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Starting Your Day with Dread or Excitement? The Effects of Meeting Scheduling Cadences on Anticipated Daily Outcomes

Liana M. Kreamer[1] and **Steven G. Rogelberg**[2]

Abstract

While researchers have explored many facets of workplace meetings, current research has yet to consider the concept of scheduling cadences (e.g., how meetings are dispersed throughout the day). Leveraging research on task interruptions and anticipatory reactions, we conducted two studies using experimental vignette methodology (EVM) where we presented hypothetical daily work schedules, varying by meeting load and dispersion, to a sample of full-time employees (Study 1: N = 109; Study 2: N = 222) and captured their anticipated feelings about the day. We also considered daily task-characteristics (e.g., expected task duration, task complexity) and an individual difference trait (work interruption resiliency; WIR) as moderating variables. Results from both studies provide evidence that daily meeting schedules influence employees' anticipatory reactions to the day in terms of positive affect and productivity. Days with meetings high in quantity, duration,

[1]Florida Institute of Technology, Melbourne, USA
[2]University of North Carolina, Charlotte, USA
Associate Editor: Amanuel G. Tekleab

Corresponding Author:
Liana M. Kreamer, Florida Institute of Technology, 150 W University Blvd, Melbourne, FL 32901, USA.
Email: lkreamer@fit.edu

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and dispersion result in decreased anticipations of positive affect and productivity. Moreover, characteristics of the daily work task/s influence these relationships. When daily task complexity is expected to be high, the negative effects of meeting duration and dispersion are heightened. Further, an individuals' level of WIR moderates the relationships between daily meeting dispersion and anticipated end-of-day outcomes, with those low in resiliency more negatively affected by dispersed meetings compared to their counterparts. Findings from this research extend literature on meetings, workplace interruptions and anticipatory responses to offer insight into how to best schedule workplace meetings to increase employees' anticipated outcomes and experiences.

Keywords
meetings, meeting scheduling, task interruptions, task complexity, work calendars, work interruption resiliency, experimental vignette methodology, anticipated emotions, positive affect, daily productivity

Work meetings are an everyday aspect of organizational life, with most employees attending an average of 11-15 meetings per week (Nizio, 2021). Research finds workplace meetings are necessary for collaboration, team communication and group productivity (Kauffeld & Lehmann-Willenbrock, 2012; Rogelberg, 2019). These meetings typically last between 30 and 60 minutes and exist in increments spread throughout the workday (Allen et al., 2015). Meetings can be scheduled in a myriad of ways. Some workdays may consist of back-to-back morning meetings with free afternoons devoted to work-related tasks, while other workdays may have dispersed meetings - with one meeting scheduled for the early morning, one around lunch, and one in the late afternoon. This sequence or pattern of meetings throughout a day can be thought of as a meeting cadence. Meeting cadences may vary depending on the day, the current project load, the nature of the job, or at the discretion of the employer or employee. Although the dispersion of workplace meetings may seem innocuous, research and theory exploring the negative effects of workplace interruptions suggest that meeting scheduling may be quite consequential.

In our work, we contend that meetings can function as a *form* of interruption, depending on their scheduling cadence. Research shows constant interruptions can negatively affect employee well-being, leading to stress and reduced job satisfaction (Fletcher et al., 2018; Fletcher & Bedwell, 2016; Sonnetag et al., 2018). By understanding the interplay between meetings and

interruptions, organizations (and individual employees) can design schedules that allow for dedicated work time, reducing the impact of frequent interruptions on employee stress levels and workload.

While both meeting science and research on workplace interruptions have (independently) flourished over the past 20 years (Mroz et al., 2018; Puranik et al., 2020; Rogelberg, 2019), there are challenges with the current state of the literatures that we seek to address in this paper. Integrating the two streams of research, we believe our paper makes a contribution to both meeting science and interruptions research by filling four specific gaps.

First, a majority of past research on workplace meetings has explored factors within the meeting itself, leveraging a process model to provide best practices for before, during and after the meeting event (e.g., Mroz et al., 2018; Niederman & Volkema, 1999; Schwartzman, 1986). While these insights have significantly advanced our knowledge on how to successfully lead and attend a meeting, they do not consider the aggregated effects of those meetings as events (i.e., over the course of a day or week) on employees' experiences and subsequent work-related outcomes. Second, to our knowledge, meetings research has not explored how meetings can evoke anticipations about one's workday. Much of the meetings literature explores perceptions or experiences of meetings following the meeting event. However, research on anticipated feelings and emotions suggests employees' predictions and anticipations can be quite meaningful. Third, a recent review of work interruptions (Puranik et al., 2020) provides a definition that proposes interruptions must be spontaneous (i.e., not planned). However, we believe this may be an oversight and propose that meetings, even when planned, can psychologically function similarly to interruptions. Fourth, most research on task and/or work interruptions have explored the objective effects of interruptions. An objective approach assumes an event that halts ongoing work is interruptive by its very occurrence and fails to incorporate participant assessments of the interruption (e.g., Flynn et al., 1999; Monk et al., 2008; Monk & Kidd, 2008). Few studies have explored the *subjective experience* or appraisal of anticipatory interruptions (i.e., how the interuptee interprets the impending interruption).

In our study, we begin to address the above gaps in both meeting science and the interruptions literature to explore how daily meeting scheduling can lead to employees perceiving meetings to be interruptive to one's day, in turn influencing their expectations about how the day will go. Specifically, leveraging research on (a) work-related interruptions and (b) anticipatory reactions as theoretical frameworks, we seek to study how the cadencing of meetings can invoke positive or negative feelings about a workday in the form of anticipated feelings of productivity and a common well-being indicator, positive affect.

