The Effect of Mindfulness and Job Demands on Motivation and Performance Trajectories Across

the Workweek: An Entrainment Theory Perspective

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Abstract

Employee performance is commonly investigated as a static, one-time snapshot of prior employee behaviors. For the studies that do acknowledge that performance fluctuates over time, the timeframe decision is disconnected from theoretical underpinnings. To make this connection clearer, we draw on entrainment theory and investigate trajectories in motivation and performance across the five-day workweek. We hypothesize that both motivational control (i.e., staying on course and sustaining effort in pursuit of goals through the redirection of attention) and performance have a declining trajectory across the workweek. Drawing on self-determination theory, we also hypothesize that trait-based mindfulness (i.e., non-judgmental present moment attention and awareness) negatively relates to the downward trajectory in performance across the workweek via its effect on the trajectory of motivational control. Finally, we take a trait activation theory perspective, hypothesizing that mindfulness is relevant as an indirect influence on performance trajectories through motivational control trajectories only when job demands are high. We test our model using 151 full-time employees in a medical device company. We collected data from participants twice daily across the five-day workweek. We then use these daily scores to create between-person (e.g., person-centric) trajectories to investigate the proposed relationships. The hypotheses are generally supported. There is a downward trajectory of both motivational control and performance across the workweek. Further, job demands conditionally moderate the indirect effect of mindfulness on performance trajectories through motivational control trajectories. Theoretical and practical implications specific to dynamic motivation and performance, entrainment, and mindfulness literature are discussed.

Keywords: Mindfulness, motivational control, motivational trajectory, job demands, entrainment theory

"If my boss knew how unproductive I am on Fridays, he wouldn't want me here either."

-----James Johnson

Employee performance—behavior that is important in achieving organizational goals (Yin, Wang, & Lu, 2018)—is a ubiquitous outcome variable in organizational behavior research (Colquitt, LePine, & Wesson, 2019). This attention is not surprising, because maximizing the performance of employees should translate into higher performing organizations (Shin & Konrad, 2017). Employee performance is typically investigated in one of two ways. One approach is to investigate a static "snapshot" of prior behaviors by measuring it at one point in time. Although straightforward, this approach overlooks the dynamic nature of performance. An alternative approach is to recognize that performance fluctuates over time (Dalal, Bhave, & Fiset, 2014; Park, Sturman, Vanderpool, & Chan, 2015; Sonnentag & Frese, 2012). Prior research illustrates that a considerable proportion of employee performance varies from day-to-day (e.g., Dalal, Lam, Weiss, Welch, & Hulin, 2009; Glomb, Bhave, Miner, & Wall, 2011). Unfortunately, the timeframe in which prior research evaluates the dynamic nature of employee performance is relatively arbitrary. In particular, our understanding of the variability across the workweek is limited.

To more fully understand performance variability across the workweek, we thus adopt a trajectory-based approach and focus on the direction (e.g., increasing, decreasing, stable, etc.) of changes in motivation across a designated timeframe (Dörnyei, 2000; Ratelle, Guay, Larose, & Senécal, 2004). Prior work has established a close link between day-to-day motivation and performance (Vancouver, Gullekson, Morse, & Warren, 2014; Vancouver & Kendall, 2006). For example, over several weeks, fluctuations in self-efficacy and self-concordant goals are associated with fluctuations in performance (Werner, Milyavskaya, Foxen-Craft, & Koestner, 2016), but the rationale for the selected time interval in such studies has been unclear. We suggest that it is important to situate the day-to-day motivation-performance relationship within a meaningful timeframe. From a theoretical perspective, doing so ensures that an often-neglected

aspect of organizational context—temporality—is included in our discussion of motivation and performance (Ancona, Goodman, Lawrence, & Tushman, 2001; George & Jones, 2000; Ployhart & Vandenberg, 2008). Additionally, understanding the temporal confines of motivation and performance ensures that practitioners are managing themselves and others in ways that fully incorporate the inevitable and ongoing cyclicality of our lives. More specifically, employees might be able to maximize their overall motivation and performance by understanding and addressing their day-to-day patterns across a workweek.

The days of the week serve as a temporal map by which we plan our lives. For example, one might work Monday through Friday, run errands and spend time with friends on Saturday, and rest or prepare for the workweek on Sunday. Such cyclical behaviors represent *entrainment*, which is when human activity begins to synchronize with the pattern and rhythm of social systems, norms, and institutions (Beal & Ghandour, 2011; Hülsheger et al., 2014). Indeed, for the majority of the working population, work occurs Monday through Friday, while Saturday and Sunday are set aside for personal time. Along these lines, we suggest that within-person variation in motivation and performance is subject to a socially imposed schedule, specifically, the five-day workweek.

Our work incorporates entrainment theory, with the goal of understanding motivation and performance. In this study, we investigate motivation in the form of *motivational control*, defined as staying on course and sustaining effort in pursuit of goals through the redirection of attention (Wanberg, Zhu, Kanfer, & Zhang, 2012). Specifically, we hypothesize that performance dwindles across the workweek given a corresponding decline in motivational control (Hockey, 2011). We focus on motivational control for two reasons. First, motivational control is fitting as a day-to-day phenomenon because it addresses the ability to stay focused across time, which aligns with our interest in the between-person trajectory across the Monday to Friday workweek. Second, motivational control is conceptually relevant for investigating entrainment. Motivational control aligns with the temporal underpinnings of entrainment theory in that it entails staying motivated

over time through the redirection of attention, as opposed to simply capturing the degree of

motivation at a specific point in time.

     To further investigate the described motivation-performance trajectory phenomenon, we

also investigate an individual characteristic that has been theoretically suggested to impact

entrainment. According to self-determination theory (SDT), trait-based mindfulness (a

disposition towards non-judgmental, present moment attention and awareness: Brown & Ryan,

2003), might counteract the impact of entrainment. Aligning with prior entrainment-based

research (Hülsheger et al., 2014), we suggest that the self-regulatory capacities associated with

mindfulness (Glomb, Duffy, Bono, & Yang, 2011) should facilitate employees breaking free of

entrainment processes, and instead allow for engagement in self-determined behavior (Schultz &

Ryan, 2015). More specifically, we hypothesize that more mindful employees are less likely to

experience a downward trajectory in motivation, and in turn, performance across the workweek.

     Incorporating mindfulness into our motivation-performance trajectory model is important

for two reasons. First, the influence of entrainment is presumed to be inevitable because it is

something that we do not notice. If mindfulness negatively relates to motivation-performance

trajectories, this would suggest that not all employees will be universally affected by entrainment.

Said another way, mindfulness—the capacity for remaining focused on the present moment—

might counteract our automatic tendency to experience fluctuating attention and motivation based

on the day of the week. Second, such an investigation contributes to workplace mindfulness

research by adding to the conversation about the effect of mindfulness on employee motivation.

A recent study by Hafenbrack and Vohs (2018) highlights that state mindfulness might not

always be beneficial. The authors suggest that motivation entails attaining a better future state,

and that state mindfulness detracts from this better future state due to an acceptance of the current

situation. The authors then illustrate that state mindfulness is negatively associated with task

motivation through a reduced focus on the future and reduced arousal. This series of studies take

place in a lab setting and considers how states of induced mindfulness may relate to one's

motivation to complete a series of tasks. Our work also seeks to understand the effect of

mindfulness on motivation at work, but our goal is to understand how one's general tendency to

be mindful (rather than one's level of state mindfulness induced at one point in time) may impact

the overall motivational trajectory that workers experience throughout a workweek. In doing so,

we investigate whether the effect of trait mindfulness on performance episodes across the

workweek differs from the effect of state mindfulness on short-term tasks (e.g., Hafenbrack &

Vohs, 2018).

Additionally, as aptly summarized by Good et al. (2016), we have a limited understanding

of why and how mindfulness relates to performance. A few studies to date evaluate the direct

effect of mindfulness on performance outcomes, such as task performance (Dane & Brummel,

2014), problem-solving tasks (Ostafin & Kassman, 2012), and academic performance (Shao &

Skarlicki, 2009). The theoretical rationale in these studies draws from findings illustrating that

mindfulness is associated with cognitive flexibility (Moore & Malinowski, 2009) and reduced

distractions (Herndon, 2008). We suggest an alternative mechanism such that mindfulness

facilitates maximal performance by ensuring stability in motivational control and performance

across the workweek. This self-regulatory framework aligns more closely with the theoretical

perspectives proposed within workplace mindfulness literature (Good et al., 2016; Glomb, Duffy,

et al., 2011).

Entrainment is a temporal phenomenon, such that our motivation and performance

becomes affixed to the cyclicality of the workweek. Mindfulness aligns with this temporal

framework in that employees should disassociate with temporal norms and place their attention

and awareness in the present moment. Building on this model, we investigate a boundary

condition of our mindfulness to motivation-performance trajectory model. Specifically, we

investigate job demands, defined as the degree to which employees "are required to work fast and

hard and have much work to do in a short time, or permanently have a great deal of work to do"

(Janssen, 2001, p. 1040). Following SDT (Schultz & Ryan, 2015), we expect that mindfulness

facilitates stable, self-determined levels of motivational control across the workweek. However, this assumes that individuals are embedded in environments that necessitate sustained re-direction of attention. We therefore suggest that employees high in job demands have less control of their work environment, which requires higher levels of a self-regulatory capacity, like mindfulness, to help ensure alignment with self-determined actions oriented toward goal achievement. Alternatively, employees low in job demands likely do not require similarly high levels of a self-regulatory capacity such as mindfulness, to continually re-engage them with self-determined actions oriented toward goal achievement. This is consistent with tenets of trait activation theory (Judge & Zapata, 2015; Tett & Burnett, 2003), which suggests that for a trait to influence performance, there must be a match between the characteristics of the trait and the cues of the situation.

Overall, our study contributes to several areas of organizational behavior research. We contribute to the motivation and performance literatures by taking a trajectory perspective and highlighting the impact of entrainment across the workweek. We also extend prior trait-activation research by evaluating whether trait-situation alignment arguments (e.g., high trait mindfulness paired with high job demands) are pertinent to dynamic, day-to-day performance, and not just static, aggregated performance. Finally, our investigation also contributes to workplace mindfulness research. Mindfulness has been suggested to be helpful in addressing several individual and organizational ailments (Good et al., 2016), and such enthusiasm has also been met with some strong criticism (Purser, 2018). Our work adds to the conversation about mindfulness by investigating when it might be valuable and when it might have limited utility in the workplace (Dane, 2011).

