities to observe positive and negative cues from their environment to better make sense or meaning of their work. In sum, building on previous research, I suggest that when mindful individuals are present in their roles, they will experience a greater a sense of meaningfulness.

*Hypothesis 2: Mindfulness at work will be positively related to work meaningfulness.*

Mindfulness varies from task-to-task, from day-to-day, thus, on days when individuals have more restorative evenings, they are likely to be more mindful towards their tasks the next-day. Drawing from W-HR, this home restorative process results in increased work outcomes, thus evening recovery should rejuvenate individuals' abilities to be mindful at work, resulting in improved EWB work outcomes such as perceptions of work meaningfulness.

*Hypothesis 3: Evening recovery experiences of a) relaxation, b) mastery, and c) control will be positively related to next-day work meaningfulness via next-day mindfulness at work.*

### ***Mindfulness and High-Quality Connections***

Next, I explain the link between mindfulness and the social indicator of EWB, HQCs. As reviewed previously, HQCs have shown to be important at all levels of the organization, however, there is considerably less work on the antecedents of HQCs. Stephens et al. (2012) suggested that there are cognitive (e.g., other-awareness, impression formation, perspective-taking), emotional (e.g., positive emotions, emotional contagion, empathy), and behavioral antecedents (e.g., respectful engagement, helping) of HQCs, thus, I theoretically explain why attentional attributes such as mindfulness may result in HQCs.

Interpersonal interactions are key and frequent experiences in the workplace, and I suggest that mindful individuals are more likely to develop HQCs. For an interaction to be characterized as a HQC, individuals should listen to one another actively and respectfully, be open to others' ideas, create space for others' emotions, and have the ability to withstand stressful or tense circumstances (e.g., difference of opinions). When it comes to workplace interactions, mindfulness refers to the quantity and quality of our attention towards others (Reina et al., 2022). Mindful individuals direct their resources into others so that they are able attend to

others during workplace conversations nonjudgmentally and unbiasedly. That is, they are open to, receptive, and actively listening to others' thoughts and opinions during a conversation, without forming attitudes or evaluations about them. For example, Beckman et al. (2012) found that physicians who participated in a mindfulness training felt better equipped and able to listen to their patients. Furthermore, mindful individuals do not react impulsively if, for example, a difference of opinions or disagreements arise, rather they process this information and take a moment to craft their response to uphold a sense of openness and effective listening during conversations. Importantly, during stressful conversations, individuals who infuse mindfulness in their conversations are not overcome by this stress and may be more likely to withstand possible stress and tension, a key quality of HQCs.

In addition to being mindfully attentive, individuals also are aware of their incoming thoughts and feelings. They recognize that thoughts of past or future tasks or meetings may flow into mind, or they may hear an email or text notification come from their phone, during their conversations, but they do not switch tasks, attach meaning, or ruminate on these intruding distractions (i.e., decentering). Instead, they attend to their interactions from a less self-focused lens (i.e., shift away from one's own perspective; Reina et al., 2022), and more objective attention towards the other. As a result, they are fully present to their workplace interactions. Relatedly, Reina et al. (2022) note that the extent to which individuals are mindful in their workplace interactions influences the longer-term relationship trajectory, and Arendt et al. (2019) find that mindfulness within the context of leader communication influences followers' satisfaction. Extending this line of work and responding to Good et al.'s (2016) call to explore how mindfulness may impact relational outcomes, I suggest that infusing mindfulness into daily workplace interactions will support the development of HQCs.

*Hypothesis 4. Mindfulness will be positively related to high-quality connections.*

Mindfulness varies situationally, however, if one is feeling rejuvenated and restored, they are more likely to be free of feelings of depletion, which allows individuals to be mindful towards others. That is, they are not distracted by other feelings or thoughts that might result from impaired restoration. Taken together, I advance evening recovery as a key home to work process by which individuals rejuvenate their minds from their daily work demands, and as a result, they are better able to be mindful towards others at work the next day, which allows them to form HQCs.

*Hypothesis 5. Evening recovery experiences of a) relaxation, b) mastery, and c) control will be positively related to next-day high-quality connections via next-day mindfulness at work.*

### **The Moderating Effect of the Recovery Environment**

Because of the recent shift in work arrangements (e.g., remote work, hybrid work), the lines between home and work domains have become blurred, thus, recovery researchers question whether the home domain is still an appropriate environment for restoration (Sonnentag et al., 2017). In examining the impact of recovery environment, I draw from ART (Kaplan, 1995), which suggests that individuals attach meaning to their environments, some of which may reflect on its stressfulness or capacity for supporting restoration. For example, individuals may attach job stress to an office space, whereas they may attach comfort and relaxation to a living or bedroom space. To permit restoration however, ART suggests that individuals should be physically and psychologically distanced from their job demands such that they should restore in an environment that is different from their work space because ruminating on or being physically close to job demands can undermine restoration (Hartig et al., 2003; Kaplan, 1995). I discuss spatial and psychological distance in turn.

**Spatial distance.** I first suggest that individuals who recover in a spatially distant environment from their workspace will have a stronger relationship between evening recovery experiences and next-day mindfulness. Spatial distance may include occupying the same space that one works, using work spaces or work devices for non-work purposes (e.g., using the same phone for texting or calling purposes) seeing one's work space (e.g., seeing desk while relaxing in one's bedroom) or work-related items. Individuals can either work at-home or in another space (e.g., office, shared coworking space, etc.). First, for individuals who work from home *and* recover at home, their restoration experience may be impaired or less effective in comparison to those who leave their home to recover (e.g., go to the gym, go outdoors). This is because individuals have attached job demands as a meaning to their home space, and thus, would be less likely to effectively feel restored, suggesting that a potential cost for working from home is a reduction in effective restoration quality. On the contrary, one possible opposing argument is that the home is a space for self-expression, thus, having control over oneself may allow them to restore as a control experience (Hartig et al., 2007). However, Hartig et al. (2007) find that teleworkers experience their home as a place of demands rather than restoration, thus, this suggests that for those who work from home will see lower levels of restoration if their recovery environment is also in the home. In contrast, individuals who work from home *and* recover elsewhere will be more likely to feel restored due to spatial distance. Relatedly, Sonnentag et al. (2010) found that low spatial work-home boundaries, operationalized dichotomously by having a home office or not, were related to poorer psychological detachment from work during non-work time, which subsequently predicted high levels of emotional exhaustion and need for recovery. More recently, Klotz et al. (2022) recently found that evening nature contact (i.e., amount of time spent recovering outdoors in the evening) related to next-day positive affect and subsequent

work effort for individuals with high levels of nature connectedness. Thus, a change of scenery (or lack of), or sense of “being away” enhanced (inhibited) their restoration. Finally, for individuals that work outside of their home in their office or in shared working space, then, their home may not have work attached as a meaning, thus, permitting restoration in their home. Thus, creating distance from one’s work space is a critical factor in enhancing the relationship between restoration and attentional resources at work the following day (i.e., mindfulness). This leads me to hypothesize:

*Hypothesis 6. The positive relationship between evening recovery experiences of a) relaxation, b) mastery, and c) control and next-day mindfulness will be stronger (i.e., more positive) for those that engage in more recovery activities in a more spatially distant environment from their work space.*

In addition to spatial distance, I suggest that individuals who experience psychological distance from their workspace will have a stronger relationship between evening recovery experiences and next-day mindfulness. Prior work has shown that psychological distance (i.e., detachment) has been positively related to personal resources. For example, psychological detachment has shown to decrease next-morning fatigue and increase vigor (Sonnentag et al., 2008; ten Brummelhuis & Bakker, 2012b). In contrast, the *lack* of evening psychological detachment (i.e., spending time on work-related tasks) resulted in decreased well-being, vigor, recovery levels, and increased exhaustion (Bakker et al., 2013; Sonnentag, 2001; Sonnentag & Natter, 2004; ten Brummelhuis & Bakker, 2012b; Ten Brummelhuis & Trougakos, 2014). Further, evening psychological detachment strengthened the positive (negative) relationship between next-day work-related flow and at-home vigor (fatigue) (Demerouti et al., 2012). In addition, evening psychological detachment was especially important when distress at work was

high in order to reduce stress at home (Park et al., 2018). Thus, this form of psychological distance from work has shown to support restoration in prior work. Interestingly, Sonnentag et al. (2017) note that if home demands are very high, then detachment from one's work may be easier such that they are consumed with their home demands. However, catching up on home demands and chores is not a restorative experience, thus, this would still prevent feelings of restoration. To this end, I suggest that high psychological distance should strengthen the relationship between evening recovery experiences and next-day mindfulness at work.