We first review the existing literature on task interruptions, with a focus on studies relevant to employees' subjective experiences of interruptions. We then discuss relevant findings from meeting science, which suggest meetings often function as work interruptions. We leverage event system theory to consider the interactive effects of meeting demands and the demands of individual work tasks. We present two outcome variables relevant to experiences of interruptions (i.e., daily productivity and positive affect). We discuss the significance of researching anticipatory feelings, leveraging literature on anticipated emotions and decision-making processes. We then present two experimental vignette studies that empirically investigate the effects of meeting scheduling cadences on anticipated reactions to the workday.

Theories and Hypotheses

Task Interruptions

A task interruption is defined as any event that shifts the attention of the individual from the on-going task, towards some secondary external event (Abad et al., 2018a; Altmann & Trafton, 2004; Andreasson et al., 2017; Boehm-Davis & Remington, 2009; Brixey et al., 2007; Czerwinski et al., 2004; Matzelle, 2005). This interruption interferes with the cognitive attention of the individual, breaking concentration on the primary task to focus on a secondary task (Baethge & Rigotti, 2013; Trafton & Monk, 2007). Such interruptions break the continuity of task performance, reducing efficiency and productivity, and jeopardizing performance in the form of "switch costs," where individuals shift to an interrupting task and back again to the ongoing task (Brixey et al., 2007; Trafton & Monk, 2007). Each time an individual is interrupted, they require an additional immersion period to return to their previous work (DeMarco & Lister, 2013, p. 62). The longer the duration of the interruption, the greater the lagged response to return to the primary task becomes (Hodgetts and Jones 2006a; Monk & Kidd, 2008; Puranik et al., 2020).

Interestingly, these negative effects of task interruptions exist regardless of the nature of the interrupting task. For example, research finds the effects of interruptions (e.g., on resumption lag, time loss, error rate) persist despite the high similarity or match between the interrupting and interrupted tasks (Edwards & Gronlund, 1998; Pankok et al., 2017; Speier et al., 1999). In other words, even when the interruption is relevant to the goals of the primary task/s, it nevertheless carries the negative implications of interruptions such as time loss, reduced efficiency, and lagged resumption time.

The above research explores the objective, negative effects of having a task interrupted (e.g., time loss). Other research has explored the subjective

experience of interruptions, finding the appraisal or assessment of interruptions can result in equally important outcomes (Puranik et al., 2020). For example, research has found that appraisals of interruptions are related to time famine (i.e., the feeling of having too much to do and not enough time; Perlow, 1999), negative affect, and reduced task accomplishment (Sonnetag et al., 2018). A subjective approach to studying interruptions is better suited to capture attitudinal, emotional, and affective reactions to interruptions (e.g., Fletcher et al., 2018; Hunter et al., 2019; Lin et al., 2013) as it captures the interrupted persons' *psychological experience* of the interruption (Puranik et al., 2020) which is "theoretically a more proximal and meaningful predictor of [affective] reactions than just the occurrence of the work interruption itself" (Puranik et al., 2020, p. 13).

Interestingly, research comparing objective and subjective experiences of task interruptions finds it is the *perceptions* of interruptions, more than the interruption itself, that results in greater employee stress (Fletcher et al., 2018) and strain (Fletcher & Bedwell, 2016). Given this insight, in the present work, we focus on employees' psychological experience of meetings as events that can operate as an interruption at work.

Meetings as Interruptions

Some common external workplace interruptions include face-to-face interactions, drop-ins, procedural delays, receiving emails, phone calls or text messages throughout the day (Puranik et al., 2020). Of note, employees list work meetings as one of their primary interruptions from work (Abad et al., 2018b), taking time away from tending to individual tasks and goals. In fact, sixty-five percent of senior managers and executives, ranging across multiple industries, believe meetings keep them from completing their own work, and 64% say meetings come at the expense of deep thinking (Perlow et al., 2017). These findings suggest meetings are subjectively experienced similarly to interruptions, and may compromise employees' feelings of daily productivity and enjoyment.

Past research has applied this interruptions framework when exploring meeting perceptions, finding support that work meetings can be psychologically experienced like interruptions (e.g., Luong & Rogelberg, 2005; Rogelberg et al., 2006). For example, likening work meetings to interruptions and daily hassles, Luong and Rogelberg (2005) found that meeting load (i.e., the number of meetings an employee had per day) was associated with increased feelings of fatigue and subjective workload. Similarly, using an interruptions framework, Rogelberg et al. (2006) found a significant relationship between meeting time demands and employee job attitudes and

well-being, where increased meeting time demands (i.e., number of meetings attended) related to a decrease in employees' well-being. These findings support the idea that meetings are often perceived as a unique form of interruption; where meeting attendance can disrupt perceptions of goal achievement and can elicit negative emotions (e.g., fatigue, emotional strain; Rogelberg et al., 2010).

Meetings can differ from other workplace interruptions in that they are often planned and anticipated. Other workplace interruptions, such as drop-ins and emails, are often unanticipated and therefore unplanned for. While we argue meetings act as a type of workplace interruption, we do note that meetings are often expected events which distinguish them from other forms of workplace interruptions (see Puranik et al., 2020 for a review of the interruptions literature). Additionally, meetings typically have a dedicated time and place, whereas other forms of workplace interruptions may not. However, even when scheduled and expected, meetings still "suspend the behavioral performance of and/or attentional focus from an ongoing work task" (Puranik et al., 2020, p. 817) fitting the definition of a workplace interruption. Therefore, in our work, we look to expand the definition of work interruptions (Puranik et al., 2020) by suggesting meetings (even when planned and expected) indeed function as a form of interruption at work.

The Role of Individual Work Tasks

Individual work tasks expected for the day likely influence the effect of meetings serving as interruptions (Zhang et al., 2023). For example, if an employee anticipates having to complete a large amount of individual work that day, meetings may be experienced as even more interruptive compared to days where there are less expected tasks. Event system theory provides useful guidance for why it is valuable to focus on daily meetings and individual work assignments in combination (Morgeson et al., 2015).