In summary, our conceptual model entails job demands as a conditional moderator of the indirect effect of trait-based mindfulness on performance trajectories through motivational control trajectories (see Figure 1). To test our model, data were collected from 151 full-time employees in a medical device company. We collected data from participants twice daily across

the five-day workweek and used a person-centric (i.e., between-person) trajectory approach to investigate the proposed relationships.

Theoretical Background and Hypothesis Development

Motivational Control and Performance Trajectories: An Entrainment Theory Perspective

Motivational control entails "the intentional cognitive redirection of attention, use of goal setting, and/or use of environmental management strategies to stay on course and sustain effort (Kanfer & Heggestad, 1997; Kuhl, 1985)," which is a strong and proximal predictor of performance (Wanberg et al., 2012, p., 266). As a self-regulatory state, motivational control strengthens one's intentions to persist and sustain efforts towards accomplishing tasks, particularly when the motivation to achieve goals begins to wane (Kuhl, 1985). Behaviors representative of motivational control includes self-initiated goal setting, development of self-reward strategies, or visualization of the likely benefits of performance outcomes. We are interested in the tendency for motivation to decrease over time. Thus, evaluating a motivation-centric self-regulatory state is ideal for evaluating motivational trajectories. Motivational control is important because it influences employee performance; the degree to which employees are effective in translating personal resources (e.g., time, energy, knowledge, etc.) into goods and services (Motowidlo, 2003). We suggest that the temporal context associated with the day of the workweek should influence employees' assumptions and interpretations regarding whether it is worthwhile to sustain task efforts.

As the first day of the workweek, for most individuals, Monday signifies the beginning of a five-day cycle in which tasks must be completed before taking a two-day break. Alternatively, Friday signifies the end of the cycle; a reoccurring end-point where there is no more time remaining to accomplish the week's objectives. We suggest that as employees move further away from Monday and closer to Friday, their temporal framework evolves, which influences how they experience the utility of their efforts (George & Jones, 2000; McGrath & Kelly, 1986).

Work can be viewed as an ongoing, multi-goal context, where we subconsciously direct

our attention and efforts (Carver & Scheier, 1998; Lord, Diefendorff, Schmidt, & Hall, 2010) and consciously decide which goals will be reprioritized or abandoned (Schmidt & DeShon, 2007). The multi-goal literature takes a self-regulatory perspective, suggesting that employees engage in goal discrepancy processes (Vancouver, Weinhardt, & Schmidt, 2010). Specifically, employees are attuned to the discrepancy between their goals and their current progress, and then subconsciously adjust their attention or consciously adjust their efforts in ways that maximize the utility of their time and energy (Klein, 1989). The perceived amount of time remaining constitutes an important factor that affects this self-regulatory process (Kirchberg, Roe, & Van Eerde, 2009; 2015). At a temporal starting point, such as a Monday, employees are likely to perceive that they'll be able to address all areas of their work (Schmidt, Dolis, & Tolli, 2009). But as time progresses, such as through the remaining days of the week, employees likely sense that they are less likely to finish all of their tasks, causing them to either gravitate toward the simpler tasks that require less effort (Waller, Conte, Gibson, & Carpenter, 2001) or abandon some tasks altogether (Schmidt & DeShon, 2007; Schmidt et al., 2009). Thus, as the workweek progresses, employees might be less likely to increase task focus because they recognize that doing so becomes less efficient as the workweek progresses and less time remains (McGrath & Rotchford, 1983; Oettingen & Stephens, 2009).

Relatedly, this goal discrepancy process assumes that employees are aware of the status of their tasks, projects, and deliverables, as well as have a sense as to when such items will be completed (Oettingen, Mayer, & Brinkmann, 2010). These mental projections, however, are likely to be influenced by the day of the week. At the beginning of a workweek, there is typically some structure or system in place outlining tasks and deliverables for the impending workweek. But as the week progresses employees receive new information, accumulate new requests, and encounter new obstacles that convolute their ability to succinctly plan and prioritize their time (König, van Eerde, & Burch, 2010). Thus, as the workweek progresses from Monday to Friday it should be more challenging to properly engage in self-regulatory activities specific to

motivational control, such as staying focused on sub-goals, or visualization of the end-goal, which facilitate goal accomplishment.

The relationship between motivation and performance is well established (Pinder, 2014). There is also evidence suggesting that this relationship exists at the daily level (e.g., Fisher & Noble, 2004; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009) because employee effort and persistence to a task should positively relate to the extent to which they are successful in accomplishing that task. We extend this line of reasoning to our model, which investigates the relationship between motivational control and performance. More specifically, we suggest that the downward trajectory of motivational control will coincide with a downward trajectory in performance. As employees become less able to maintain motivation, focus attention, and sustain their effort, they will also be less likely to complete their work tasks (Kanfer, 1990; Kanfer & Heggestad, 1997). We therefore hypothesize the following:

Hypothesis 1: *There will be a declining trajectory of (a) motivational control and (b) employee performance across the workweek.*

The Effect of Mindfulness on Motivational Control and Performance Trajectories: A Self-Determination Theory Perspective

According to SDT, there are several forms of motivation that fall along a continuum of self-determination, anchored by high versus low levels of self-selected and self-endorsed behavior (Deci & Ryan, 1985). Evidence accumulated over the past 45 years suggests that highly self-determined behavior is positively associated with an assortment of beneficial outcomes, including well-being and performance (Deci & Ryan, 2017). When the mindfulness construct was first conceptualized, it was largely discussed as a trait-based, self-regulatory characteristic with the capacity to enlist more self-determined behaviors, which in turn would lead to beneficial outcomes (Brown & Ryan, 2003). We expect that such mindful self-determination is likely to influence motivational control and performance trajectories in two ways: by facilitating the transition from non-conscious to conscious processing and by ensuring accurate and effective

conscious processing.

Compared to non-conscious processing (e.g., Bargh, Gollwitzer, Lee-Chai, Barndollar, & Trotschel, 2001), conscious processing has a higher likelihood of productivity in that it is self-directed, and therefore has a higher likelihood of aligning with one's needs and best interests (Sheldon, 2011). Along these lines, research supports the notion that mindfulness helps individuals overcome the automaticity associated with non-conscious processing (Siegel, 2007) and instead facilitate more conscious processing. Specific to motivation, a study by Levesque and Brown (2007) offers preliminary evidence suggesting that mindfulness influences whether one relies on conscious versus non-conscious processing when it comes to motivational constructs. The authors first developed an Implicit Association Test (IAT) measure of implicit autonomy orientation. They then illustrated that for individuals low in trait-based mindfulness, implicit autonomy orientation at low and high levels was associated with day-to-day autonomy at low and high levels, respectively. Alternatively, there was no association between implicit autonomy and day-to-day autonomy (at low or high levels) when mindfulness was high. These findings suggest that mindfulness plays an important role in dictating whether day-to-day motivation is consciously self-determined or influenced by external, non-conscious stimuli.

Individuals are conditioned over time to automatically internalize the signals and norms of specific workdays and adjust their mindset accordingly (Ancona et al., 2001). As the workweek progresses, we expect that employees will have a harder time maintaining motivational control given non-conscious, temporal-contextual influences. The ability to sustain effort and re-direct attention towards work goals as the week progresses should be particularly challenging for employees at the lower end of the mindfulness continuum. At lower levels of mindfulness, employees are more likely to rely on habitual, automatic functioning (Brown & Ryan, 2003). They tend to "run on automatic," failing to fully consider or question why they are doing what they are doing as they operate throughout the day. The extent to which they operate habitually thus makes them highly susceptible to the influence of entrainment. Alternatively, as

employees move further toward the high end of the mindfulness continuum, they are less susceptible to operating according to the schemas and cognitive habits associated with a specific workday (Bargh, 1994). Thus, as mindfulness increases, employees are more likely to acknowledge their internal dialogue with clarity (Chaiken, 1980; Siegel, 2010), allowing them to filter out unconscious temptations to downgrade the intensity of their efforts as the week progresses. Further, as mindfulness increases, employees are more conscious of their activities and act with intention (Shapiro, Carlson, Astin, & Freedman, 2006). Thus, instead of allowing non-conscious stimuli to dictate their levels of motivation, they are more likely to enact autonomously-derived motivational control levels that are in alignment with achieving their goals. Indeed, research suggests that mindfulness is positively associated with engaging in self-determined action (Brown & Ryan, 2003; Levesque & Brown, 2007).

In addition to minimizing non-conscious automaticity, mindfulness also likely influences conscious processing as it relates to monitoring progress and making appropriate behavioral adjustments to facilitate goal achievement. Mindful individuals maintain a sense of openness and interpret events more as they are rather than through a self-biased, judgmental lens (Brown & Ryan, 2003). They exhibit higher levels of metacognition such that they can continually step back and monitor their thoughts and feeling in a detached manner (Reina & Kudesia, 2020). Throughout the day and workweek, more mindful employees can harness the self-regulatory resources to monitor and adjust their attention, thoughts, and feelings and re-invest these resources into task pursuit, even as unexpected situations arise (Bishop, Lau, Shapiro, Carlson, Anderson, Carmody, et al., 2004). Alternatively, employees lower in mindfulness are less likely to maintain high levels of the self-regulatory capacity necessary to continuously redirect attentional resources toward the evolving demands of the workweek and shifting task priorities.

In sum, we suggest that the extent to which employees are mindful dictates the degree to which they overcome the entrenched mental models and habitual processing stemming from entrainment. As previously outlined, we also suggest that the downward trajectory in

motivational control is positively associated with the downward trajectory in performance. Connecting these arguments, we suggest that mindfulness is indirectly related to the downward trajectory in performance via the downward trajectory in motivational control. We therefore hypothesize:

> Hypothesis 2: *Mindfulness is negatively related to the declining weekly trajectory of employee performance through its negative relationship with the declining weekly trajectory of motivational control.*

The Activating Role of Job Demands

Trait activation theory suggests that the relationship between traits and performance is situationally dependent (Tett & Burnett, 2003). When employees are in trait-relevant situations the tendencies associated with the trait "should naturally translate into effective performance" (Judge & Zapata, 2015, p. 1153). Alternatively, if the demands of the situation do not necessitate the inherent characteristics of the trait, then the presence of the trait will be of limited practical utility. We suggest that mindfulness follows this pattern—its benefits become especially activated within contexts where the job is highly demanding and the work is fast-paced and complex.