*Hypothesis 7. The positive relationship between evening recovery experiences of a) relaxation, b) mastery, and c) control and next-day mindfulness will be stronger (i.e., more positive) for those that engage in more recovery activities with high psychological distance.*

Considering the hypothesized indirect effect between evening recovery experiences and next-day work meaningfulness at work (Hypothesis 3) and HQCs (Hypothesis 5) through mindfulness, and the important role of recovery environment on the relationship between evening recovery and mindfulness (Hypothesis 6), I hypothesize that the indirect effects will be stronger (i.e., more positive) for those that recover in a spatially and psychologically distant environment from their work space. Taken together, I hypothesize:

*Hypothesis 8. The positive relationship between evening recovery experiences of a) relaxation, b) mastery, and c) control and next-day work meaningfulness through work mindfulness will be stronger (i.e., more positive) for those that engage in recovery experiences in a high spatially distant environment from their work.*

*Hypothesis 9. The positive relationship between evening recovery experiences of a) relaxation, b) mastery, and c) control and next-day work meaningfulness through work*

*mindfulness will be stronger (i.e., more positive) for those that experience high psychological distance from their work.*

*Hypothesis 10. The positive relationship between evening recovery experiences of a) relaxation, b) mastery, and c) control and next-day high-quality connections will be stronger (i.e., more positive) for those that engage in recovery experiences in a high spatially distant environment from their work.*

*Hypothesis 11. The positive relationship between evening recovery experiences of a) relaxation, b) mastery, and c) control and next-day high-quality connections will be stronger (i.e., more positive) for those that experience high psychological distance from their work.*

### **Eudaimonic Workplace Well-Being and Work Outcomes**

EWB has important practical implications for attitudinal and behavioral work outcomes. I focus on two contextual performance behavioral outcomes (OCBs and CWBs) and one attitudinal outcome (turnover intentions). Contextual performance behaviors such as helping behaviors and CWBs are discretionary behaviors—helping behaviors are a facet of OCBs which involve “voluntarily helping others with, or preventing the occurrence of, work-related problems” (Podsakoff et al., 2000, p. 516; Sawyer et al., 2022), whereas CWBs are behaviors that is intended to harm the organization (Dalal et al., 2009). Turnover intentions, or thoughts of quitting the organization, predict actual turnover, which is costly and counterproductive to the organization (Tett & Meyer, 1993). Indeed, organizations want to maximize OCBs, and minimize employees’ engagement in CWBs and turnover intentions.

First, when individuals feel greater purpose or meaning in their work (i.e., psychological EWB), then they are like to having higher OCBs, less engagement in CWBs and lower turnover intentions. Those who perceive their work as meaningful are committed to their work, thus



wanting to help their colleagues (and avoid acting in counterproductive ways to their organization), as well as result in less withdrawal behavior such as turnover intentions (Steger et al., 2012). If individuals find meaning in their work, they are likely to want the organization to succeed, thus, leading to positive outcomes. Indeed, prior meta-analytic evidence shows that meaningful work increases engagement in OCBs (Allan et al., 2019), reduces CWB engagement (Hu & Hirsh, 2017), and reduces withdrawal behaviors such as turnover intentions (Allan et al., 2019). I extend this previous work and suggest that on days in which employees feel greater work meaningfulness, they will report higher OCBs, decreased engagement in CWBs, and less turnover intentions. Stated formally:

*Hypothesis 12. Work meaningfulness will positively relate to organizational citizenship behaviors, and negatively relate to turnover intentions and counterproductive work behaviors.*

Second, when individuals experience HQCs (i.e., social EWB), then they are like to having higher (lower) engagement in OCBs (CWBs), and lower turnover intentions. HQCs should leave individuals feeling uplifted, energized, and supported by their counterpart, thus, increasing social well-being. As a result, individuals feel socially supported and integrated at work, and they will be more (less) likely to engage in helping behaviors (CWBs) towards their colleagues and less likely to leave the organization. Relatedly, OCBs has been positively and reciprocally related to trust through coworker social support (Halbesleben & Wheeler, 2015), and HQCs in particular have been related to contextual performance (Chhajer & Dutta, 2021). In sum, HQCs are positive interpersonal interactions that will likely allow individuals to feel respected and supported at work, resulting in positive work outcomes. This leads me to hypothesize:

*Hypothesis 13. High-quality connections will positively relate to organizational citizenship behaviors, and negatively relate to turnover intentions and counterproductive work behaviors.*

## **METHOD**

### **Participants and Procedure**

To test the hypothesized model, I used experience-sampling methodology (ESM). ESM is critical to use considering the daily, fluctuating nature of the variables in the proposed model, which are frequently measured at the daily level (Nielsen & Cleal, 2010; Sonnentag et al., 2022; Sonnentag et al., 2017). ESM is advantageous for several reasons. First, it enhances ecological validity because it asks participants to respond to surveys within the context of each workday (Uy et al., 2010). In addition, the intent of ESM is to obtain the lived, day-to-day experience of employees (Gabriel et al., 2019), thus, ESM reduces recall inaccuracy (or retrospective bias) as participants respond to surveys about states and experiences as they happen (in segments of time), rather than, for example, thinking back about an entire work week (Beal & Weiss, 2003). And finally, independent and dependent variables may be related due to a third variable, resulting in a spurious relationship. However, because of multiple data points for each variable in ESM, we can reduce the number of third variable explanations that can also explain the observed effect (Beal & Weiss, 2003).

Using snowball sampling methods, full-time working adults were recruited ( $N = 85$ ). Interested individuals completed one screener survey, which specified the study period, eligible criteria to participate (full-time working adults, above the age of 18, proficient in English, working during the study period, work from home at least one day of the week) and collected demographics and trait level variables. Two individuals were excluded due to not being

employed full-time, six individuals were excluded for not working from home at least one day of the week, five individuals were excluded for logistical reasons (e.g., email bounce-back).

Qualified participants ( $N = 72$ ) were invited to complete three daily surveys (one each morning, one mid-day at work, one end of workday) for ten consecutive work days. In the morning survey (open from 6AM – 10AM), participants reported their evening recovery experiences, recovery environment, time spent working, and sleep quality from the prior night; in the mid-day survey (11AM—2PM), participants reported mindfulness and mode of work for that day; in the after-work survey (4PM–9PM), participants reported work meaningfulness, HQCs, job satisfaction, and positive and negative affect, OCBs, CWBs, turnover intentions for that day. All surveys were pilot tested to ensure that they took no longer than three minutes. As noted by Gabriel et al. (2019), studies with high response rates generally use monetary incentives, thus, participants were paid \$1 for each daily survey they completed, plus a \$15 bonus if they completed 80% or more of the surveys. Participants received frequent reminders throughout the course of the study. In line with other ESM studies that find a response rate between 42% and 99% (Gabriel et al., 2019), I found a response rate of 74.62% (i.e., the total number of surveys completed was 1,612 and the total number of surveys possible for completion was 2,160).

Following Gabriel et al. (2018), only participants who completed three full days or more were retained for the analyses. Of the final sample ( $N = 55$ ), 67.30% were female, 30.90% were male, and 1.8% identified as non-binary. The mean age was 33.24 ( $SD = 8.98$ ), and the majority (69.1%) identified as White, and 16.4% identified as Hispanic or Latino, 5.5% identified as Asian, and 9.1% identified as mixed or multiracial. 1.8% had some college education, 3.6% held a two-year degree, 49.1% held a four-year degree, 36.4% held a Master's degree, 1.8% held a Professional degree, and 7.3% held a Doctorate degree. The mean tenure in their current job was

3.43 years ( $SD = 5.19$ ) with a minimum tenure of less than a year and a maximum tenure of 34 years. Participants worked an average of 41.24 hours per week ( $SD = 8.96$ ). 56.40% held a mid-level job, 18.20% held an entry-level job, 16.40% held a senior-level job, 5.50% held a top-management/CEO job, and 3.60% were self-employed. The majority (52.70%) of participants worked in finance, education, or healthcare. The average number of days per week that participants reported going into the office was 1.98 days ( $SD = 1.66$ ) and working from home was 3.24 days ( $SD = 1.80$ ).