According to event system theory, the more an event demands time, attention and effortful processing, the greater its magnitude (Morgeson et al., 2015). Further, the magnitude of one event can interact with the strength of other events in the environment, having a combined influence on outcome variables. This theory suggests both *time* and *strength* of events are important dimensions that influence the impact they have on work-related outcomes (Morgeson et al., 2015). Event time is primarily defined by event duration (i.e., the amount of time the individual work task is expected to take). Event strength, on the other hand, pertains to the level of attention and cognitive effort required for an event (Morgeson et al., 2015). Event system theory suggests that a longer duration and heightened complexity make events more

influential in impacting outcomes (Morgeson et al., 2015). In light of this, researchers argue for the importance of studying the impact of meeting time by situating it in relation to individual work tasks (Zhang et al., 2023). In our work, we consider the role of individual work tasks as a moderating variable - influencing the relationship between meeting cadences and work-related outcomes specific to interruptions.

Outcomes of Interruptions

In their recent process-based model of work interruptions, Puranik et al. (2020) proposed two general outcomes of interruptions: performance outcomes and well-being outcomes. Some performance outcomes include delay in task resumption/completion, forgetting of intentions, increased error rate, decreased satisfaction with one's own performance and a reduction in quality of work (Baethge & Rigotti, 2013; Bailey & Konstan, 2006; Brixey et al., 2007; Flynn et al., 1999; Grebner et al., 2003; Jett & George, 2003; Zhang et al., 2004; Puranik et al., 2020). On a daily level, productivity captures subjective experiences of effectively making progress towards one's goals (Sonnentag et al., 2018). Research finds that individuals' perceptions of their task accomplishment are related to pride, productivity, engagement, and job satisfaction (Gabriel et al., 2011; Kim et al., 2009; Ng et al., 2011; Pines et al., 2016).

Well-being outcomes include irritation/annoyance, stress/anxiety, emotional exhaustion, job engagement, job satisfaction, and situational well-being (Puranik et al., 2020). Studies have found positive relationships between positive affect and organizational citizenship behaviors (OCBs), absorption in activities, and job performance (Deluga & Masson, 2000; Ilies et al., 2006; Kashdan et al., 2004), and negative associations between positive affect and job withdrawal, intention to quit, and emotional exhaustion, (Crede et al., 2007, Van Katwyk et al., 2000; Wright & Cropanzano, 1998). In the current study, we specifically focus on one variable from each outcome domain: (1) anticipatory productivity and (2) anticipatory positive affect.

Anticipatory Feelings of Emotion. Anticipatory feelings refer to feeling positive or negative emotions (e.g., exhilaration, dread) at the prospect of performing or not performing an action or behavior (Richard et al., 1996; Rivis et al., 2009). Anticipated feelings can be distinguished from both attitudes and general affective reactions in terms of a time perspective (Richard et al., 1996). Specifically, attitudes and general affective reactions include an individual's overall evaluation of and feelings about performing an action, whereas anticipated feelings of emotion refer to people's *predicted* emotions they believe

they will experience after having performed (or not performed) an action (Rivis et al., 2009). While studied quite extensively in psychology in general (e.g., Ajzen & Sheikh, 2013; Conner et al., 2013; Greitemeyer, 2009), anticipated feelings of emotion are largely understudied in the organizational sciences; yet offer great promise for the field given the suggested influence that anticipated feelings can have on employee behaviors, experiences, and objective work-related outcomes.

Literature on anticipated feelings of emotion and decision-making suggest that individual's predictions of their emotions are quite representative of how they would feel in the given situation/s (e.g., Kirsch, 1985). People often anticipate emotions they might experience as a result of their decisions or in response to situational events (Bell, 1982; Fong & Wyer, 2003; Loomes & Sugden, 1986) and these anticipations have a powerful influence on subsequent behaviors. For example, research finds predicted feelings of guilt, dread, elation, and regret influence everyday choices (Gilovich et al., 1995; Mellers et al., 1999). In fact, anticipated affect is shown to be one of the most powerful motivating forces when it comes to decision-making. In their meta-analytic review, Sandberg and Conner (2008) show anticipated affect accounts for a substantive amount of the variance in decision-making intentions – above and beyond individual attitudes and subjective norms.

On a related note, decision affect theory (Mellers et al., 1997) considers the role of perceived pleasure and pain on the decision-making process. The theory suggests people anticipate the pleasure and/or pain of future outcomes, consider the chances that they will occur, and select the option they believe will result in greater pleasure. In the process, people simulate what life would be like with one outcome or another and select the most appealing option. In their research, Mellers and McGraw (2001) examine both anticipated *and* actual pleasure of various outcomes and their relation to choices people make. The authors selected participants who had already made a choice but did not yet know the outcome of their decision. Participants reported their anticipated feelings about all possible outcomes. Later, when they learned what the actual outcome was, they reported their actual feelings experienced based on the outcome. Results found anticipated feelings were quite accurate, being very similar to the actual feelings experienced by participants (Mellers & McGraw, 2001).

In further theoretical support, the self-fulfilling prophecy predicts that a belief or expectation an individual has about a future event will manifest due to the initial expectation influencing subsequent behaviors (Merton, 1948). This theory would suggest that initial expectations about an event could shape subsequent attitudes and behaviors, in turn impacting actual outcomes. Therefore, anticipated feelings and emotions are important in and of

themselves, as they shape subsequent behaviors and decisions (regardless of their accuracy to eventual actual feelings).