As previously outlined, mindfulness should be associated with a reduction in the downward trajectory of motivational control, and in turn, performance, because being fully present by monitoring and adjusting attention ensures employees are not susceptible to the routines, schemas, and socialized assumptions of the day of the workweek. A demanding job is consistently intense and requires ongoing adaptability (Karasek, 1979). From a non-conscious processing standpoint, such settings are also conducive to cognitive overload, making it harder to conceptualize one's situation with accuracy (Sweller, 1988). From a conscious processing standpoint, automatic or habitual thinking is more likely in such settings, as there is little time or energy available to step back and properly evaluate and prioritize one's efforts (Siegel, 2007). In such circumstances being present, attentive, and non-judgmental is especially critical, as it helps

stabilize employees' attentional focus and continually employ high levels of task effort across the workweek. Less demanding jobs, however, have a lower workload, slower pace, and involve simpler tasks. In such settings, work is more easily managed on a day-to-day basis (Kahneman, 1973) and does not activate the need for high levels of mindfulness to maintain motivational control.

In total, we suggest that trait-based mindfulness is relevant to the trajectory of motivational control only when job demands are high. As previously discussed, the trajectory of motivational control should mediate the relationship between mindfulness and the trajectory of employee performance. Thus, job demands should also moderate the indirect effect of mindfulness on the downward trajectory of performance via motivational control. We therefore hypothesize the following:

> *Hypothesis 3: Job demands conditionally moderate the indirect effect of mindfulness on the trajectory of employee performance through the trajectory of motivational control, such that the indirect effect is significant when job demands are high and not significant when job demands are low.*

Method

Sample and Procedure

We recruited participants from employees working in a medical device sales organization in China. With the assistance of the organization's Human Resources department, we contacted 200 employees and 165 of them agreed to participate (response rate of 82.5%). In this communication, we asked participants for permission to send them daily surveys, explained the nature of the study (e.g., general purpose, format/length of surveys,

timeline of surveys), and clearly stated that their responses were confidential, and that they could withdraw from the study at any time[1].

The data collection procedure included two stages. In the first stage, participants completed a questionnaire reporting their demographic information, trait mindfulness, and job demands. One week after, in the second stage of data collection, we asked participants to complete the daily surveys over five consecutive workdays (Monday through Friday). Each day we distributed a survey to the participants at the beginning of the workday (at approximately 9:00 am) and the end of the workday (at approximately 6:00 pm). The final sample included 742 matched daily observations (i.e., morning and evening surveys) nested within 151 individual employees (75.5% of initially contacted participants). The participants were predominantly female (56.13%), were an average of 29.46 years old ($SD = 6.46$), had an average job tenure of 3.56 years ($SD = 2.64$), and had an average of 15.88 years of education ($SD = 4.21$).

Measures[2]

All measures were originally written in English. These measures were translated to Mandarin using the translation and back translation procedure (Brislin, 1980). First, the items were translated from English to Mandarin by a bilingual research assistant. Second, a few words and phrases were modified by the third author. Third, the second author, who did not participate in the English-to-Mandarin translation, translated the Mandarin version back to English. Fourth, the second and third authors collaborated to compare the original and back-translated versions and confirmed that the two were semantically equivalent.

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[1] This data collection was initiated by the third author in China where IRB approval is neither required nor common. However, the third author's school department has ethical policies in place regarding data collection on human subjects that purposefully align with U.S. IRB standards and APA ethical guidelines. The third author gained approval from the department before collecting data and conducted the data collection procedures in alignment with the department's ethical policies.
[2] A full list of items for all measures is available at https://sc.lib.miamioh.edu/handle/2374.MIA/6673.

Mindfulness. Trait mindfulness was measured using Kimmes, Jaurequi, May, Srivastava, and Fincham's (2018; see also Van Dam, Earleywine, & Borders, 2010) 5-item scale. The items asked respondents to indicate how frequently they have experiences that reflect tendencies to not be mindful (e.g., "I find myself saying or doing things without paying attention" and "I get so focused on the goal I want to achieve that I lose touch with what I'm doing right now to get there"). Responses ranged from 1 = "almost always" to 7 = "almost never". The items were recoded such that higher scores reflect a greater degree of mindfulness. The Cronbach alpha for the scale was .84.

Job demands. Job demands were measured using Janssen's (2001) eight-item scale. Sample items include "I have to work fast" and "I have too much work to do". Responses ranged from 1 = "strongly disagree" to 7 = "strongly agree". The Cronbach alpha for the scale was .86.

Daily motivational control. Employee's daily motivational control was measured during the PM survey using Wanberg and colleagues' (2012) four-item, state-level motivational control scale. Respondents were asked to rate the extent to which four statements were descriptive of their job while working that day. Sample items included "Despite difficulties that passed my way today, I was able to stay focused on my job" and "If I got interrupted today, I worked hard to get back on track." Responses ranged from 1 = "not at all true of me" to 7 = "very true of me." The Cronbach alpha for the scale was .94.

Daily job performance. Employee's daily job performance was measured during the PM survey using Bakker and Xanthopoulou's (2009) daily performance scale. The items include "Today, I fulfilled all the requirements of my job" and "Today, I performed well." Responses

ranged from 1 = "strongly disagree" to 7 = "strongly agree." The Cronbach alpha for the scale was .93[3].

Control variables[4]. We controlled for employees' age and gender because prior studies suggest that these variables can impact daily performance (Beyer, 1990; Waldman & Avolio, 1986). Age was self-reported in years. Gender was dummy-coded with male coded as "1." Hülsheger et al. (2014) found that mindfulness was related to the mean level and change trajectory of daily sleep quality over five workdays. Since daily sleep quality can also influence one's daily performance, we also controlled for the mean level and trajectory of daily sleep quality over the five consecutive workdays[5]. Sleep quality was measured daily within the AM survey using a shortened version of the Pittsburgh Sleep Quality Index (Buyssé, Reynolds, Monk, Berman, & Kupfer, 1989), which was adapted to refer to the previous night's sleep by Diestel, Rivkin, and Schmidt (2015). The score is additive (range: 0-15) and involves both subjective (sleeping quality and restfulness) and objective components (sleep efficiency, sleep duration, and sleep latency). Sample items include "How would you rate the quality of your previous night's sleep (0 = very good; 3 = very bad)?" and "How many hours of actual sleep did you get last night (0 = >7; 1 = 6-7; 2 = 5-6; 3 = < 5)?" Following Diestel et al. (2015), we recoded the score such that higher values indicate higher levels of sleep quality.

We also controlled for several variables that had the potential to influence motivation and performance trajectories. First, the extent to which employees are motivated on a day-to-day basis could be influenced by where employees find themselves within a specific performance episode (Beal, Weiss, Barros, & MacDermid, 2005). For example, one could argue that

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[3] The correlation between the two items was .88 ($p < .01$).

[4] We reran all of our analyses without including controls in the model and the pattern of results was the same.

[5] As stated in the results section, we did not find a significant curvilinear effect for sleep quality trajectory. Therefore, we did not control for non-linear sleep quality trajectories.

employees' motivation should increase across the workweek if they are working towards a Friday deadline. Thus, we controlled for the mean level and trajectory of daily work plan over the five consecutive workdays[6] using an adaptation of Elliott, Armitage, and Baughan's (2003) three-item planned behavior scale (collected during the AM survey). A sample item is "Today, I have a lot of work that I plan to do". The Cronbach alpha for the scale was .92.

Second, we controlled for ego depletion (Lanaj, Johnson, & Barnes, 2014). This line of work suggests that individual self-control resources are finite, such that engaging in self-control at an earlier time point will deplete available self-control resources at a later time point (Baumeister, Bratslavsky, Muraven, & Tice, 1998). As such, we controlled for the mean level and trajectory of daily ego depletion[7] using Lanaj, Johnson, and Barnes' (2014) daily ego depletion scale (collected during the AM survey). A sample item is "Today, I felt drained." The Cronbach alpha for the scale were .93.

Third, prior research suggests that employees are the least happy on Monday and the happiest on Fridays (Croft & Walker, 2001; Egloff, Tausch, Kohlmann, & Krohne, 1995; Harvey, Milyavskaya, Hope, Powers, Saffran, & Koestner, 2015). We therefore controlled for the mean level and trajectory of daily positive affect (five items) and daily negative affect (five items) using Karim, Weisz, and Rehman's (2011) ten-item scale (collected during the PM survey)[8]. A sample item for positive affect is "Today, I felt active." A sample item for negative affect is "Today, I felt upset." The Cronbach alphas for the scales were .93 (positive affect) and .87 (negative affect).

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[6] As stated in the results section, we did not find a significant curvilinear effect for daily work plan trajectory. Therefore, we did not control for non-linear daily work plan trajectories.
[7] As stated in the results section, we did not find a significant curvilinear effect for daily ego depletion trajectory. Therefore, we did not control for non-linear daily ego depletion trajectories.
[8] As stated in the results section, we did not find a significant curvilinear effect for daily positive or negative affect trajectories. Therefore, we did not control for non-linear daily positive/negative affect trajectories.

Analytic Strategy

        We hypothesized that daily motivational control and daily job performance have a linear

trend along the five consecutive workdays. To evaluate this linear trend we followed the

procedures described in Chen, Ployhart, Thomas, Anderson, and Bliese (2011) and obtained

empirical Bayes estimates of the linear trajectories with random coefficient models (i.e., RCMs;

also known as linear mixed models or hierarchical linear models: Bliese & Ployhart, 2002).