### **Potential Risks and Benefits to Participants**

This study was approved by VCU IRB #HM20026650. There were no potential risks to participate in this study. Participation was voluntary and participants were allowed to withdraw from the study at any time.

### **Measures**

The Appendix includes the full list of survey items for the focal variables. Cronbach's alpha is reported in Table 4.

#### ***Evening Recovery Experiences***

Evening recovery experiences from the previous day (between leaving work and before going to bed) were measured on a scale of 1 (*Not at all*) to 5 (*A great deal*) using 12-items from the questionnaire developed by Sonnentag and Fritz (2007). This measure includes three dimensions: relaxation, mastery, and control. Each of these three dimensions were tested as separate independent variables. Participants were directed to: "Think about [their] evening time yesterday (the time between finishing work and going to bed)." An example item is "Yesterday evening, I decided on my own schedule."

#### ***Evening Recovery Experience Environment***

**Spatial distance.** Spatial distance from work of the previous night was measured using five items on a scale of 1 (*Not at all*) to 5 (*A great deal*). Five items were inspired by Hartig et al.'s (1997) measure of Perceived Restorativeness Scale and one item (Item 6, Table 1) was adapted from Clark (2002). Participants were directed to: "Think about [their] evening time yesterday (the time between finishing work and going to bed)." An example item is "Yesterday evening, I used my work space for non-work purposes (for example, eating, reading)."

**Validation study.** I conducted a validation study to validate this measure of spatial distance from work. Participants were recruited via Prolific ( $N = 197$ ), an online crowdsourcing platform. Participants were employed full-time, hybrid workers, had worked the previous day at their paid full-time job, and were fluent in English, and were paid \$1.04 for participating. Consistent with current recommendations, I included two attention checks during the survey to ensure they were paying attention (Oppenheimer et al., 2009). Only those who passed both attention checks were retained for data analysis, resulting in 178 complete responses. The final sample was primarily between the ages of 25-34 years old (43.2%), held a bachelor's degree (47.7%), White (83%), male (51.1%), and married (42%). In addition, 55.1% of participants reported to work from home the previous day (42.6% worked in the office; 2.3% worked remotely from a public or shared co-working space) and 71.6% of participants reported to work from home on the day they took the survey (26.7% worked in the office; 1.1% worked remotely from a public or shared co-working space).

Participants were directed to: "Think about [their] evening time between finishing work yesterday and going to bed and respond to the following questions using the scale provided." Participants rated six items that captured different manifestations of spatial distance from work from the previous evening on a scale of 1 (*Not at all*) to 5 (*A great deal*). I computed an average

score for each participant, of which higher scores indicate that individuals experienced more spatial distance from their workspace. In addition, participants responded to several other related measures: evening recovery experiences (relaxation, mastery, control; 12-items Sonnentag & Fritz, 2007), psychological detachment (Sonnentag & Fritz, 2007, 4-items), boundary spanning preferences (Kreiner, 2006, 4-items), boundary strength (Hecht & Allen, 2009, 8-items), role blurring (Schieman & Glavin, 2016, 5-items), role integration (Reyt & Wiesenfeld, 2015, 4-items), and work into life permeability (Matthews & Barnes-Farrell, 2010, 1-item; Nam, 2014). Cronbach alphas are presented along the diagonal in Table 2.

A principal component analysis with varimax rotation revealed that a one-factor solution fit the spatial distance construct best and five of the six items loaded well onto the factor (i.e., above 0.40, see Table 1). As a result, one item (i.e., “I sought to change my work environment so it was different when I was no longer working.”) was dropped from further analyses due to its low loading of .14). To establish convergent and discriminant validity, I examined correlations with related constructs such as evening relaxation experiences ( $r = -0.03$ ,  $p = 0.70$ ), evening mastery experiences ( $r = 0.15$ ,  $p = 0.05$ ), evening control experiences ( $r = -0.08$ ,  $p = 0.30$ ) psychological detachment ( $r = -0.18$ ,  $p = 0.02$ ), boundary spanning preferences ( $r = -0.12$ ,  $p = 0.113$ ), boundary strength ( $r = -0.30$ ,  $p < 0.001$ ), role blurring ( $r = 0.23$ ,  $p = 0.002$ ), role integration ( $r = 0.15$ ,  $p = 0.05$ ), and work into life permeability ( $r = 0.26$ ,  $p < 0.001$ ), which revealed that some of these constructs are indeed related but not to a great extent. Based on the results of this validation study, I concluded that the five-item measure of spatial distance demonstrates acceptable validity.

**Psychological distance.** Psychological distance from work of the previous night was measured on a scale of 1 (*Not at all*) to 5 (*A great deal*) using four-items from the questionnaire

developed by Sonnentag and Fritz (2007). Participants were directed to: “Think about [their] evening time between finishing work yesterday and going to bed and respond to the following questions using the scale provided.” An example item is “Yesterday evening, I forgot about work.”

### ***Mindfulness at Work***

Mindfulness at work was measured using eight items from the Mindfulness@Work Scale by U. Hülshager and H. Alberts (2021) on a scale from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Participants were directed to “Think about [their] work day so far today.” An example item is “During work today, I have found it easy to stay focused on the task at hand.” Following recommendations for truncating scales and prior work (Gabriel et al., 2019; Ganster et al., 2022), I chose two highest loading items per dimension to avoid overburdening participants with the full 21-item scale.

### ***Work Meaningfulness***

Following Long (2017), work meaningfulness was measured using three-items on a scale from 1 (*Strongly disagree*) to 5 (*Strongly agree*) (May et al., 2004). An example item is “Today, the work I did was meaningful.”

### ***High-Quality Connections***

HQCs were measured using four items from Major et al.’s (2018) scale on a scale of 1 (*Not at all*) to 5 (*A great deal*). Participants were directed to: “Think about [their] interactions (for example, with colleagues or clients) today at work since the previous survey (sent at 11 am).” An example item is “How often did you experience each of the following during your interactions?... Felt “in sync” with others.”

### ***Turnover Intentions***

Daily turnover intentions were measured using two-items on a scale of 1 (*Not at all*) to 5 (*A great deal*) by Shi et al. (2021). An example item is “Today, I thought of quitting my job.”

### ***Organizational Citizenship Behaviors***

Interpersonally-directed OCBs (OCB-I) were measured using Henderson et al.’s (2020) three-item measure on a scale of 1 (*Not at all*) to 5 (*A great deal*). An example item is “How often did you engage in each of these behaviors at work today?... I helped others work heavy workloads.”

### ***Counterproductive Work Behaviors***

Following Fehr et al. (2017), CWBs were measured using five-items from Bennett and Robinson (2000) on a scale of 1 (*None at all*) to 5 (*A great deal*). Importantly, Fehr et al. (2017) chose these items based on their likelihood to vary on a daily basis and their ability to capture both the interpersonal and organizational components of CWBs. Rather than dichotomizing CWB engagement into “Yes” or “No”, we follow prior work and measure CWBs on a Likert scale (e.g., Demerouti et al., 2015; Yang & Diefendorff, 2009; Zhou et al., 2018). An example item is “How often did you engage in each of these behaviors at work today?... I took an additional or a longer break that is acceptable at my workplace.”