Common anticipatory feelings in regard to meetings may include opening the work calendar each morning and feeling a sense of dread, excitement or indifference depending on the calendar schedule. Anecdotally, it is common to hear employees complaining when their calendars are filled with meetings, especially for those in leadership types of roles, who spend upwards of 23 hours per week in scheduled meetings (Rogelberg et al., 2007). Consistently, in our pilot work[1], over 90% of participants indicated that they view their work calendar in the morning prior to beginning the day. Of these individuals, over 97% reported experiencing some sort of emotion or feeling about how the day will go. Finally, roughly 98% reported their initial feelings (i.e., anticipated feelings) about how the day will go are generally (60%) or mostly (38%) accurate to the actual feelings they experience at the end of the day. Results from our preliminary research provide support that nearly all employees' (a) look at their work calendars before beginning their day (b) experience an initial emotional response when viewing their schedule and (c) their initial reactions are fairly accurate to end-of-day feelings.

Taken together, we believe these theories (e.g., decision affect theory, self-fulfilling prophecy) and findings (e.g., from our pilot work) support the notion that anticipated feelings of emotion are an interesting and valuable construct to explore given their influence on subsequent behaviors, reactions, experiences and ultimate outcomes.

Overview of Studies

We propose that daily meeting load can influence employees expected work experiences for the day. Furthermore, when work meetings are spread throughout the day, there seems to be little time in between meetings to complete a task or reach optimal productivity. Meeting load and dispersion may also influence employees' anticipated sense of well-being, contributing to employee frustrations or fatigue (Luong & Rogelberg, 2005). Leveraging the above research on task interruptions and anticipatory reactions to events, the present studies investigate the effect of daily meeting cadences on employees anticipated end-of-day affect and productivity. Further, we investigate the moderating role of individual work tasks expected for the day by considering the influence of task duration and task complexity on anticipated end-of-day reactions. We explore our hypotheses using two complementary vignette studies, manipulating various aspects of a calendar schedule and capturing employees' anticipated outcomes to the day.

Study 1

In the first vignette study, we consider two factors that likely influence how meetings elicit anticipatory end-of-day feelings: (a) the number of meetings scheduled for the day (meeting quantity) and (b) the dispersion of the meetings throughout the day (meeting spread).

Meeting Quantity

Because meetings naturally break up the workday, more frequent meetings require greater task switching. Employees must switch gears when attending meetings, and then shift back to their previous work task/s following each meeting. The previously discussed consequences of interruptions (e.g., loss of concentration, emotional strain) suggests the number of meetings scheduled for a day influence employees' anticipated end-of-day, work-related outcomes. In fact, evidence suggests that when employees have a lot of workgroup meetings, their overall well-being declines (Rogelberg et al., 2006). Further, the number of meetings per day is related to daily fatigue and employee subjective workload (Luong & Rogelberg, 2005). Employees likely anticipate frequent meetings will be more disruptive as they deplete resources needed for individual work tasks, leading to greater fatigue. Moreover, having to attend frequent meetings naturally interrupts workflow, and causes employees to have to leave tasks unfinished. Additional energy and effort are required to return to the uncompleted tasks following each meeting, in turn, increasing the subjective daily workload of employees. These findings suggest that frequent meetings likely are perceived as repetitive interruptions that will disrupt workflow, in turn, reducing employees' anticipations of daily productivity and positive affect. Thus, in this study, we propose:

> **Hypothesis 1.** Meeting quantity is negatively related to employees' (a) anticipated productivity and (b) anticipated positive affective reactions.

Meeting Spread

Meeting spread is conceptualized as the temporal spacing of meeting across a day. Aligned with research and theory on task interruptions, when meetings are highly dispersed, they will likely be perceived as more interruptive compared to meetings grouped together. This is because when meetings are grouped together in succession, they operate as one solo interruption compared to multiple interruptions occurring throughout the day. In support of this, recent research on software developers finds that workplace meetings negatively impact developers' performance due to the high level of cognitive cost associated with switching

between tasks (Abad et al., 2018a). Interestingly, a majority of respondents perceive "morning meetings" as less disruptive to their daily tasks, believing it may be best to finish all daily meetings before starting any work-related tasks. Scheduling the meetings for "right afternoon" was next preferable, with respondents stating they are already interrupted (via lunch) around noon (Abad et al., 2018b). Ideally, these employees would choose to reduce the amount of task-switching required for the day by creating blocks of interrupted times conducive to achieving a workflow or rhythm. When meetings are dispersed throughout the daily schedule, they naturally create more disruptions and will seem to elicit greater task switching compared to meetings grouped together (e.g., back-to-back). Thus, we hypothesize that:

> **Hypothesis 2.** Meeting spread is negatively related to employees' (a) anticipated productivity and (b) anticipated positive affective reactions.

Daily Task Duration

Research on task interruptions suggests that participants sense of overall workload influences whether they experience interruptions positively or negatively (Adamczyk & Bailey, 2004; Feldman & Greenway, 2021; Puranik et al., 2020). Interruptions are more likely to provoke negative emotions when overall workloads seem higher than usual (Feldman & Greenway, 2021). However, research finds when an interruption occurs during a *low* workload moment, it can mitigate the negative effects of the task switching: reducing perceptions of annoyance, decreasing frustration, and lowering the level of time pressure (Adamczyk & Bailey, 2004). In fact, recent research found respondents tended to feel positive emotions when interruptions occurred during light workload periods (Feldman & Greenway, 2021).

Event system theory holds that a longer duration makes events more powerful in eliciting outcomes (Morgeson et al., 2015). Thus, when work tasks are expected to take longer, the effects of meetings functioning as interruptions may be heightened. In support of this theorizing, research has found time pressure mediates the relationship between task interruptions and (a) irritation with work and (b) satisfaction with performance (Baethge & Rigotti, 2013). When employees are operating under intense time constraint, the negative effects of interruptions will be amplified. In line with this research on workload and time pressure, we predict the amount of time that individual daily work tasks are expected to take will heighten (high task duration) or mitigate (low task duration) the effects of meeting quantity and meeting spread on anticipated feelings of daily productivity and positive affect. Thus, we hypothesize the following moderations:

Hypothesis 3. Task duration moderates the negative relationship between meeting quantity and (a) anticipated productivity and (b) anticipated positive affective reactions such that the relationship is stronger on days with high task duration and weaker on days with low task duration.