Specifically, using RCMs, we obtained unique Bayes estimates on each trajectory inherent in the

regression of each daily variable against time using random intercept, random slope models. Over

the five consecutive workdays, Monday equals zero, and Friday equals four. As an example, the

following formulas were estimated for daily motivational control:

$$\text{Level 1:} \quad Motivecontrol_{ij} = \pi_{0j} + \pi_{1j}(\text{Time}_{ij}) + r_{ij}$$
$$\text{Level 2:} \quad \pi_{0j} = \gamma_{01} + u_{0j}$$
$$\pi_{1j} = \gamma_{11} + u_{1j}$$

Where:
- $Motivecontrol_{ij}$ = Motivational control score for individual j at time i
- γ_{01} = Intercept (initial score of motivational control)
- γ_{11} = Mean of Time–Motivational control trajectory
- r_{ij} = Level 1 residuals
- u_{0j} & u_{1j} = Level 2 residuals

        Thus, for the trajectory scores, negative (positive) values of π_{1j} (the sum of γ_{11} and u_{1j})

indicate a downward (upward) linear trend in daily variables over time. We also tested whether

the daily variables contained quadratic, cubic, or quartic components to rule out non-linear

changes in daily variables[9]. Following Chen and colleagues' (2011) procedures, non-linearity was

ruled out using random intercept, fixed slope models, because the fixed slope examines the

general trend across the sample (i.e., on average, such that the situation for each individual is

assumed to be random: Chen, 2005).

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[9] For five time points (i.e., Monday to Friday), the quartic trend is the largest high-order term that can be estimated.

Following Chen's (2005) and Chen and colleagues' (2011) procedures, we then saved the trajectory values (π_{1j}) of each daily variable as a new variable (see also Firth, Chen, Kirkman, & Kim, 2014; Zhu, Wanberg, & Harrison, 2016 for examples). The result is a *person-centric* data structure, which aligns with the other person-level variables within our model. This practice allows for a simultaneous examination of all hypothesized relationships (Chen et al., 2011). As an example, the following formula was regressed for motivational control trajectories at the person-centric level:

$$\pi_{1j} = \beta_{10} + \beta_{11}(\text{Mindfulness}_j) + \beta_{12}(\text{Jobdemands}_j) + \beta_{13}(\text{Mindfulness}_j \times \text{Jobdemands}_j) + v_{1j}$$

Where:
- Mindfulness_j = The main predictor, individuals' trait mindfulness
- Jobdemands_j = The moderator, job demands
- β_{10} = Intercept
- $\beta_{11}, \beta_{12}, \beta_{13}$ = Variable coefficients
- v_{1j} = Residuals

To test our hypotheses, we conducted multivariate modeling (Muthén & Muthén, 1998-2018) using Mplus 7.5. All foci variables were grand-mean centered (Cohen, Cohen, West, & Aiken, 2003), the products of which were used as the interaction terms to examine the moderation hypotheses. To examine the mediation and moderated mediation effects, we conducted a bias-corrected bootstrapping procedure with 20,000 replications (PROCESS program: Hayes, 2013; see also Owens & Hekman, 2016) to obtain the 95% confidence intervals (CIs) of the estimated parameters. This approach more accurately reflects the asymmetric nature of the sampling distribution of the mediation effects (Hayes, 2013; Liu, Zhang, & Wang, 2012; Preacher & Hayes, 2008).

Results

Construct Validity

To ensure the variables measured in the current study captured distinct constructs, we conducted multilevel confirmatory factor analyses (CFAs: Muthén, & Muthén, 1998-2018). We first evaluated a six-factor model, including within-level factors of motivational control and performance, and between-level factors of mindfulness, job demands, motivational control, and performance. This model fit the data well (χ^2 [df = 154] = 337.41, p < .001, CFI = .94, TLI = .92, RMSEA = .04), with all indicators loading significantly onto their respective factors. In addition, this model fit significantly better than alternative five-factor models, including a model with within-level motivational control and within-level performance combined (χ^2 [df = 155] = 846.15, p < .001, CFI = .76, TLI = .72, RMSEA = .08; $\Delta\chi^2$ [Δdf = 1] = 508.74, p < .001), a model with between-level motivational control and between-level performance combined (χ^2 [df = 157] = 402.47, p < .001, CFI = .92, TLI = .90, RMSEA = .05; $\Delta\chi^2$ [Δdf = 3] = 65.06, p < .001), and a model with between-level mindfulness and between-level job demands combined (χ^2 [df = 157] = 525.13, p < .001, CFI = .88, TLI = .85, RMSEA = .06; $\Delta\chi^2$ [Δdf = 3] =187.72, p < .001). These findings suggest that the study measures were distinct constructs.

Analysis of Daily Variable Trajectories

We followed the guidelines provided by Bliese and Ployhart (2002), Chen et al. (2011), and Firth et al. (2014) to test the nature of the trajectory of daily variables using RCM. First, intraclass coefficients (ICC1) were estimated based on an unconditional random coefficient model (also known as an intercept-only model) to estimate the relative amount of between-person and within-person variance. We also conducted one-way ANOVAs to examine whether variances were significant across persons (see Table 1). Across the different individuals, the attributable variance at the daily level was 62.9% for daily motivational control (F = 9.49, p < .001), 48.3% for daily performance (F = 5.68, p < .001), 34.2% for daily sleep quality (F = 3.55, p < .001), 54.1% for daily planned work (F = 6.88, p < .001), 53.1% for daily positive affect (F = 6.66, p

< .001), 53.7% for daily negative affect ($F = 6.79$, $p < .001$), and 55.2% for daily ego depletion

($F = 7.18$, $p < .001$). These results support the non-independence of our data and suggest that

significant variation exists at both the within-person and between-person levels, warranting the

use of a person-centric approach to study the *trajectory* of our daily variables (Chen, 2005).

Second, we tested whether the daily variables had generally linear trajectories following

procedures suggested by Chen (2005), Chen et al. (2011), and Firth et al. (2014). Specifically, we

tested a random intercept, fixed slope model, using weekday (i.e., Monday equals zero and Friday

equals four) as a predictor of each of the daily variables. Note that the fixed slope examines the

average slope across the sample (Chen, 2005). This fits well with our hypotheses because we

seek to predict the overall trend across the sample, as opposed to predicting why variability exists

within the overall trend, which would then require a random slope model (Chen, 2005). Specific

to the control variables (see Model 1 of Table 1), we found a significant declining trajectory for

positive affect ($\gamma_{linear} = -.11$, $p < .001$), and an increasing trajectory was found for planned work

($\gamma_{linear} = .05$, $p = .03$), negative affect (marginally, $\gamma_{linear} = .03$, $p = .09$), and ego depletion (γ_{linear}

$= .05$, $p = .003$). The fixed slope for sleep quality was not significant ($\gamma_{linear} = -.02$, ns). Specific to

the focal study variables, supporting Hypothesis 1a and Hypothesis 1b, we found significant

declining trajectories for motivational control ($\gamma_{linear} = -.12$, $p < .001$) and performance ($\gamma_{linear} =$

$-.05$, $p = .03$), respectively[10].

We next evaluated the linear trends by comparing random intercept, random slope (RIRS)

models to random intercept, fixed slope (RIFS) models, using R's likelihood ratio test for model

comparisons (Command: ANOVA.LME; Chen, 2005). As shown in Table 1 (see Model 5 of

Table 1), the RIRS models were significantly better than the RIFS models for all variables. This

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[10] As a robustness check, we also used random intercept and random slope models to estimate the slopes. The pattern of results remained the same.

suggests that the linear relationship for each variable significantly varies among individuals, making it acceptable to evaluate trajectories using a person-centric model (Chen et al., 2011).

Third, we evaluated whether the trends were nonlinear by testing whether the daily variables contained quadratic, cubic, or quartic components (see Models 2, 3, and 4 of Table 1). The findings illustrated that a fixed quadratic trend parameter was not significant for any of the control variables; sleep quality ($\gamma_{quadratic}$= -.003, *ns*), work plan ($\gamma_{quadratic}$= -.02, *ns*), positive affect ($\gamma_{quadratic}$= -.003, *ns*), negative affect ($\gamma_{quadratic}$= .002, *ns*), and ego depletion ($\gamma_{quadratic}$= -.01, *ns*), or for either of the focal variables; motivational control ($\gamma_{quadratic}$= .01, *ns*) and performance ($\gamma_{quadratic}$= .00, *ns*). Similar non-significant results were found for cubic and quartic trends. The non-significant higher-order components (paired with the significant linear components) in motivational control and performance further support Hypothesis 1a and Hypothesis 1b. More specifically, these findings suggest that there is a significant, linear decrease in employees' daily motivational control and performance across the workweek.

Analysis of Mediation and Moderated Mediation

Table 2 summarizes the means, standard deviations, and reliabilities of the variables included in our study, as well as the correlations among the variables. Mindfulness was positively associated with the change trajectory of motivational control ($r = .26$, $p < .001$) and the change trajectory of performance ($r = .23$, $p = .005$). These results suggest that as mindfulness increases, motivation and performance are less likely to decline over the workweek.

Unstandardized coefficient estimates for the estimated multivariate models are displayed in Table 3. The predictors included in our model explained variance of the change trajectory of motivational control and performance at 20.8% and 27.3%, respectively, suggesting that the hypothesized relationships explained sizable portions of variances in the exogenous variables (see Table 3).

The path model (see Table 3) examined our mediation and moderated mediation hypotheses simultaneously. For the mediation hypothesis, we suggest that mindfulness is positively associated with the change trajectory of performance through the change trajectory of motivational control (Hypothesis 2). We found that mindfulness was positively related to the change trajectory of motivational control but at a reduced statistical significance threshold of p less than .1 ($\gamma = .02$, $p = .09$). For the stage 2 path, we found that the change trajectory of motivational control was significantly and positively related to the change trajectory of performance ($\gamma = .34$, $p < .001$). We then conducted a bootstrapping procedure to examine the mediation effect. Using a 20,000-replication bootstrapping procedure (i.e., PROCESS program: Hayes, 2013; see also Owens & Hekman, 2016; Preacher & Hayes, 2008), we found that the bias-corrected confidence intervals (CIs) for the indirect effect of mindfulness on the change trajectory of performance via the change trajectory of motivational control included zero (95% *bias-corrected CI* = -.001 to .03). Thus, Hypothesis 2 was not supported.