### ***Control Variables***

Following prior daily studies, I controlled for potential contextual influences at the day level of analysis. I do not include between-person controls that might affect the key variables (e.g., parental status) because I am interested in within-person relationships only and between-person variables will not affect these relationships on a daily basis. Daily level controls include positive and negative affect, sleep quality, job satisfaction (as a measure of HWB), formal mindfulness practices, mode of work, time spent working in the evening, and week day. First,



daily positive and negative affect were measured using four-items (i.e., upset, hostile, inspired, determined) from Thompson's (2007) Positive and Negative Affect Schedule (PANAS) scale on a scale of 1 (*Not at all*) to 5 (*Extremely*). An example item is "How did you feel today at work? Today, I felt... Upset." Next, because sleep quality may affect mindfulness and general well-being, I controlled for sleep quality the prior night with one item (i.e., "How would you rate the quality of your previous night's sleep?") from the Pittsburgh Sleep Quality Index (PSQI; Buysse et al., 1989), which is commonly used in ESM studies (e.g., Liu et al., 2021); Scott and Judge (2006). The item was measured on a scale of 1 (*Very bad*) to 4 (*Very good*). Job satisfaction was measured with one-item ("Today, I was satisfied with my job") on a scale of 1 (*Not at all*) to 5 (*A great deal*), which has been developed to assess job satisfaction in event-sampling studies (Hülshager et al., 2013). To eliminate the possibility of the effect of formal mindfulness practices on next-day mindfulness at work, formal mindfulness was measured with one-item ("For how many minutes (if at all) did you engage in a mindfulness practice such as a seated meditation, a body scan, or a yoga class yesterday evening?"). Response options included zero minutes, 0-30 minutes, 30-60 minutes, 60-90 minutes, and 90 minutes or more. I asked participants each day where they worked (in-person/at the office, at-home/remote, from a third location) and how much time they spent working in the evening in minutes. Finally, following recent ESM studies (Kim et al., 2022; Klotz et al., 2022), I controlled for the potential effects of linear (day) and nonlinear trends (sine and cosine) associated with the day of the week "as there may be linear and cyclical trends in repeatedly measured affect, cognitions, and behaviors (Beal & Weiss, 2003)" (Kim et al., 2022, p. 65).

### **Analytical Approach**

Given the multilevel nature of the data (daily responses within individuals) and my interest in within-person fluctuation of the hypothesized model, I analyzed means, standard deviations, correlations using SPSS version 29, and Cronbach's alphas using Mplus 8.0 at the within-person level. I next calculated the intraclass correlation (ICC) using Mplus 8.0 for all nested variables to examine within-person variance (LeBreton & Senter, 2008), which estimates how much of variability in individual responses is predicted by common membership (i.e., the individual). The ICC is used to determine adequate within-person variance and justify the use of multi-level methods to test the hypothesized paths (LeBreton & Senter, 2008).

Before testing the hypotheses, I conducted a multilevel confirmatory factor analysis (CFA) to examine the model fit of the hypothesized variables using Mplus 8.0. I conducted several multilevel CFAs to distinguish among related constructs (e.g., recovery experiences, recovery spatial distance). In line with prior ESM investigations (Gabriel et al., 2019), hypotheses were tested using multi-level structural equation modeling (SEM) framework using Mplus 8.0. Multi-level methods account for the nested person-level data (i.e., within-person variation). SEM was used because the hypothesized variables are latent variables, which means these variables are not directly observable, but we can ask several survey questions to reflect the variables. SEM allows for latent variable path analysis and accounts for measurement error.

Mediation hypotheses were tested using 95% bootstrapped confidence intervals. If the 95% confidence intervals of the mediation effects do not include zero, this indicates that the mediation hypotheses are supported. Variables were group-mean centered to test moderation (i.e., relative to each individual's mean) to remove between-person variances so that estimates represent pure within-individual relations. Finally, I plotted any significant moderation effects

using Dawson's (2014) Excel worksheet (available from: <http://www.jeremydawson.co.uk/slopes.htm>).

## RESULTS

### Preliminary Analyses

A CFA with all of the focal variables did not converge. Thus, I conducted multilevel CFAs of focal variables between related variables to examine convergent and discriminant validity. I report the model that fit best here as compared to alternate models (see Table 3). I conducted a multilevel CFA of recovery experiences and characteristics including relaxation, mastery, control, psychological distance, and spatial distance. Results indicate poor discriminant validity among these measures, but a five-factor model fit better than a one-factor model:  $\chi^2 [358] = 1670.94$ , CFI = .81, TLI = .77, RMSEA = .09, SRMR (within) = .12. A four-factor model combining spatial and psychological distance did not converge. Second, I conducted a multilevel CFA of mindfulness and the indicators of well-being (work meaningfulness and HQCs). I took a parceling approach to improve sample size-to-parameter ratio and reduce random errors associated with individual items for mindfulness and created four latent variables based on the four dimensions (nonreactivity, nonjudging, awareness, describing) as specified by Hülshager & Alberts (2021). Results for a three-factor model indicate adequate model fit and better fit than a one- or two-factor model, which would load both indicators of EWB onto one factor:  $\chi^2 [82] = 266.62$ , CFI = .92, TLI = .89, RMSEA = .07, SRMR (within) = .08. I also examined a one-factor model of recovery experience (relaxation, mastery, control) and mindfulness, as well as a four-factor model, both of which did not converge. To examine construct validity of mindfulness and relaxation, I examined a three-factor model of mastery, control, and combined mindfulness and relaxation, which had poor model fit:  $\chi^2 [562] = 4541.44$ ,

CFI = .49, TLI = .45, RMSEA = .12, SRMR (within) = .18. This suggests that mindfulness and relaxation do not load well onto the same factor. Finally, I examined discriminant validity among the three dependent variables: turnover, CWBs, and OCBs. A three-factor multilevel CFA indicates adequate model fit between these variables:  $\chi^2 [64] = 169.23$ , CFI = .85, TLI = .79, RMSEA = .06, SRMR (within) = .09. This model fit better than a one-factor model. The relatively poor fit of my measures suggests these well-established measures might not have the strongest construct validity, despite being published measures (with the exception of spatial distance validated here) in the literature.

Means, standard deviations, correlations, and alphas of the within-person variables are presented in Table 4. Next, I examined the proportion of within-person variance of the focal study variables. The ICCs show adequate within-person variation (relaxation = .40, mastery = .52, control = .44, psychological distance = .54, spatial distance = .62, mindfulness at work = .56, turnover intentions = .66, high-quality connections = .43, work meaningfulness = .63, CWBs = .44, OCBs = .47), which justifies the use of multilevel modeling.

### **Hypotheses Testing**

Next, I proceeded to test the hypotheses. As shown in Table 5, Hypotheses 1a and 1b are not supported: relaxation negatively predicted next-day mindfulness at work ( $b = -.13$ ,  $SE = .03$ ,  $p < .001$ ) and mastery negatively and non-significantly predicted next-day mindfulness at work ( $b = -.04$ ,  $SE = .02$ ,  $p = .23$ ). Control did positively and significantly predict next-day mindfulness at work ( $b = .17$ ,  $SE = .03$ ,  $p < .001$ ), providing support for Hypothesis 1c. Next, I examine the effects of mindfulness at work. The data revealed that mindfulness at work is positively related to daily work meaningfulness ( $b = .50$ ,  $SE = .06$ ,  $p < .001$ ) and daily high-quality connections ( $b = .47$ ,  $SE = .05$ ,  $p < .001$ ), supporting Hypothesis 2 and 4.

Then, I tested the mediation effects between evening recovery and work meaningfulness (Hypothesis 3) and high-quality connections (Hypothesis 5) through mindfulness (see Table 6). Given the significance of Hypotheses 1a and 1c, I found significant mediation (Indirect Effect = -.06,  $SE = .02$ ,  $p < .001$ , 95% CI [-.10, -.03] and Indirect Effect = .09,  $SE = .02$ ,  $p < .001$ , 95% CI [.05, .13] for relaxation and control, respectively), however, the effect of relaxation is not in the hypothesized direction. Not surprisingly, given the lack of support for Hypothesis 1b, I did not find a mediation effect (Indirect Effect = -.02,  $SE = .02$ ,  $p = .23$ , 95% CI [-.05, .01]). Thus, I do not find support for Hypothesis 3a or 3b, but I do find support for Hypothesis 3c. Next, I test for mediation between evening recovery and high-quality connections through mindfulness. The results follow a similar pattern to Hypothesis 3 such that I found support for the effect of control (Hypothesis 5c) (Indirect Effect = .08,  $SE = .02$ ,  $p < .001$ , 95% CI [.05, .12]), but not for relaxation (Hypotheses 5a) or mastery (Hypothesis 5b) (Indirect Effect = -.06,  $SE = .02$ ,  $p < .001$ , 95% CI [-.09, -.03] and Indirect Effect = -.02,  $SE = .02$ ,  $p = .23$ , 95% CI [-.05, .01] for relaxation and mastery, respectively).