Hypothesis 4. Task duration moderates the negative relationship between meeting spread and (a) anticipated productivity and (b) anticipated positive affective reactions such that the relationship is stronger on days with high task duration and weaker on days with low task duration.

See Figure 1 for the full hypothesized model.

Method

Below, we describe our participants, data exclusions, manipulations, and all measures in the study. Research materials and analytic code are available on the Open Science Framework.[2] Data are not available due to their proprietary nature. This study's design and its analysis were not preregistered.

Participants

Participants for Study 1 were recruited from two large Pharmaceutical companies based in the Northeast, United States. To qualify to partake in the study, participants were required to work full-time (>35 hours per week), be at least 18 years old and spend at least 6 hours of time in work meetings per

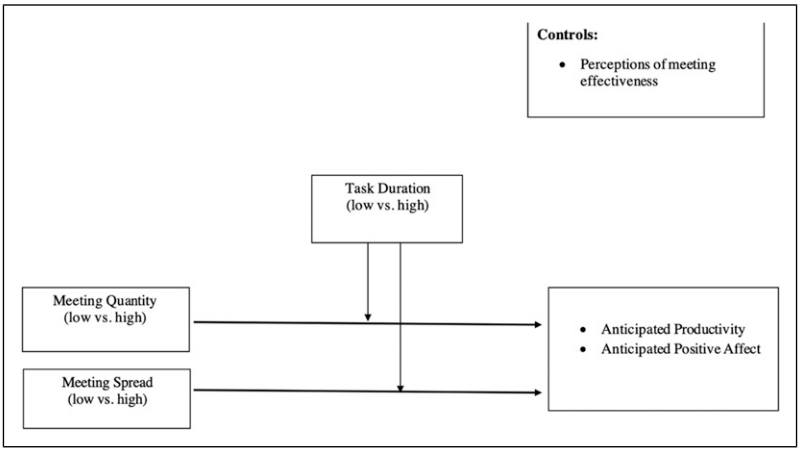

Figure 1. Hypothesized model for variables in Study 1.

week, on average. A *work meeting* was described to participants as "a gathering of two or more employees for a purpose related to the functioning of an organization or a group" (Rogelberg, 2019, p. 4).

A total of 114 participants completed the online questionnaire. We eliminated participants that indicated they spend less than 6 hours of time in work meetings per week ($n = 3$), as well as those that indicated they work less than 35 hours per week ($n = 1$) as they failed to meet inclusion criteria. We also eliminated those that indicated they were 'not at all confident' that the feelings they just reported would be representative of what they would actually feel in the given situation/s ($n = 1$).

This resulted in a final sample of 109 participants (64% female, 36% male). The sample consisted of mid-to high-level managerial employees (20% executive level, 43% mid-management). Eighty percent of the sample indicated that their job involves work that is precise, scientific, and intellectual to a great or very great extent. Roughly 85% of the sample was between the ages of 35 and 55, with a majority having been with the company between 1 and 10 years (40%). Participants had, on average, 15 meetings per week.

Procedure and Design

Participants were asked to complete a survey capturing anticipated feelings based on hypothetical workday schedules. A scenario-based design is most appropriate when the goal of the research is to assess explicit processes and potential outcomes—those about which participants are aware of and can provide information on (Aguinis & Bradley, 2014). The survey presented a general vignette describing a day at work, including a constant 2 hours of meetings as well as a set deliverable due by the end of the day. Participants were asked to imagine themselves in the given situation and respond to the various ways in which the day may pan out. Further instructions were provided before each of the eight schedules presented, indicating the amount of time the deliverable is expected to take (i.e., the task duration condition). Thus, all eight scenarios varied based on three factors: the number of meetings, the spread of the meetings, and the specific amount of individual work tasks assigned for the day. Adopting a within-persons approach, all participants viewed the same set of scenarios – each presented with eight schedules, in random order. After each schedule, respondents reported anticipated feelings (e.g., predicted productivity and affective reactions with the day). Section 2 of the survey included general questions that captured perceptions of meeting effectiveness at work, the nature of their current job, and demographics.[3] The survey took, on average, approximately 14 minutes to complete.

Manipulation of Factors. Factor A represented the manipulation of meeting quantity: A day with four, 30-minute meetings, and a day with two, 60-minute meetings[4]. Factor B consisted of meeting dispersion or spread: Low meeting spread (back-to-back meetings), and high spread (meetings with a total of 4 hours in between). Factor C was reflected in the written instructions presented before each schedule, representing task duration: a scenario with low task duration (15-minute task), and a scenario with high task duration (3-hour task). See the online appendix and Table 1 for the full factorial design[5].

Experimental Vignettes. With the help of two subject matter experts (SME), both employees from where the sample was drawn, we created the vignette to represent a realistic workday that would be typical for our sample. One recommendation to improve realism in EVM designs is to increase the level of immersion experienced by participants (Aguinis & Bradley, 2014). By creating a standard workday and realistic scenario, we increase the likelihood of participants being personally immersed in the situation described in the

Table 1. Factorial Design for Studies 1 and 2.