Next, we examined our moderated mediation hypothesis. Specifically, that job demands conditionally moderates the indirect effect of mindfulness on the change trajectory of performance via the change trajectory of motivational control (Hypothesis 3). As expected, the interaction between mindfulness and job demands was significantly associated with the change trajectory of motivational control ($\gamma = .04$, $p < .001$). We then used the Johnson-Neyman procedure (Preacher, Curran, & Bauer, 2006) to plot the band of significance for the simple slope of mindfulness on the change trajectory of motivational control across the observed, centered range of job demands [-1.85, 1.78]. As shown in Figure 2, the relationship between mindfulness and the change trajectory of motivational control is non-significant (the confidence interval includes zero) for values of centered job demands that range between -1.85 and 0.10. In other words, when the value of centered job demands is below 0.10, the simple slope between

mindfulness and the change trajectory of motivational control is not significant. This relationship

becomes positive and significant for centered job demands values above 0.10 (the confidence

interval excludes zero when the job demands value is at 0.10), indicating that when job demands

are slightly higher than the average, trait mindfulness has a positive association with the change

trajectory of motivational control. We then conducted the bootstrapping procedure to test the

conditional indirect effects. We found that the confidence interval for the index of moderated

mediation was significant, as it excluded zero (95% bias-corrected CI = .001 to .04). Thus,

Hypothesis 3 was supported.

Supplementary Analyses

Compared to Tuesday, Wednesday, and Thursday, Monday and Friday serve as salient

temporal landmarks which may affect the degree to which socialized assumptions are ingrained

and acted upon (Dai, Milkman, & Riis, 2014). In particular, Monday is more common for

planning meetings; a time to get team-members focused on the deliverables that are due

throughout the remainder of the workweek (Cottrell, 2002). Alternatively, given that Friday is the

closest day to the weekend, it is commonly perceived as the most acceptable day for more lax

workplace behaviors. For example, for organizations interested in moving to a four-day

workweek, Friday is typically the first candidate to be cut (Grosse, 2018). Similarly, Friday is

commonly associated with casual attire, flexible workdays, and work-related social events (e.g.,

Yates & Jones, 1998). We did not find any signs of non-linearity across the workweek for

motivational control or performance. Nonetheless, we conducted additional testing to evaluate

whether Monday and Friday differentially contributed to the trajectories. We first conducted

supplemental analyses where we removed Monday and Friday, thereby narrowing the analyses to

only include Tuesday, Wednesday, and Thursday. When doing so, there was still a significant,

downward trajectory of motivational control (γ_{linear} = -.17, p < .001). Additionally, the interaction

between mindfulness and job demands continues to be significantly associated with the change

trajectory of motivational control ($\gamma = .04$, $p < .001$). Second, we conducted ANOVA tests

comparing the changes in motivational control and performance when moving from each day of

the week to its subsequent day of the week (i.e., the declines from Monday-to-Tuesday, Tuesday-

to-Wednesday, Wednesday-to-Thursday, and Thursday-to-Friday). The results suggest that for

motivational control (F [3, 616] = 1.66, $p > .05$) and performance (F [3, 616] = 1.94, $p > .05$) the

differences in declines are not significant across the four-day shifts. Overall, the findings suggest

that the linear, downward trajectories of motivational control and performance are relatively

similar across each day of the workweek.

The focus of this research is on trajectories, which is a between-person calculation based

on daily reports. To supplement this work, we conducted an exploratory data collection at the

daily level (see Tables 1-3 of the Appendix). Specifically, in addition to daily motivational

control and daily performance, we also evaluated daily state-based mindfulness and daily job

demands. Doing so allowed us to evaluate whether there are daily level relationships between the

four study variables, which may offer new insights on why motivational control and performance

have a downward trend across the workweek. Second, it allowed us to evaluate the degree to

which aggregation of state-based mindfulness is similar to trait-based mindfulness, which to date,

is relatively unclear in the workplace mindfulness literature.

Using a convenience sample, we enlisted 129 full-time working graduate students from a

large U.S. university (IRB #: HM20008881). Participants were sent email surveys twice daily and

completed these surveys via Qualtrics every day for five days (Monday through Friday). The time

1 (mid-day) survey was sent out at 7:30 am and participants had until 11:30 am to complete the

survey. The time 2 (post-day) survey was sent out at 6:00 pm and participants had until 11:30 pm

to complete the survey. The time 1 survey included a state-based version of the mindfulness scale

and a day-level version of the job demands scale used in the main study. For both measures, a

question stem was added before each item set of items. The question stem prompted participants

to report state-based mindfulness and job demands throughout their work day so far. The time 2

survey included the same day-level version of motivational control and performance that we used

in the main study. The final sample consisted of 512 matched daily observations (i.e., mid-day

and post-day surveys) nested within 128 individual employees (one participant did not finish the

experiment). The participants were predominantly male (65.90%), were an average of 24.58 years

old ($SD = 2.97$), and had an average full-time work experience of 2.56 years ($SD = 1.65$).

The linear trajectory for motivational control ($\gamma_{linear} = -.15$, $p < .01$) and performance

($\gamma_{linear} = -.08$, $p < .05$) were negative and statistically significant, replicating the main study

findings. Also consistent with the main study findings, the higher-order components were not

statistically significant, suggesting that the trajectories were linear. Also as expected, the

trajectory of motivational control and the trajectory of performance were positively correlated (r

$= .54$, $p < .01$). For state-based mindfulness, the quartic component was statistically significant,

but the linear trajectory was not ($\gamma_{quartic} = -.08$, $p < .05$). Due to its nonlinearity, we excluded the

trajectory of state-based mindfulness from further analyses.

Next, we created between-person, mean-level aggregations of daily state-based

mindfulness, and daily job demands. Replicating the main study findings, the main effect of the

mean level of daily state mindfulness on the change trajectory of daily motivational control was

statistically significant ($\gamma = .03$, $p < .01$). Additionally, the bootstrapped mediation results for the

mean level of daily state mindfulness on the change trajectory of daily performance via the

change trajectory of daily motivational control was significant [effect size $= .02$; 95% bias-

corrected CI $= .002$ to $.04$]. However, the interaction between the mean level of daily state

mindfulness and job demands on the change trajectory of motivational control was not significant

($\gamma = .01$, $p > .05$). In general, the exploratory findings replicate the main study findings. We further discuss the nonlinearity of state-based mindfulness and the non-significant interaction in the future research section.

Discussion

The findings of this study offer support for our entrainment hypothesis which suggests that motivational control and performance should decline over the five-day workweek. Further, our findings highlight two between-person variables that help explain the circumstances that affect motivation and performance trajectories. Specifically, our findings reveal that job demands function as an activating mechanism for the influence of mindfulness on the trajectory of performance via the trajectory of motivational control. These findings make several theoretical and practical contributions to research investigating the dynamic nature of motivation and performance, as well as workplace mindfulness research.

Theoretical Implications

While static assessment of employee performance is beneficial in that it offers a straightforward, generalized view of prior performance, it overlooks opportunities to pinpoint meaningful fluctuations in employee performance over time (Dalal & Hulin, 2008). To date, several streams of research contribute to our understanding of daily performance variability (see Dalal et al., 2014 for a thorough review). For example, there is support for the "happy productive worker" hypothesis, which suggests that moment-to-moment mood influences moment-to-moment performance (Fisher, 2003). Research also illustrates that personal (e.g., ability: Deadrick, Bennett, & Russell, 1997) and situational (task complexity: Fisher & Noble, 2004) characteristics influence day-to-day performance trajectories over several months or weeks, respectively. Interestingly, however, the timeframe (e.g., multiple times a day, day-to-day, month-to-month) in which employee performance variability is investigated is typically not a

theoretical determination, but a methodological one. We build on this body of work by putting

the timeframe at the forefront of our conceptual model. Our work acknowledges that employees

are susceptible to the socialized and habitual norms of time; in this case, the day of the workweek

(Ancona et al., 2001). This finding is important for scholars interested in understanding employee

motivation and performance, as it highlights the utility of expanding considerations of contextual

variables to include aspects of time. Our findings also inform future research in two ways. First,

researchers interested in within-person, daily investigations of motivation or performance should

consider accounting for the potential impact of the day of the week in which they collect data.

Second, researchers interested in the dynamic nature of motivation or performance should

proactively consider alternative timeframes of interest. The workweek represents a relatively

universal trajectory timeframe; but perhaps individuals in some work contexts are also entrained

by monthly, quarterly, seasonal, or annual performance episodes.

Building on the point above, this research highlights an understudied area and potential

avenue for future motivational control research in particular, and motivation research in general.

The three fundamental elements of motivation include direction (engaging in the appropriate

task), intensity (the amount of energy or effort), and persistence (the length of time) (Dörnyei,

2000; Grant et al., 2007; Kuhl, 1986; 1987). Interestingly, "…motivation research has paid

attention to the first two dimensions but neglected (or treated superficially) the time dimension"

(Ployhart, 2008, p. 19), even though there is some evidence to suggest that motivation changes

across time. For example, attentional involvement fluctuates throughout the workday given

perceived ability to handle challenges (Abuhamdeh & Csikszentmihalyi, 2012), engagement and

effort fluctuate across days given novelty and challenge perceptions (Fisher & Noble, 2004;

Vujčić, Oerlemans, & Bakker, 2017), and engagement fluctuates across weeks given the degree

to which one feels self-efficacious or optimistic (Bakker & Sanz-Vergel, 2013). However, it is

unclear whether there is any meaningful trend in these fluctuations across time, and thus, the

matter of motivational persistence remains elusive. The current work contributes to motivation

research by specifically modeling persistence via motivational trajectories.

This study also has theoretical implications for workplace mindfulness research. Scholars

interested in motivation or performance have focused on state-based mindfulness, finding that

mindfulness relates to employee performance through heightened attention, focus, cognitive

flexibility, and persistence (Glomb, Duffy, et al., 2011; Good et al., 2016). Our work is unique in

that it focuses on the relationship between trait-based mindfulness and performance. More

importantly, of the studies investigating the relationships between trait-based mindfulness and

performance, an understanding of the linking mechanisms is still nascent. To our knowledge,

Reb, Narayanan, Chaturvedi, and Ekkirala (2017) is one of the only studies to consider the

mechanism by which trait mindfulness relates to performance outcomes. They evaluate the

mediating role of emotional exhaustion, which is not a self-regulatory mechanism, but a

consequence of self-regulatory efforts. Drawing from SDT, our study links trait-based

mindfulness to performance through enhanced stability in motivational control across the

workweek. This is theoretically significant, as it supports the original tenets of mindfulness

theory; that it is a self-regulatory capacity that facilitates self-determined behavior (Brown &

Ryan, 2003; Schultz & Ryan, 2015).