Next, I tested the hypothesized moderation effect of spatial and psychological distance. I tested each moderator separately on the relationship between each recovery experience and next-day mindfulness at work. There was no significant interaction effect of spatial distance and relaxation ( $b = -.06$ ,  $SE = .05$ ,  $p = .23$ ), spatial distance and mastery ( $b = .13$ ,  $SE = .07$ ,  $p = .07$ ), or spatial distance and control ( $b = .09$ ,  $SE = .06$ ,  $p = .12$ ) on next-day mindfulness. Similarly, there was no significant interaction effect of psychological distance and relaxation ( $b = 0.05$ ,  $SE = .04$ ,  $p = .31$ ), psychological distance and mastery ( $b = -.02$ ,  $SE = .07$ ,  $p = .75$ ), or psychological distance and control ( $b = -.06$ ,  $SE = .04$ ,  $p = .19$ ) on next-day mindfulness. These results fail to

support Hypotheses 6 and 7. Considering the lack of interaction effect, I do not proceed to test the moderated mediation effects (i.e., Hypotheses 8, 9, 10, and 11).

Finally, I tested Hypotheses 12 and 13. As shown in Table 5, daily work meaningfulness significantly predicted less turnover ( $b = -.29$ ,  $SE = .04$ ,  $p < .001$ ), greater OCBs ( $b = .20$ ,  $SE = .04$ ,  $p < .001$ ), and less CWBs ( $b = -.07$ ,  $SE = .03$ ,  $p = .003$ ), providing support for Hypothesis 12. In addition, daily high-quality connections significantly predicted less turnover ( $b = -.10$ ,  $SE = .03$ ,  $p < .001$ ), greater OCBs ( $b = .26$ ,  $SE = .05$ ,  $p < .001$ ), and less CWBs ( $b = -.10$ ,  $SE = .03$ ,  $p < .001$ ), providing support for Hypothesis 13.

All analyses reported here reflect the presence of daily-level controls. Post-hoc, I examined the influence of controls on the analysis. When removing the controls completely, results for the direct effects and mediation effects stayed the same. When removing the non-significant controls only (i.e., hours worked at night, mode of work, and the linear effect of day), results for the direct effects and mediation effects stayed the same. I also examined the influence of controls on the moderation hypothesis of spatial and psychological distance on the significant relationship between control and mindfulness at work. When removing non-significant controls (i.e., hours worked at night, mode of work, the effect of day, and the linear effect of day), results for the moderation of both spatial and psychological remained the same (i.e., non-significant moderation).

## DISCUSSION

This study investigated the effects of evening recovery experiences on next-day mindfulness and well-being at work. I found that having a sense of control over one's evening predicted next-day mindfulness at work, but engaging in evening relaxation and mastery activities did not. Daily work mindfulness did predict both intrapersonal and interpersonal

indicators of well-being, work meaningfulness and HQCs, which subsequently predicted less turnover intentions and CWBs and greater OCBs. However, the data revealed no support for interaction effects between evening recovery experiences and spatial or psychological distance on mindfulness at work. Next, I discuss the implications of these findings.

### **Theoretical Contributions and Directions for Future Research**

This study makes several theoretical contributions to the organizational literature. First, this study contributes to the workplace well-being literature. Specifically, previous research commonly studies components of the HWB conceptualization such as happiness, affect, or job satisfaction (Bartels et al., 2019; Inceoglu et al., 2018). Instead, I go beyond HWB and focus on EWB using a work-home process perspective. Moreover, I focus on outcomes *during the next workday* as a result of evening recovery rather than outcomes at bedtime or the next morning, which complements and extends the existing recovery research that has widely documented the effects of evening recovery on more proximal well-being outcomes (see Sonnentag et al., 2022 for a review). While I did not find support for relaxation or mastery on work mindfulness, the data revealed that control recovery experiences at home do affect work mindfulness and well-being during the workday. One possible explanation for this is that the effects of relaxation and mastery experiences on well-being are rather short-term and affect one's immediate future (e.g., at bedtime or at the start of the next work day), rather than during the next work day. In addition, it could be that the effects of relaxation and mastery experiences are only related to certain aspects of well-being. In this case, it might be that relaxation and mastery affect HWB, rather than EWB. Future well-being researchers could consider what home or life experiences may linger into the work space and why they may impact EWB versus HWB at work.

Specifically, I contribute to the literature regarding the indicators of EWB. I contribute to the work meaningfulness literature in two ways. First, I build on previous qualitative work by empirically advancing work meaningfulness as a fluctuating, state-level variable, as recent qualitative data indicates variability across work experiences (Bailey & Madden, 2017; Mitra & Buzzanell, 2017). Indeed, an analysis of ICCs in the present study revealed that work meaningfulness was shown to vary on a daily level, which complements and supports the existing qualitative research. Traditionally, organizational researchers have considered work meaningfulness as a trait level variable, however, considering the findings of the present study, I suggest that future researchers should theoretically advance how predictors and consequences of meaningfulness may have an impact on work meaningfulness day to day. Second, I advance one attentional attribute (i.e., mindfulness) of work meaningfulness, whereas the majority of previous research has focused on external aspects of the work environment that can be manipulated such as organizational conditions, values, social cues, job features, and other employment features that influence work meaningfulness (De Boeck et al., 2019). The data in this study supports that how we attend to our work affects our perceptions of meaningfulness. In addition, I contribute to the HQCs literature. While HQCs have been suggested to keep people connected in a physically-distant workplace (Waters et al., 2022), the majority of work on HQCs is theoretical in nature (Heaphy et al., 2018; Reina et al., 2022), and thus, we have limited empirical evidence of the processes that motivate employees to strengthen their workplace connections. In this study, I contribute to the existing literature and show that mindfulness is an important predictor of HQCs. I find that how we manage our evening recovery time at work, namely having control over our time, influences HQCs through work mindfulness.



Second, this study contributes to the recovery literature. Until this point, the recovery literature has focused most on energetic or affective resource replenishment as outcome of recovery experiences. For example, meta-analyses show that recovery experiences are related to energetic resources such as higher vigor and lower fatigue (Bennett et al., 2018) and affective resources such as feeling recovered (Steed et al., 2021). In this study, I go beyond energy and affect and put forth a theoretical explanation for the effect of recovery on an attentional resource, mindfulness. The data revealed that control experiences might lead to increased mindfulness, whereas mastery and relaxation did not. This builds on recent work that found a positive effect of physical activity after work on work focus (Ten Brummelhuis et al., 2022) and sleep quality on mindful states at work (Hülshleger et al., 2018). Future recovery researchers could take a more nuanced approach to understanding which recovery experiences may be more or less important to energetic, attentional, or affective outcomes. In addition, rather than analyzing the home recovery to work energy process, I conducted post-hoc analyses to see if work may energize individuals that report higher home demands. However, I found that when individuals report increased daily home demands, then are likely to feel more negative in the morning, and as a result, feel more exhausted, burned out, and take more microbreaks during the work day (relaxing-, social-, entertainment-, and family-related breaks). Thus, though home demands and negative affect were measured at the same time point, this preliminary evidence suggests that work itself might not function as a recovery experience for those with high home demands. In other words, individuals take more time for recovery during work time when they have higher home demands.

Interestingly, evening relaxation and mastery affected workplace mindfulness in the opposite direction (i.e., a negative relationship) than I expected (i.e., a positive relationship). One

explanation for this negative relationship is that if individuals relax in the evening or engage in mastery activities (e.g., other activities that take effort but restore one's sense of competence), perhaps they did not accomplish necessary or extra work-related tasks and as a result, faced increased work demands the following day. Thus, this may lead to increased stress levels or distractedness at work. In addition, researchers have recently that relaxation and formal mindfulness practices are often used interchangeably in the literature (Luberto et al., 2020), however, I remind readers that in the present study, I isolated the effect of daily formal mindfulness practices, which were very weakly and non-significantly related to evening relaxation ( $r = .03$ ). In terms of mastery recovery experiences, it is possible that the more effort one exerts in other activities, the less energetic or attentional resources they might have to be mindful the next day. Instead, prior research would support that they have replenished their sense of competence or self-confidence, but not necessarily attentional resources such as focus or mindfulness. Future researchers could build on this work and hypothesize and test mediators that may explain why the relationship between evening relaxation and mastery and informal, state mindfulness at work might be negative.