Low Individual Task Duration (C1)		
Study 1	Low Meeting Spread (B1)	High Meeting Spread (B2)
Low meeting quantity (A1)	(A1)(B1)(C1)	(A1)(B2)(C1)
High meeting quantity (A2)	(A2)(B1)(C1)	(A2)(B2)(C1)
High Individual Task Duration (C2)		
Study 1	Low Meeting Spread (B1)	High Meeting Spread (B2)
Low meeting quantity (A1)	(A1)(B1)(C2)	(A1)(B2)(C2)
High meeting quantity (A2)	(A2)(B1)(C2)	(A1)(B2)(C2)
Low Individual Task Complexity (C1)		
Study 2	Low Meeting Spread (B1)	High Meeting Spread (B2)
Low meeting duration (A1)	(A1)(B1)(C1)	(A1)(B2)(C1)
High meeting duratioN (A2)	(A2)(B1)(C1)	(A2)(B2)(C1)
High Individual Task Complexity (C2)		
Study 2	Low Meeting Spread (B1)	High Meeting Spread (B2)
Low meeting duration (A1)	(A1)(B1)(C2)	(A1)(B2)(C2)
High meeting duration (A2)	(A2)(B1)(C2)	(A1)(B2)(C2)

vignette. Our sample reported having jobs that include independent work tasks, and individual project reports. Thus, we included these descriptions in the vignette to increase the realism of the scenario. Further, vignettes become more lifelike when they provide "natural noise," or familiar distractions (Aguinis & Bradley, 2014). When the "noise" created by the distractors (e.g., phone calls, emails, assignments) is controlled - as in the present case - more realistic scenarios can be created without compromising internal validity (Pierce & Aguinis, 1997). Moreover, improving the realism of the study by increasing the similarity between the experimental (vignette) and natural setting (the workplace) enhances the observed effects, similarly to how transfer of training is improved by increasing the similarity between the job training and job contexts (Aguinis & Kraiger, 2009). By including "noise," via lunch plans and work obligations, participants' were likely able to immerse themselves in the scenario presented and feel familiar with the vignette. Plus, it helped to put all participants in identical mindsets prior to collecting reactions regarding the scenarios.

The general vignette presented at the beginning of the survey was as follows:

> "Please imagine yourself in the following scenario:
> You have a fairly independent job, where you are individually evaluated. You are currently on two, team-based projects. You anticipate brief phone calls from colleagues and peers throughout the day, per usual. You ate a large breakfast and plan to snack throughout the afternoon, so you are not planning to take a formal lunch break. You expect the average email load, typically receiving and responding to forty emails throughout the day. On your calendar, you have 2 hours of team meetings spread throughout the 9AM – 5PM workday. Additionally, you have a project report you must deliver to your supervisor by the end of the day that you must independently complete." Further instructions were given before the presentation of each of the eight schedules. The instructions varied based on the manipulation of individual task assignment (Factor C):
> Low Task Duration Condition (c1)
> "Now, keeping the schedule above in mind, imagine you expect the deliverable for your supervisor to take you approximately 15 minutes to complete today."
> High Task Duration Condition (c2)
> "Now, keeping the schedule above in mind, imagine you expect the deliverable for your supervisor to take you approximately 3 hours to complete today."
> To summarize, the survey began with the overall vignette.

Then, each scenario included one set (of the two sets) of instructions followed by the presentation of one (of the eight) 9 AM – 5 PM workday schedules,

which varied on the number of meetings (a1, a2) and the spread of those meetings (b1, b2). See Figure 2 for an example of a calendar schedule.

Measures

Due to the repetitive nature of the research design, we shortened scales in attempts to reduce participant fatigue (Gabriel et al., 2019). Both the scales, and items within the scales, were presented in random order after each schedule to allay order effects. In addition, following guidance from Huang et al. (2012), two insufficient effort responding (IER) questions were scattered throughout the survey (e.g., "please select strongly agree for this item") to detect careless responses from participants.

Figure 2. Example of a calendar visual presented to participants depicting low meeting quantity (2 meetings) and high meeting spread (4 hours in between).

Realism. Four items were included on the survey to ensure respondents viewed the vignette as realistic and could imagine themselves in the given work situation. The first two items were presented immediately following the workday vignette (1) "How realistic does this scenario seem to you, given your experiences at work?" Roughly 87% of respondents selected very or somewhat realistic, and (2) "Could you imagine yourself in this work situation?" Over 90% of the sample selected yes.

The two items presented at the end of the survey, following the presentation of all eight calendar schedules, were: (1) "Was it particularly difficult to imagine yourself experiencing the given work situation throughout the duration of the survey?" Approximately 90% of participants responded no, indicating it was not difficult to imagine themselves in the work situation while completing the survey, and (2) "How confident are you that the feelings you just reported would be representative of what you would actually feel in the given situation/s?" Ninety nine percent of participants selected very confident or somewhat confident. Results from the manipulation check provide support that participants perceived the vignette as realistic, suggesting their responses are representative of how they would feel in the given work situations.

Anticipated Productivity. Two items from Foulk et al. (2019) and three items from Grawitch et al. (2008) were used to measure predicted daily productivity. For these questions, participants reported the extent to which they believe they could adequately perform work-related tasks given the schedule presented. Items were adapted to represent imagined perceptions, changing "I have" to "I believe I would." Sample items include: "Today at work, *I believe I would* fulfill my work responsibilities" and "Today at work, *I believe I would* perform the tasks expected of me." Participants were asked to respond to the items on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). Coefficient alpha ranged from .79 to .93 across all eight scenarios (average α = .87).

Anticipated Positive Affect. We assessed participants' anticipated end-of-day affect using four items taken from the Job-Related Affect and Well-Being Scale (JAWS) by Van Katwyk et al. (2000). The JAWS contain two dimensions (pleasure and arousal) resulting in four categories: high pleasure/low arousal, high pleasure/high arousal, low pleasure/low arousal, and low pleasure/high arousal. We included one (of the top five) item from each category, selecting those most relevant to the nature of the study. A four-factor model, containing both dimensions (e.g., pleasure/arousal) and levels (e.g., high/low) has received support in similar research (Warr, 1990). Further

support for the four-factor structure of affect can also be found in the original studies of JAWS (van Katwyk et al., 2000).

Again, we modified the items from "I feel" to "I believe I would feel" to align with the context of the study's design. The four items we included were: satisfied, fatigued (R) energetic, and anxious (R). Participants were asked to indicate the extent to which they agreed with the four statements based on the schedule presented, on a scale from 1 (strongly disagree) to 5 (strongly agree). Coefficient alpha ranged from .68 to .78 across all scenarios (average $\alpha = .74$).