This work also contributes to an important conversation regarding the complex

relationship between mindfulness and motivation/performance. As aptly stated by Hafenbreck

and Vohs, "there is an inherent tension between being accepting of one's present experience and

motivated to achieve something new" (2018, p. 2). In a series of studies, the authors illustrated

that state-based mindfulness was negatively and indirectly related to task motivation through a

sequential mediating effect of reduced future focus and reduced state arousal. Interestingly, this

pathway did not indirectly affect task performance. Instead, state-based mindfulness was

positively and indirectly related to task performance through reduced concerns about stressors,

which in turn, increased task focus. Our work complements this line of inquiry by illustrating that

trait-based mindfulness can play a beneficial role in both motivation and performance.

Hafenbrack and Vohs (2018) utilized five experiments to investigate the influence of state-based

mindfulness on performance on specific tasks, such as solving word puzzles, editing a cover

letter, typing speed/accuracy, and the generation of creative ideas. But as the authors point out,

"tasks in the workplace can often occur in the context of some larger purpose, such as

contributing to the organization's goals or being a source of income…" (Hafenbrack & Vohs

2018, p. 12). Along these lines, we utilize a field sample of full-time employees to understand

motivational trajectories of employees throughout the workweek as they engage in their day-to-

day work tasks. Thus, perhaps the role of mindfulness on performance is dependent upon the

criticality of the task (e.g., performance on work-related tasks in an experimental setting versus

performance in an organizational setting) and the length of the performance episode (e.g., a one-

time, short-term task versus multiple tasks across a workweek).

Incorporating job demands into our model also has important theoretical implications for

mindfulness research. Scholars caution that present moment attention and awareness are likely to

enhance performance in some settings and diminish performance in others (Dane, 2011;

Hafenbrack & Vohs, 2018). In particular, Dane (2011) suggests that the wide attentional breadth

specific to mindfulness should enhance information acquisition, processing, and filtering, which

aligns with the inherent challenges associated with dynamic and complex settings. Our findings

align with this contingency perspective, illustrating that the benefits of mindfulness for mitigating

the downward trajectories of motivation and performance only emerge when jobs are fast-paced,

challenging, and highly demanding. Given our trait-based conceptualization of mindfulness,

these findings also contribute to Judge and Zapata's (2015) call for evaluating the trait-to-performance relationship from a person-situation interactionist perspective. We hope that this work encourages scholars to continue to incorporate person-situation frameworks when investigating the performance implications of mindfulness.

Practical Implications

This work highlights the importance of considering the timeframes that guide our life, such as the five-day workweek. If employees' ability to stay focused and direct attention to work-related goals declines as the workweek unfolds, organizations could take steps to overcome this downward trajectory and maximize productivity. One potential option is for organizations to attempt to address the effect of entrainment. Individuals become entrained to the cyclicality of the workweek by observing organizational cues and internalizing social norms (Beal & Ghandour, 2011; Hülsheger et al., 2014). Although it may be challenging to mute (or reverse) years of reinforcement, organizations could mix up the ordering of their activities. If organizations disrupt weekly patterns it might help to mitigate the ill effects associated with downwards trajectories in motivation and performance across the workweek. For example, meetings (e.g., Monday morning strategy meetings) or socialization opportunities (e.g., Friday happy hour) that are currently set for specific days throughout the week could be set for alternative days.

If motivational control and performance are cyclical, organizations should focus on selection, training, and interventions that maximize employee performance by smoothing out the downward trajectory across the workweek. For example, employers could incorporate screening and selection mechanisms that pinpoint applicants high in trait-based mindfulness. Additionally, research suggests that over time, state-based mindfulness interventions increase trait-based mindfulness (Kiken et al., 2015). Thus, employers could incorporate developmental initiatives that focus on mindfulness training (e.g., Hülsheger, Alberts, Feinholdt, & Lang, 2013). This work

also highlights that organizations should carefully consider whether focusing on mindfulness is a worthwhile investment. The sheer amount of popular press and scientific investigation has prompted a great deal of interest in incorporating mindfulness practices into the workplace (Good et al., 2016). Our findings suggest that mindfulness may be of limited utility in work environments with low job demands.

These findings should also be of interest to individual employees seeking to maximize their productivity. While it is common to hear that employees should manage their time, perhaps they should also manage their ability to stay focused over time (i.e., their attentional focus). Equipped with the understanding that motivational control typically declines across the workweek, employees could pinpoint better methods of staying focused as they manage their portfolio of tasks and projects across the workweek. Additionally, employees seeking to maximize performance could begin mindfulness-based training. However, the same caveat applies at the individual level; motivation and performance might not be affected by mindfulness in less demanding jobs.

Limitations and Future Research

Motivational control and performance were both collected daily during the evening surveys. Thus, our statistical model contains a potentially endogenous mediator (i.e., motivational control). While it is possible that performing well could prompt heightened focus, from a theoretical perspective, motivation variables are more commonly positioned as precursors of performance (Kanfer, Chen, & Pritchard, 2008). In future research, one avenue for overcoming this issue is to have someone other than the focal employee rate his or her performance. However, it might be challenging for colleagues or supervisors to be fully aware of focal employees' day-to-day performance across a five-day workweek. Relatedly, although our data collection was conducted at multiple time points, all variables were self-reported, leading to

common method bias concerns (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). To reduce the

potential for between-person confounds, we adopted group-mean centering for our daily-level

variables (Song et al., 2018). As an additional step, future research could supplement the finding

using experimental designs. Specifically, manipulating motivational control may help mitigate

concerns regarding same source bias.

It is also important to point out that not all cases in the sample have a negative trajectory

for motivational control and performance. Specifically, for motivational control, 87.7% have

negative value slopes and 12.3% have positive value slopes. For performance, 71.6% have

negative value slopes and 28.4% have positive value slopes. Our hypotheses are worded such that

as mindfulness increases the downward trajectory of motivational control and performance

begins to flatten out. While these hypotheses are supported across the sample (i.e., at the

aggregate level), it is important to acknowledge that for some of the cases, mindfulness *enhanced*

the positive trajectory of motivational control or performance. Thus, for the vast majority of

cases, mindfulness helped employees maintain motivation and performance across the workweek.

But for a small subset of the cases, motivation and performance increased across the workweek,

and mindfulness enhanced this positive trajectory. Future research should explore alternative

models that seek to explain why this small subset had a positive trajectory. Additionally, there

were relatively more positive trajectory cases for performance than there were for motivational

control. This suggests that future research should evaluate alternative forces that play a role in the

trajectory of motivational control.

Future research should investigate the effects of mindfulness on motivation and

performance using alternative conceptualizations and scales. For example, there are multiple

ways of conceptualizing and measuring mindfulness (see Walach, et al., 2006). There has been

discussion in the literature about whether mindfulness is unidimensional or multidimensional,

with a two-component conceptualization of mindfulness (i.e., mindful attention and mindful

metacognition) recently emerging in the literature (Kudesia & Reina, 2019; Reina, 2020; Reina &

Kudesia, 2020).

Relatedly, prior work also suggests that trait-based and state-based mindfulness are only

moderately correlated (e.g., Brown & Ryan, 2003: $r = .44$, Hulsheger et al., 2013 Study 1: r

$= .56$; Hulsheger et al., 2013 Study 2: $r = .56$; Hulsheger et al., 2014: $r = .61$; Kudesia & Reina,

2019: $r = .38$; Kudesia & Reina, 2020: $r = .51$). Further, in Brown and Ryan's (2003) construct

validity study of the MAAS scale (which is used in this study), only 29% of the variation in state

mindfulness was attributable to individual differences, and 71% was attributable to within-person

variability. Our supplemental findings mimic our main study findings such that aggregations of

state-based mindfulness affect motivational control trajectories in the same manner as trait-based

mindfulness. Nonetheless, future research should continue to compare the effects of trait-based

mindfulness to aggregate measures of state-based mindfulness captured over time.

We also found that, specific to trajectories, state-based mindfulness increases from

Monday-to-Tuesday, goes down from Tuesday-to-Wednesday, stays constant from Wednesday-

to-Thursday, and then goes down from Thursday-to-Friday. These findings highlight that future

research should dedicate more attention to investigating why and how state-based mindfulness

fluctuates across time. For example, perhaps higher levels of trait-based mindfulness not only

entail higher levels of state-based mindfulness across time but also less variability in state-based

mindfulness across time. Future research should, therefore, consider simultaneously evaluating

different conceptualizations and operationalizations of mindfulness, including aggregations of

state-based mindfulness, trait-based mindfulness, and the trajectories of state mindfulness across

the workweek. Notably, unlike our main study findings (which used a between-person

conceptualization of job demands), our supplemental findings did not reveal a significant

interaction between mean levels of daily job demands and mean levels of state-based mindfulness on motivational control trajectories. This again highlights the need to identify and evaluate whether between-person, individual-level conceptualizations are equivalent to aggregations of the concept at the daily level.

There are several opportunities to add nuance to our findings and/or tease out alternative mechanisms underlying the relationships in our model. In particular, future research could test additional stressors that may activate the utility of mindfulness. For example, perhaps a demanding relational-oriented stressor (like social conflict) is necessary to activate the need for mindfulness, similar to how task-oriented stressors (i.e., job demands) were necessary for the current research. Future research could also go beyond mindfulness and evaluate alternative sources for managing downward trajectories in motivation and performance across the workweek. In particular, prior research suggests that employees' competence should influence the trajectory of performance over the long-term (Hulin, Henry, & Noon, 1990). Further, organizational, supervisor, or colleague support might also help mitigate downward trajectories in motivation and performance (Eisenberger, Huntington, Hutchison, & Sowa, 1986). We also note that entrainment is a complicated phenomenon in that it likely influences both non-conscious and conscious processing. We suggest that mindfulness helps individuals move toward more conscious processing from non-conscious processing as well as improve conscious processing. Future research should explore whether mindfulness indeed plays an important role in both processes, or perhaps a more vital role in one over the other.