In addition, given the increased blurry lines of home and work life due to the rise of remote work, this study questioned the assumption that the home domain is a suitable environment for recovery (Sonnetag et al., 2017). This question follows Kaplan's (1995) ART that suggests individuals attach meaning to our spaces (e.g., a desk might be associated with work demands), thus, we should have distance from our spaces in order to permit restoration. In a more recent review, researchers have noted the need to examine boundary management strategies across various work arrangements (Allen & French, 2023), thus, I suggested that the distance from one's work acts as a possible strategy to create a separation between work and

home lives. In doing so, I hypothesized that there is a key macro-level influence on the effects of recovery—specifically, the further one is, spatially and psychologically, from their work environment or materials, the stronger the relationship between recovery experiences and mindfulness. However, I did not find statistical significance for the effect of spatial or psychological distance and recovery experiences on next-day mindfulness. One possible reason for this is that this relationship may be more or less potent for employees who telework *only*, or work in office *only*, which future researchers could consider. The present sample included a mix of hybrid and telework workers. Post-hoc, I tested for the main effect of spatial and psychological distance from work on mindfulness at work. I did not find an effect of spatial distance, but I did find a relatively small, but positive significant effect of psychological distance on mindfulness at work ( $B = .08, p < .05$ ). Furthermore, this supports the assumption that employees do indeed still recover in the presence of their work environment or materials and that physical distance from one's work may not be an effective boundary management strategy. Importantly, recovery researchers should more holistically consider other relationships, situations, or work environments (e.g., negative emotions and turnover intentions, telework versus in-office or client-facing employees) in which spatial or psychological distance from work may support or hinder recovery.

In this study, I also developed and validated a scale of spatial distance from work during recovery. Recent workplace changes (e.g., remote work, hybrid work) due to COVID-19 call for the need to examine the physical environment of our workspace, and whether or not we get space from it after work hours. For example, if individuals have their desk set-up in their bedroom, they might not be able to detach from work responsibilities before bed simply due to the presence of their workspace. While previous researchers have highlighted the positive effects of

evening nature contact on next-day affective outcomes (Klotz et al., 2022), there has been little to no work examining the effect of the presence of work space. Furthermore, in regards to similar ideas, most organizational research and their measurement focuses on work-life boundary spanning preferences or integration, or attitudes or reactions towards one's work environment *or* restoration environment (Hartig et al., 1997; Sander et al., 2019). There is no direct measurement of spatial distance from one's work. While I did not find an effect of spatial distance from work during recovery on individual mindfulness the following-day, it may be that it affects one's energetic or affective resources, rather than attentional resources. Future researchers could consider this possibility. Moreover, future researchers could examine the robustness of the newly developed scale by testing it with other samples or examining its convergent or discriminant validity with other related scales.

Finally, I contribute to the growing workplace mindfulness literature. I put forth mindfulness at work as a personal resource within the context of the Work-Home Resources model such that it can vary daily depending on individuals' replenishing or depleting experiences at home. Previous work that finds a positive relationship between forms of recovery such as sleep and mindful states (Hülshager et al., 2018), however, I extend this line of work and advance control recovery experiences as a home predictor of mindfulness at work. In other words, control experiences rejuvenate attentional resources such that individuals are better able to direct their resources into their work, to find more meaning in their work and create HQCs. The latter outcome of mindfulness, responds to a call by Good et al. (2016) that suggests researchers should examine how mindfulness may affect relational outcomes, given that the literature heavily supports the effect of mindfulness on various intrapersonal outcomes. The findings of this study advance the effect of mindfulness on the quality of short-term workplace

interactions (HQCs) and in doing so, I conceptualized and measured mindfulness on the state level and found adequate within-person variance.

### **Practical Implications**

This study has important implications for practitioners. First, employees should consider which recovery experiences may benefit them, not only in terms of their energy and stress levels the following day, but also their experience of mindfulness towards their work. For example, the data supports that when employees have control over their time after work, they may experience more mindfulness the next day, which in turn, affects their daily workplace well-being and outcomes. It is important for leaders to recognize this as well and support employees' recovery experiences.

Second, it is important for practitioners to understand that work meaningfulness and high-quality connections do vary on a daily basis, and that maximizing ways to experience work meaningfulness and high-quality connections throughout the work week would lead to positive work outcomes (e.g., OCBs) and less negative work outcomes (e.g., turnover, CWBs), as opposed to having days with little to no work meaningfulness or high-quality connections.

Third, most organizations focus their efforts and interventions on enhancing employee mindfulness generally, at the trait level, and while this is an important learning tool, these efforts and interventions should also emphasize that employees will experience mindfulness differently each day—and that no individual will experience mindfulness constantly. In other words, mindfulness is a state that varies moment to moment and different experiences can enhance or deplete one's ability to be mindful.

### **Limitations**

This study has four primary limitations. First, the data are based on self-report surveys. While I used a rigorous, daily diary design to avoid recall bias and to get data based on a specified period of time, all the measures were self-report. Self-report measures are reasonable for variables such as recovery experiences, distance from work, mindfulness, and work meaningfulness, but future researchers could aim to gather other-rated measures for HQCs, CWBs, and OCBs. For example, employees' coworkers or supervisors may be able to provide a more accurate rating of the employees' helpful or harming behaviors, however, there is some evidence to support that self-rated behaviors are comparable to other-rated behaviors (Berry et al., 2012). Second, although the methodology (i.e., repeated measures separated by time) allows for tests of mediation, I cannot make claims regarding causality. To reduce these concerns, I avoided causal language and separated measurements of the focal variables by time. Third, the hypotheses in the present study were tested with only one sample. To increase the robustness of the results, future researchers could conduct additional studies that constructively replicate the phenomena. For example, future researchers could employ lab experiments or simulations to increase internal validity of the conclusions. In the present context, it was reasonable to conduct a daily diary study considering I expected the phenomena to unravel on a daily basis. In addition, additional studies that examine these relationships in other samples (e.g., healthcare workers, corporate workers, leaders, etc.) would be informative because the relationships may be more or less pronounced due to the type or level of job, and the amount of recovery time, individuals have. Similarly, the relationships might differ based on parental status such that parents might have less time for evening recovery and increased home demands. To address these limitations, future researchers could theorize according to job or demographic features. Finally, I found poor

model fit for my measures, which suggests that these well-established measures might not have strong construct validity.

### **CONCLUSION**

Using a work-home process perspective and daily diary methodology, the present study examined the effects of evening recovery on next-day mindfulness and well-being at work. I found that evening control experiences play an important role on mindfulness at work, and that mindfulness at work predicts indicators of EWB at work. I also studied the moderating effect of spatial and psychological distance on these relationships; however, I did not find support for the interaction effects. This work is important for practitioners to understand the role of evening recovery and mindfulness on work well-being and outcomes, as well as future organizational researchers to consider how recovery experiences and their effects have changed in recent times.

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**Table 1***Results of Principal Component Analysis*

	<b>Item</b>	<b>Factor loading</b>
Item 1	I occupied the same spaces that I did during the work day (for example, the kitchen or bedroom).	.861
Item 2	I used my work space for non-work purposes (for example, eating, reading).	.855
Item 3	I used my work devices for non-work purposes (for example, texting, watching television, online shopping).	.648
Item 4	I could see the space I worked in during the day when not working.	.885
Item 5	I sought to change my work environment so it was different when I was no longer working. (reverse-coded).	.138
Item 6	I could see work-related items when not working.	.729

*Notes.*  $N = 176$ . Item 5 was dropped from further analyses due to its low factor loading.