Demographics. To better understand and describe the sample in this study, we collected demographic information (e.g., age, gender, job level, tenure). Example items include, "What is your age in years?" and "How long have you worked in your current job (in years)?"

Potential Control Variables

Perceived Meeting Effectiveness. It may be beneficial to control for participants perceptions of meeting effectiveness to combat against differences in meeting perceptions between subjects. For example, if one participant has a positive outlook on meetings, while another negatively views his or her workplace meetings, this could potentially confound between-person results in regard to how the two individuals perceive their meetings as interruptive. With this in mind, we included participants' perceptions of meeting effectiveness as one potential control variable. Participants were instructed to rate the effectiveness of meetings attended in a typical workweek using a sliding percentage scale ranging from 0 to 100%. Participants responded to five items, following the instructions "In a typical workweek, what percentage of your meetings…" Sample items included, "were a good use of time" and "were well-run." ($M = 54.43\%$, $SD = 14.83\%$, $\alpha = .84$)

Job Interdependence. The nature of the job may influence whether participants' view meetings as interruptive (task *in*dependent jobs) or beneficial via a means of communication and collaboration (task *inter*dependent jobs). The theory of activity regulation (Zijlstra et al., 1999) suggests that workplace meetings likely serve as interruptions for highly task *in*dependent jobs, because they interfere with employees' personal tasks or goals. However, in highly *inter*dependent jobs, meetings are less likely to interfere with employees' goals considering meetings are typically used for collaboration and coordination of team goals/objectives (Rogelberg et al., 2006). Thus, we considered nature of the job as a second potential control variable in our model. We included four items taken from Pearce and Gregersen (1991) to capture the interdependence

of participants' work tasks. Participants were instructed to indicate their agreement (1 = strongly disagree, 5 = strongly agree) with four statements regarding their experiences at work. Sample statements include, "I work closely with others in doing my work", and "I frequently must coordinate my efforts with others" (M = 4.49, SD = .67; α = .89).

Results

Means, standard deviations and correlations for the primary variables in this study are displayed in Table 2. The two focal dependent variables, anticipated productivity and anticipated positive affect, were moderately correlated (ranged from .37 to .50 across all eight scenarios; average correlation = .44). Perceptions of meeting effectiveness were significantly related to both dependent variables, therefore we retained this variable as a control in subsequent analyses. Job interdependence was not significantly related to the two dependent variables and thus was not included as a control variable in analyses (Spector & Brannick, 2011).[6]

Model Building

We tested the hypotheses using a repeated-measures approach to multilevel modeling (MLM). MLM offers statistical tests of main effects and interactions between variables at the within-person and between-person levels (Kristjansson et al., 2007). A multilevel framework allows for the examination of nested data—in the current study, participant responses to meeting schedules are nested within person (i.e., participants responded to all eight schedules). The repeated measures approach to MLM allowed us to account for within-person variance, testing whether the change in responses were

Table 2. Means, Standard Deviations, and Correlations With Confidence Intervals for Study 1.

Variable	*M*	*SD*	1	2
1. Anticipated productivity	4.14	.93		
2. Anticipated positive affect	3.34	.87	.44 [.37, .50]**	
3. Perceptions of meeting effectiveness	54.43	14.83	.15 [.06, .24]**	.15 [.06, .24]**

Note. Between-person correlations; *N* = 109. Meeting effectiveness ranged from 0 to 100(%). *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014).
* indicates $p < .05$. ** indicates $p < .01$.

dependent on the characteristics of the various meeting schedules or characteristics of the persons themselves.

The first step in the analyses was to estimate a null model, to understand the percent of variance in outcome variables that was due to between-person variance vs. within-person variance. Results from this model were used to compute the intraclass correlation (ICC1), which provided the percentage of variance in each outcome variable explained by between-person variability (instead of solely within-person variability). It is important to establish that between-person variability in outcome variables exists given that a control variable (perceptions of meeting effectiveness) is at the between-person level. Therefore, there has to be some between-person variability in the outcome variables so that we can use various meeting schedules as a variable to potentially explain the between-person variability, in addition to explaining changes in the outcome variables. We calculated ICC1 using the multilevel package in R (Bliese, 2013). The ICC1 for anticipated productivity was .314 and the ICC1 for anticipated positive affect was .311. This indicates roughly 30% of variance is within-person and nearly 70% of variability in outcome variables is between-person.

Hypothesis Testing

Our repeated-measures design resulted in each participant responding to our dependent variables on eight occasions (i.e., responding to items after each calendar schedule). Thus, responses were nested within individuals. Given this structure of our data, multilevel analyses were most appropriate for analyses. In adherence to the recommendations on the inclusion of control variables, we tested the model with and without the theoretically relevant control variable - perceptions of meeting effectiveness - to see observed differences (Becker, 2005; Spector & Brannick, 2011). Results were the same with or without this variable[7].

Hypothesis 1 was partially supported (See Table 3). Results show a statistically significant relationship between meeting quantity and anticipated positive affect. As meeting quantity increased, anticipated end-of-day positive affect decreased ($\gamma = -.19$, $p < .05$). This relationship was robust even after perceptions of meeting effectiveness was accounted for. Meeting quantity was not significantly related to anticipated productivity ($p > .05$).

Hypothesis 2 was fully supported. As shown in Table 3, there were significant relationships between meeting spread and (a) anticipated productivity ($\gamma = -.16$, $p < .05$) and (b) anticipated positive affect ($\gamma = -.56$, $p < .01$). Such that, as meetings increased in spread on the calendar, both anticipated productivity and end-of-day positive affect decreased. Again, these relationships held after controlling for perceptions of meeting effectiveness.