Our findings suggest that there is a positive trajectory in daily planned work as the week progressed. This could mean that employees accumulate work tasks through the workweek, perhaps because they are unable to complete all of their tasks from prior days. Thus, including daily work plan as a control variable would ensure that the downward trajectory in motivational

control and performance is not influenced by the amount of work to be done. Future work should consider alternative methods for teasing out why employees are motivated to perform on any given day. For example, work plan is typically measured at the beginning of the workday and therefore doesn't account for scenarios where unplanned work surfaces later in the day. Work plan could be measured at the beginning of the day, and then deviations from the work plan could also be captured at the end of the day. Relatedly, future research should incorporate additional variables investigating individual differences in how one's workload is managed. For example, perhaps efficient, productive, or well-organized (e.g. highly conscientious) employees are less susceptible to the downward trajectory in motivational control and performance because of their ability to prevent the build-up of tasks across the workweek. It is also important to note that we were only able to capture motivation and performance scores across one workweek. Future research should collect data across several workweeks and then use these multiple trajectories to create a between-person trajectory that represents their typical trajectory across a workweek. Additionally, future studies could investigate how organization-level (or job-level) variables influence the model. For example, some organizational cultures may encourage employees to think of Friday as a day to rejuvenate or reconnect with colleagues (Schrage, 2013). Similarly, organizations with flexible work arrangements may have less of a downward trajectory because they have more opportunities for ad-hoc recovery opportunities (Hill, Erickson, Holmes, & Ferris, 2010).

Another important consideration is the relationship between job demands and motivational control trajectories. In our model, we evaluate job demands as an activating mechanism for the potential influence of trait mindfulness. However, job demands could also have a direct effect on motivational control trajectories, such that demanding jobs trigger workers to consciously and proactively monitor their progress towards goals. Our findings did not reveal a

significant direct effect of job demands on motivational control trajectories. Perhaps, then, the nature of this relationship is dependent upon individual characteristics such as conscientiousness or goal-setting tendencies. In total, future research should continue to explore alternative variables and pathways in relation to motivation-performance trajectories.

Another fascinating future research direction would be to incorporate non-work goals across the workweek. Entrainment theory suggests that we are influenced by the cyclicality of our lives, which entails work and non-work schemas. Perhaps the downward trajectory in motivational control and performance is partly influenced by our anticipation of weekend goals. Relatedly, perhaps our non-work goals have unique trajectories across the workweek that carry over into our ability to stay focused on work-related goals (Grzywacz & Marks, 2000).

Our findings did not uncover any significant differences in change trajectories across specific days of the week. Nonetheless, it would be worthwhile to integrate what we know about the recovery process into future investigations of motivation and performance (e.g., Hülsheger et al., 2014). For example, perhaps trajectory differences across the workweek are influenced by the starting point of the trajectory. Said another way, the starting point for motivational control and performance might be influenced by the weekend recovery process, and this starting point then alters the nature of the trajectory across the workweek. Second, future research should carefully consider the sample under investigation. Jobs are likely to vary with respect to whether it is necessary or useful to work on Saturday or Sunday. Along these lines, with the assistance of our primary organizational contact, we emailed a random sampling of our respondents (response rate: 16 out of 25, 64%) and asked them to describe how much work is conducted during the workweek versus the weekend, and why. Respondents confirmed that working during the weekend was the exception, not the rule. They stated that they typically worked Monday through Friday, approximately eight hours a day (typically 8 am – 12 pm and 1:30 pm – 5:30 pm).

Respondents also stated that the expectation was that employees be working and available during the operating hours of the service department (8 am – 5 pm), which is the only timeframe in which clients have direct access to employees. This suggests that our sample aligns relatively well with our focus on the five-day workweek. Nonetheless, future research should proactively incorporate said considerations when selecting samples and designing studies.

Conclusion

Prior dynamic investigations of motivation and performance have used relatively arbitrary timeframes. In this study, we integrate entrainment theory to theorize and investigate the trajectory of motivation and performance across the workweek. Aligning with trait activation theory, our findings illustrate that when job demands are high, the self-regulatory capacities associated with trait mindfulness help stabilize motivation and performance across the workweek. Our hope is that this study helps initiate new discussions for those interested in the temporal aspects of motivational and performance.

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Table 1

Analysis of Daily Variable Trajectories

Variable	*ICC1*	F-value	Model 1 γ_{linear} SE	Model 2 $\gamma_{quadratic}$ SE	Model 3 γ_{cubic} SE	Model 4 $\gamma_{quartic}$ SE	Model 5 F-value
1. Daily sleep quality	.342	3.55**	-.02 .04	-.003 .03	.02 .03	-.05 .04	40.68**
2. Daily work plan	.541	6.88**	.05* .02	-.02 .02	.001 .02	.01 .02	100.20**
3. Daily positive affect	.531	6.66**	-.11** .03	-.003 .02	.002 .02	-.02 .03	23.96**
4. Daily negative affect	.537	6.79**	.03+ .02	.002 .02	-.01 .02	-.002 .02	17.53**
5. Daily ego depletion	.552	7.18**	.05* .02	-.01 .02	-.03 .02	.01 .02	71.61**
6. Daily motivational control	.629	9.49**	-.12** .01	.01 .01	.02 .02	-.02 .02	60.81**
7. Daily performance	.483	5.68**	-.05* .02	.00 .02	.01 .02	-.03 .02	56.02**

Notes: + $p < .10$, * $p < .05$, ** $p < .01$, two-tailed. Models 1 through 4 represent random intercept, fixed slope effect estimations. For simplicity, lower-degree coefficients for Models 2 through 4 were omitted. Model 5 represents the F-value of a likelihood ratio test (using R's LME.ANOVA function), which compares the random intercept, random slope effect to the random intercept, fixed slope effect of Model 1.

Table 2

Descriptive Statistics, Reliability Coefficients, and Correlations among Study Variables

Variable	M	Between-person SD	Within-person SD	1	2	3	4	5	6	7	8	9	10	11	12
Within-person (daily) variables															
1. Daily sleep quality	12.13	1.23	1.27	—											
2. Daily work plan	4.60	.97	.74	.00	**.92**										
3. Daily positive affect	4.00	1.16	.90	-.03	-.05	**.93**									
4. Daily negative affect	2.04	.89	.68	-.07	-.11**	-.01	**.87**								
5. Daily ego depletion	2.97	.84	.64	-.17**	-.12**	-.01	.19**	**.93**							
6. Daily motivational control	5.31	.83	.54	.08*	.03	.18**	-.02	-.16**	**.94**						
7. Daily performance	4.85	.89	.74	.01	-.02	.18**	-.05	-.10**	.26**	**.93**					
Between-personal variables															
1. Gender (0 = female)	.44	.50		—											
2. Age	29.46	6.46		-.21*	—										
3. Mindfulness	4.67	1.12		-.07	.15	**.84**									
4. Job demands	5.22	.86		.19*	.04	.16*	**.86**								
5. Mindfulness*Job demands	24.56	8.11		.07	.13	.87**	.62**	—							
6. Change trajectory of daily sleep quality	-.01	.32		-.02	-.07	.03	.04	.03	—						
7. Change trajectory of daily work plan	.04	.26		.04	-.07	-.09	.13	.01	-.03	—					
8. Change trajectory of daily positive affect	-.11	.17		.01	.09	.10	.03	.09	-.09	.02	—				
9. Change trajectory of daily negative affect	.03	.11		.05	.01	.04	-.02	.01	-.06	-.26**	.08	—			
10. Change trajectory of daily ego depletion	.05	.20		-.11	.08	.05	.11	.09	-.11	-.21**	.07	.25**	—		
11. Change trajectory of daily motivational control	-.12	.16		.02	-.06	.26**	-.07	.21*	.07	.08	.14	-.04	-.15	—	
12. Change trajectory of daily performance	-.04	.21		.00	-.09	.23**	-.13	.11	.07	.01	.08	-.05	-.11	.31**	—

Notes: $N = 742$ at the daily level. $N = 151$ at the individual level. $^* p < .05$, $^{**} p < .01$, two-tailed. Cronbach's alphas appear on the diagonal in bold. Between-person level correlations are reported for Level 2 variables and within-person level correlations are reported for Level 1 (daily) variables.

Table 3
Path Modeling of Study Variables

Variables	Change trajectory of daily motivational control	Change trajectory of daily performance
	B (*SE*)	*B* (*SE*)
Intercept	-.01 (.06)	.04 (.08)
Controls		
Gender (0 = female)	-.02 (.03)	.02 (.03)
Age	-.003 (.002)	-.002 (.002)
Mean level of daily sleep quality	.01 (.01)	.000 (.01)
Change trajectory of daily sleep quality	.04 (.04)	.03 (.05)
Mean level of daily work plan	.003 (.01)	-.01 (.02)
Change trajectory of daily work plan	.02 (.05)	-.02 (.06)
Mean level of daily positive affect	.01 (.01)	.02 (.02)
Change trajectory of daily positive affect	.14* (.07)	.10 (.09)
Mean level of daily negative affect	-.001 (.02)	-.003 (.02)
Change trajectory of daily negative affect	.01 (.12)	-.23 (.15)
Mean level of daily ego depletion	.02 (.02)	-.002 (.03)
Change trajectory of daily ego depletion	-.12+ (.06)	-.04 (.09)
Mean level of daily motivational control	-.02 (.03)	.12** (.03)
Mean level of daily performance		-.11** (.03)
Main variables		
Mindfulness	.02+ (.01)	.04* (.02)
Job demands	-.01 (.02)	-.06** (.02)
Mindfulness*job demands	.04** (.01)	-.03 (.02)
Mediators		
Change trajectory of daily motivational control		.34** (.11)
R^2	20.8%	27.3%

Notes: $N = 151$. + $p < .10$, * $p < .05$, ** $p < .01$, two-tailed. Unstandardized coefficients are reported.