**Table 2***Validation Study Correlations*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Spatial distance	(.86)													
2. BSP	-.12	(.89)												
3. BS	-.20**	.38**	(.83)											
4. Role Blurring	.23**	-.40**	-.80**	(.85)										
5. Role Integration	.15*	-.14	-.42**	.50**	(.81)									
6. WIL	.26**	-.12	-.53**	.54**	.41**									
7. Relaxation	-.03	.04	.17*	-.15*	-.06	-.22**	(.94)							
8. Mastery	.15	-.09	-.05	.15*	.17*	.19*	0.05	(.89)						
9. Control	-.08	.01	.21**	-.19*	-.02	-.25**	.52**	.04	(.91)					
10. Psych. Detachment	-.18*	.27**	.49**	-.45**	-.25**	-.39**	.41**	-.18*	.25**	(.93)				
11. Mode of Work (Previous day)	.33**	-.05	-.16*	.04	.11	-.01	-.09	-.11	.01	-.10				
12. Age	-.15	-.16*	-.17*	.13	.00	-.01	-.04	-.10	.04	.00	.06			
13. Gender	.18*	.03	-.00	.03	-.03	.01	-.00	-.11	.11	.02	.02	-.03		
14. Mode of Work (Current day)	.09	.01	-.03	-.06	.05	-.06	.02	-.14	.04	.05	.53**	.10	-.07	
15. Number of Kids	-.05	.03	-.15	-.02	.12	.21*	.02	.10	-.26**	-.07	.06	.05	-.12	.05

*Notes.* *N* = Ranges from 102-176. BSP = Boundary spanning preferences; BS = Boundary strength; WIL= work-into-life permeability; Psych. Detachment = Psychological detachment. Cronbach's alpha reported on the diagonal.

\*\*Correlation is significant at the 0.01 level (2-tailed).

\*Correlation is significant at the 0.05 level (2-tailed).

**Table 3***Confirmatory Factor Analysis Results for Main Study*

	$\chi^2$	<i>df</i>	CFI	TLI	RMSEA	SRMR
<b>Model 1</b>						
<b>Recovery Experiences</b>						
1-factor: Relaxation, Mastery, Control, Spatial Distance, Psychological Distance	4921.23	380	0.33	0.26	0.15	0.21
3-factor: Relaxation, Control, Mastery	3173.64	374	0.59	0.53	0.12	0.16
4-factor: Psychological and Relaxation	2729.61	366	0.65	0.60	0.11	0.15
5-factor	1670.94	358	0.81	0.77	0.09	0.12
<b>Model 2</b>						
<b>Mindfulness and Recovery Experiences</b>						
3-factor: Mindfulness and Relaxation	4541.44	562	0.49	0.45	0.12	0.18
<b>Model 3</b>						
<b>Mindfulness and EWB</b>						
1-factor: Mindfulness, Work meaningfulness, HQCs	1147.17	88	0.52	0.40	0.15	0.15
2-factor: Work meaningfulness and HQCs	1031.16	86	0.58	0.46	0.15	0.14
3-factor	266.62	82	0.92	0.89	0.07	0.08
<b>Model 4</b>						
<b>Work outcomes</b>						
1-factor: OCBs, CWBs, Turnover Intentions	604.11	70	0.23	0.01	0.13	0.15
3-factor	169.23	64	0.85	0.79	0.06	0.09

*Note.* EWB = Eudaimonic well-being; OCBs = Organizational citizenship behaviors; CWBs = Counterproductive work behaviors. Recovery Experiences includes relaxation, mastery, control, psychological distance, and spatial distance. Work outcomes includes OCBs, CWBs, and turnover intentions.  $\chi^2$  = chi-square value given by Maximum Likelihood estimator; *df* = degrees of freedom;  $\Delta\chi^2$  = difference chi-square;  $\Delta df$  = difference in *df*; CFI = comparative fit index; TLI = Tucker-Lewis Index; RMSEA = root mean square error of approximation; SRMR = Standardized Root Mean Square Residual; \**p* < .05.

**Table 4***Main Study Descriptives, Reliabilities, and Correlations*

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Relaxation	2.94	1.15	(.96)																
2. Mastery	1.80	0.93	-0.03	(.88)															
3. Control	3.26	1.11	.57**	.18**	(.95)														
4. Psyc. distance	3.11	1.19	.36**	0.05	.47**	(.91)													
5. Spatial distance	2.00	1.06	0.05	0.01	0.01	-.11*	(.85)												
6. M@W	3.81	0.76	-0.04	0.05	.23**	.24**	-.25**	(.82)											
7. HQC	3.14	0.95	-0.01	0.06	.20**	.15**	-.16**	.39**	(.93)										
8. Turnover	1.68	1.02	-.10*	0.03	-.15**	-.22**	.17**	-.43**	-.26**										
9. Meaning	3.08	1.07	0.04	.12**	.19**	0.06	-0.01	.36**	.47**	-.35**	(.87)								
10. CWB	1.56	0.52	-0.01	-0.02	-.18**	-.16**	0.04	-.46**	-.25**	.32**	-.23**	(.61)							
11. OCB	2.20	0.92	-0.04	.11*	0.05	-.14**	0.01	.11*	.40**	-0.04	.35**	-0.05	(.63)						
12. NA	1.37	0.64	-0.06	0.02	-.13**	-.23**	.14**	-.43**	-.21**	.47**	-.17**	.37**	0.08						
13. PA	2.50	0.98	-0.02	.22**	0.06	0.01	-.14**	.33**	.48**	-.26**	.56**	-.13**	.29**	-0.06					
14. Sleep quality	2.80	0.76	.10*	0.00	.26**	.21**	-.25**	.24**	.14**	-.12*	0.07	-.10*	-0.04	-.13**	0.02				
15. JS	3.02	1.07	0.05	0.08	.19**	.10*	-.12**	.41**	.53**	-.47**	.68**	-.19**	.34**	-.27**	.54**	0.08			
16. Formal MF	1.31	0.61	0.03	.17**	0.04	0.03	0.02	-.14**	-0.05	.16**	-0.06	.22**	-0.07	.09*	0.00	.09*	-0.08		
17. Mode of work	1.71	0.52	0.07	-0.09	.11*	.18**	0.03	0.00	-.20**	-0.01	-.13**	0.09	-.18**	-0.06	-.11*	-0.04	-.14**	0.02	
18. Overtime	19.85	43.37	-.22**	-0.05	-.23**	-.30**	0.07	-0.06	-.12*	0.05	-.12*	0.00	-0.06	0.09	0.00	-0.08	-0.08	0.02	-0.03

Notes.  $N = 462-508$ . Cronbach's alpha reported on the diagonal for scales with 3 or more items. M@W = Mindfulness at work; HQC = High-quality connections; CWB = Counterproductive work behaviors; OCB = Organizational citizenship behaviors; NA = Negative affect; PA = Positive affect; JS = Job satisfaction; Formal MF = Formal mindfulness in minutes; Overtime = Minutes worked at night.

\*\*Correlation is significant at the 0.01 level (2-tailed).

\*Correlation is significant at the 0.05 level (2-tailed).



**Table 5***Direct Effect Regression Results*

	Dependent Variable					
	Mindfulness	Work Meaningfulness	High-Quality Connections	Turnover	CWB	OCB
<i>Predictor</i>						
Relaxation	-0.13**					
Mastery	-0.04					
Control	0.17**					
Mindfulness		0.50**	0.47**			
Work Meaningfulness				-0.29**	-0.07**	0.20**
High-Quality Connections				-0.10**	-0.10**	0.26**
<i>Control</i>						
Negative Affect	-0.15**					
Positive Affect	0.16**					
Sleep Quality	0.09**					
Formal Mindfulness	-0.05**					
Overtime (in minutes)	-0.01					
Mode of Work	0.00					
Job Satisfaction	0.12**					
Day	0.20*					
Sin(Day)	-0.01					
Cosine(Day)	-.04*					

*Note.*  $N = 504$ . \*\*Coefficient is significant at the 0.01 level. \*Coefficient is significant at the 0.05 level. CWB = Counterproductive work behaviors; OCB = Organizational citizenship behaviors.

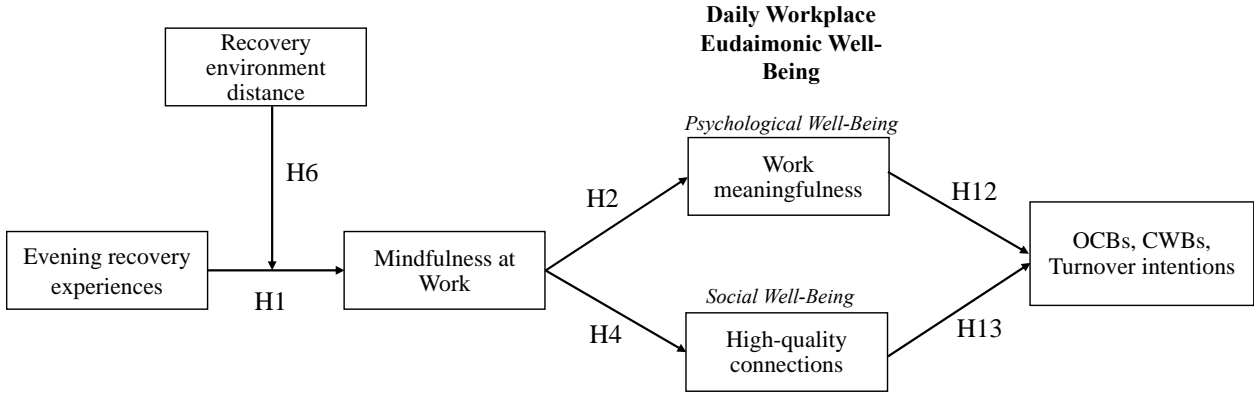
**Table 6***Mediation Results*

	Mediator: Mindfulness	Mediator: Mindfulness
	Work Meaningfulness	High-Quality Connections
	Estimate	Estimate
<i>Predictor</i>		
Relaxation	-0.06**	-0.06**
Mastery	-0.20	-0.02
Control	0.09**	0.08**
<i>Control</i>		
Negative Affect	-0.15**	-0.15**
Positive Affect	0.16**	0.16**
Sleep Quality	0.09**	0.09**
Formal Mindfulness	-0.05**	-0.05**
Overtime (in minutes)	-0.01	-0.01
Mode of Work	0.00	0.00
Job Satisfaction	0.12**	0.12**
Day	0.20*	0.20*
Sin(Day)	-0.01	-0.01
Cosine(Day)	-.04*	-.04*

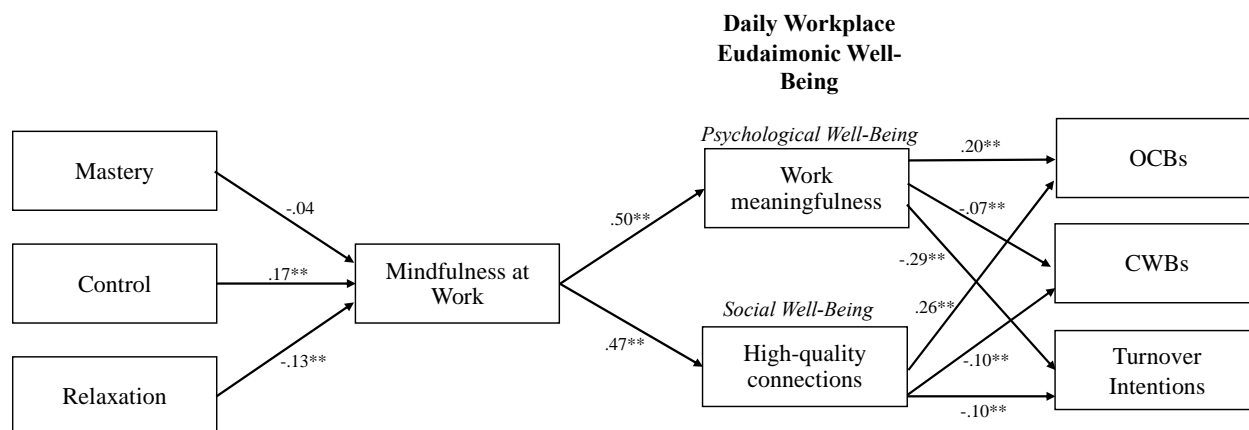
*Note.*  $N = 504$ . \*\*Coefficient is significant at the 0.01 level. \*Coefficient is significant at the 0.05 level.

**Figure 1.**

*Hypothesized Model*



*Note.* H = Hypothesis; OCBs = Organizational citizenship behaviors; CWBs = Counterproductive work behaviors. Indirect effects not shown.

**Figure 2.***Direct Effect Regression Results*

## Appendix A – Survey Items of Hypothesized Variables

### Time 1 (Morning Survey)

#### *Evening Recovery Experiences (Sonnentag & Fritz, 2007)*

Directions: Think back to your time yesterday between leaving work and before going to bed. Rate the extent to which you experienced each of the following statements.

Yesterday evening...

1. I kicked back and relaxed.
2. I did relaxing things.
3. I used the time to relax.
4. I took time for leisure.
5. I learned new things.
6. I sought out intellectual challenges.
7. I did things that challenged me.
8. I did something to broaden my horizons.
9. I felt like I could decide for myself what to do.
10. I decided on my own schedule.
11. I determined for myself how I spent my time.
12. I took care of things the way that I wanted them done.

#### *Evening Recovery Experience Environment*

Directions: Please think about your evening time yesterday between finishing work and going to bed and response to the following questions using the scale provided.

Yesterday evening...

Spatial (i.e., physical) distance:

1. I occupied the same spaces that I did during the work day (for example, the kitchen or bedroom).
2. I used my work space for non-work purposes (for example, eating, reading).
3. I used my work devices for non-work purposes (for example, texting, watching television, online shopping).
4. I could see the space I worked in during the day when not working.
5. I could see work-related items when not working.

Mental distance (i.e., psychological detachment) (Sonntag & Fritz, 2007)

1. I forgot about work.
2. I didn't think about work at all.
3. I distanced myself from my work.
4. I got a break from the demands of work.

### Time 2 (Afternoon Survey)

*Mindfulness at Work (U. Hülsheger & H. Alberts, 2021)*

Directions: Please think about your work day so far today. Rate the extent to which you have experienced each of the following:

1. At work today, I can easily put my thoughts into words.
2. When it comes to work-related issues today, I can easily put my beliefs, opinions, and expectations into words.
3. When I have experienced unpleasant emotions during work today, they easily took over.
4. When negative things happened at work today, I had immediate intense reactions.
5. At work today, I tell myself I shouldn't be feeling the way I'm feeling.
6. At work today, I criticized myself for having irrational or inappropriate emotions.
7. During work today, I have found it easy to stay focused on the task at hand.
8. When I have been working today, I have only focused on what I am doing, nothing else.

### Time 3 (End of Work Survey)

*Work Meaningfulness (Long, 2017; May et al., 2004)*

Directions: Today...

1. The work I did was meaningful.
2. My job activities were significant to me.
3. I felt that the work I did was valuable.

*High-Quality Connections (Major et al., 2018)*

Directions: Please think about your workplace interactions (for example, with colleagues or clients) today at work since the previous survey (sent at 11AM).

How often did you experience each of the following during your interactions?

1. Thoughts and feelings flew with ease with others.
2. Mutual responsiveness to one another's needs.
3. Felt a sense of mutual trust with others.
4. Felt "in sync" with others.

*Counterproductive Work Behaviors (Bennett & Robinson, 2000; Fehr et al., 2017)*

Directions: How often did you engage in each of these behaviors at work today?

1. I worked on a personal matter instead of work for my employer.

2. I spent too much time fantasizing or daydreaming instead of working.
3. I made fun of someone at work.
4. I took an additional or a longer break than is acceptable at my workplace.
5. I lost my temper while at work.

*Organizational Citizenship Behaviors (Henderson et al., 2020)*

Directions: How often did you engage in each of these behaviors at work today?

Today...

1. I helped others with heavy workloads.
2. I assisted my supervisor with his/her work when not asked.
3. I took a personal interest in other employees.

*Turnover Intentions (Shi et al., 2021)*

Directions: Rate the extent to which you agree with each of the following statements.

1. Today, I thought of quitting my job.
2. Today, I thought of searching for a new job.