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                        ┌─────────────────────┐
                        │     Job demands     │
                        └─────────────────────┘
                                  │
                              H3  │
                                  │                    H2
          ┌ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─┼─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┐
          │                       │                                         │
          │                       ▼        H1a                  H1b         ▼
┌──────────────────┐    ┌─────────────────────┐        ┌─────────────────────┐
│                  │    │ Change trajectory of│        │ Change trajectory of│
│ Trait mindfulness│───▶│ motivational control│───────▶│    performance      │
└──────────────────┘    └─────────────────────┘        └─────────────────────┘

   (Pre-survey)         (Pre-survey)          (Weekdays 1- 5)            (Weekdays 1- 5)
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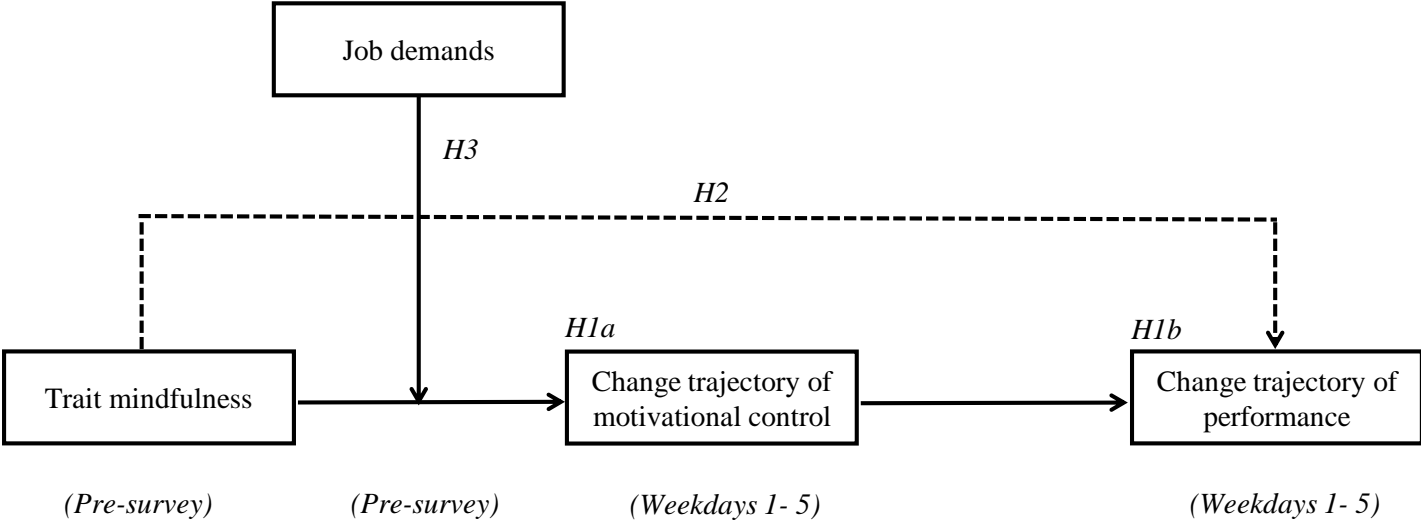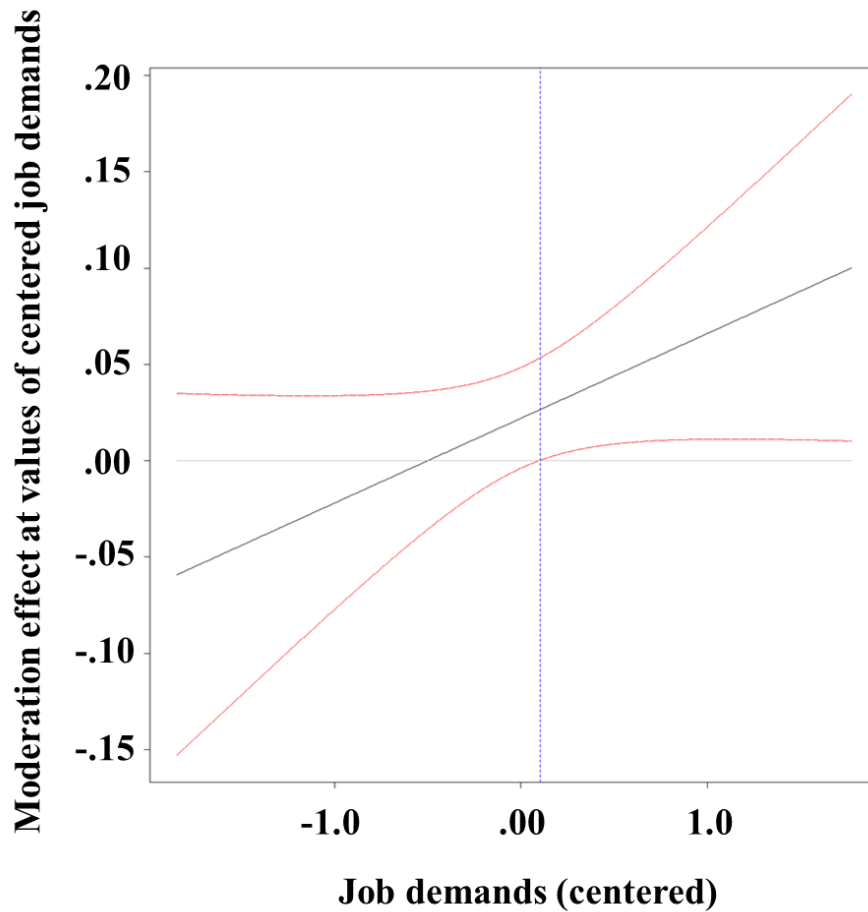
Figure 1. Conceptual model.

Figure 2. Regions of significance for the interaction between trait mindfulness and job demands on the change trajectory of motivational control.

Note. Dashed vertical line reflects the upper bound point at which the confidence band crosses zero (centered job demands = 0.10), implying that the simple slope between trait mindfulness and the change trajectory of daily motivational control is positive and significantly different from zero for centered job demands values of 0.10 and above. When the value of centered job demands is below 0.10, the simple slope between trait mindfulness and the change trajectory of daily motivational control is not significantly different from zero.

Appendix: Supplementary Analyses

Table 1-appendix

Descriptive Statistics, Reliability Coefficients, and Correlations among Study Variables for the Exploratory Study

Variable	M	Between-person SD	Within-person SD	1	2	3	4	5	6	7	8	9	10
Within-person (daily) variables													
1. Daily mindfulness (mid-day)	3.45	.91	.86	**.90**									
2. Daily job demands (mid-day)	4.77	.94	.91	-.22**	**.91**								
3. Daily motivational control (post-day)	4.50	.81	.90	.12**	.25**	**.89**							
4. Daily performance (post-day)	4.51	.81	.93	.26**	-.01	.52**	**.77**						
Between-personal variables													
1. Gender (0 = female)	.66	.48		—									
2. Age	24.58	2.97		-.01	—								
3. Mean level of daily state mindfulness (M)	3.47	.91		.05	-.05	—							
4. Mean level of daily job demands (D)	4.77	.94		.27**	.02	.33**	—						
5. M*D	16.84	6.10		.17	-.03	.87**	.72**	—					
6. Change trajectory of daily mindfulness	—	—		—	—	—	—	—	—				
7. Change trajectory of daily job demands (CD)	-.26	.14		-.21*	.22*	.01	-.01	.02	—	—			
8. M*CD				-.16	.25**	-.44**	-.12	-.35**	—	.86**	—		
9. Change trajectory of daily motivational control	-.15	.11		-.06	.11	.20*	.19*	.23**	—	.26**	.12	—	
10. Change trajectory of daily performance	-.08	.15		.20*	-.06	.24**	.28**	.29**	—	.06	-.05	.54**	—

Notes: $N = 512$ at the daily level. $N = 128$ at the individual level. * $p < .05$, ** $p < .01$, two-tailed. Cronbach's alphas appear on the diagonal in bold. Between-person level correlations are reported for Level 2 variables and within-person level correlations are reported for Level 1 (daily) variables. The change trajectory of daily mindfulness is not computed since the trajectory is non-linear.

Table 2-appendix
Hierarchical Regression Results for the Exploratory Study

Variables	Change trajectory of daily motivational control		Change trajectory of daily performance	
	Model 1	*Model 2*	*Model 3*	*Model 4*
	B (SE)		*B (SE)*	
Intercept	-.22 (.07)	-.08 (.06)	.32**(.09)	.36** (.07)
Controls				
Gender (0 = female)	-.02 (.02)	-.03 (.02)	.06* (.02)	.05* (.02)
Age	.00 (.00)	-.00 (.00)	.00 (.00)	.00 (.00)
Mean level of daily motivational control	-.003 (.01)	-.01 (.01)	.00 (.02)	-.01 (.02)
Mean level of daily performance			-.06** (.02)	-.05** (.02)
Main variables				
Mean level of daily state mindfulness (M)	.03* (.01)	.02^{+} (.01)	.01 (.01)	-.00 (.01)
Mean level of daily job demands (D)		.03 (.02)		.02 (.01)
M*D		.01 (.01)		-.01 (.01)
Mediators				
Change trajectory of daily motivational control			.68** (.09)	.66** (.10)
R^2	8.2%	9.5%	45.4%	47.2%

Notes: $N = 128$. $^{+}p < .10$, $^{*}p < .05$, $^{**}p < .01$, two-tailed. Unstandardized coefficients are reported.

Table 3-appendix
Hierarchical Regression Results for the Exploratory Study

Variables	Change trajectory of daily motivational control		Change trajectory of daily performance	
	Model 1	*Model 2*	*Model 3*	*Model 4*
	B (SE)		*B (SE)*	
Intercept	-.22 (.07)	-.15* (.06)	.32** (.09)	.36** (.08)
Controls				
Gender (0 = female)	-.02 (.02)	-.00 (.02)	.06* (.02)	.05* (.02)
Age	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)
Mean level of daily motivational control	-.003 (.01)	-.00 (.01)	.00 (.02)	.00 (.02)
Mean level of daily performance			-.06** (.02)	-.07** (.02)
Main variables				
Mean level of daily state mindfulness (M)	.03* (.01)	.02* (.01)	.01 (.01)	.00 (.01)
Change trajectory of daily job demands (CD)		.20* (.07)		-.08 (.08)
M*CD		-.05 (.07)		.08 (.07)
Mediators				
Change trajectory of daily motivational control			.68** (.09)	.71** (.10)
R^2	8.2%	11.6%	45.4%	46.3%

Notes: $N = 128$. * $p < .05$, ** $p < .01$, two-tailed. Unstandardized coefficients are reported.