Table 3.

Multilevel Modeling Results Using Anticipated Productivity as the Criterion

Variable	Estimate	Std. Error	*df*	t-value	*p*>|t|
(Intercept)	4.07	.28	64.60	14.74	.00***
L2 meeting effectiveness	.01	.00	58.00	1.73	.09
L1 meeting quantity	.02	.08	415.00	.29	.77
L1 meeting spread	−.16	.08	415.00	−1.97	.05*
L1 task duration	−.17	.10	415.00	−1.76	.08
Meeting quantity × Task duration	−.09	.11	415.00	−.81	.42
Meeting spread × Task duration	−.62	.12	415.00	−5.48	.00***

Multilevel Modeling Results Using Anticipated Positive Affect as the Criterion

Variable	Estimate	Std. Error	*df*	t-value	*p*>|t|
(Intercept)	3.32	.26	66.67	12.68	.00***
L2 meeting effectiveness	.01	.00	58.00	1.75	.09
L1 meeting quantity	−.19	.09	415.00	−2.11	.04*
L1 meeting spread	−.56	.09	415.00	−6.47	.00***
L1 task duration	−.03	.11	415.00	−.28	.78
Meeting quantity × Task duration	−.04	.12	415.00	−.31	.76
Meeting spread × Task duration	.14	.12	415.00	1.19	.24

Note. L1 = Level 1, L2 = Level 2. indicates p < .05. indicates p < .01. indicates p < .001. Estimates are unstandardized.

Hypothesis 3, predicting an interaction between daily task duration and meeting quantity, was not supported for either dependent variable ($p > .05$). However, Hypothesis 4 was partially supported. Daily task duration moderated the relationship between meeting spread and anticipated productivity, after controlling for perceptions of meeting effectiveness ($\gamma = -.62$, $p < .01$). Namely, the negative relationship between meeting spread and anticipated productivity was stronger on days with high task duration and weaker on days with low task duration. View Figure 3 for the interaction plot. There was no significant finding for the interaction between meeting quantity and anticipated positive affect ($p > .05$).

Summary of Results: Study 1

As expected, meeting quantity and meeting spread were negatively related to anticipated positive affect, suggesting employees experience initial feelings of

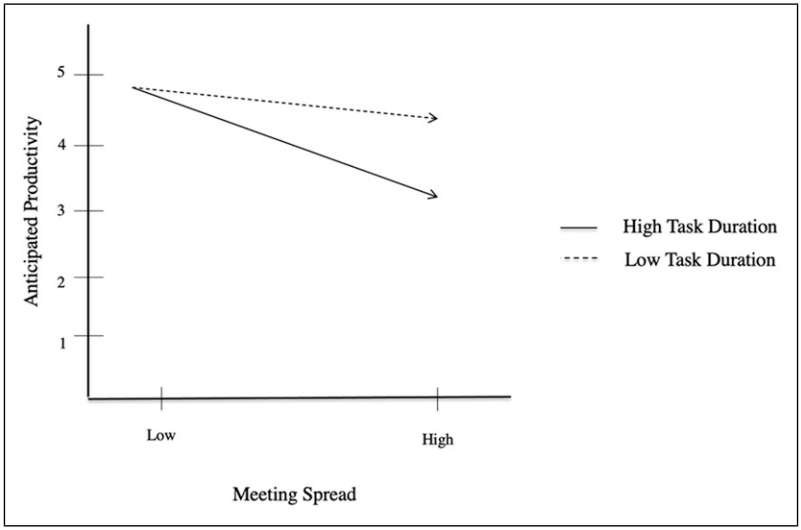

Figure 3. Interaction of task duration and meeting spread as related to anticipated productivity.

dread when they see high meeting frequency and dispersion on the calendar for the day, and anticipate feeling negative emotions at the end of that day. Surprisingly, the amount of task duration expected for the day did not moderate the relationships between meeting schedule variables (quantity, spread) and anticipated positive affect. A possible explanation for this null finding may be due to individual differences not accounted for in the present study. For example, recent research exploring work interruption resiliency finds that those high in resiliency to interruptions respond less negatively when interrupted at work (Zide et al., 2017). Thus, the potential resiliency to work interruptions may help offset the expected extra negative affect that interruptions would have when task duration is expected to be high. To address this possibility, we explore work interruption resiliency (WIR) as one potential individual-level moderating variable in Study 2.

As hypothesized, meeting spread was negatively related to anticipated productivity. We found when meetings were highly dispersed throughout the calendar, employees predicted levels of productivity for that day declined. Expected daily task duration moderated this particular relationship. On days with a high task duration, the negative effect of meeting spread was heightened. Unexpectedly, there were no significant relationships or interactions between meeting quantity (i.e., the number of meetings) and

anticipated productivity. This may, in part, be due to the total time spent in meetings being held constant in this study. Recall, there were 2 hours of meetings dispersed throughout each calendar scenario used in this study (2, 60-minute meetings; 4, 30-minute meetings). Participants were assigned a consistent 2 hours of time interrupted via meeting attendance throughout their day, regardless of their differing breakdowns. The same 2 hours would be 'lost' to meetings in both conditions, equally impacting employee's anticipations of daily productivity. We address this possibility in Study 2 by exploring meeting duration (total time spent in meetings that day) as a predictor.

Study 2

We conducted a second vignette study where we seek to replicate and extend the above findings to gain a deeper understanding of meeting scheduling cadences. In Study 2, we again explore the effect that meeting spread (i.e., dispersion) has on the two anticipated outcomes (productivity and positive affect) in attempt to replicate the significant findings from Study 1. However, in this second study, we manipulate the time spent (or 'lost') in meetings by exploring the effects of total meeting *duration* on anticipated end-of-day outcomes. Here, we are not holding time spent in meetings constant as we did in Study 1. Rather, we hold meeting quantity constant (at 2 meetings) to explore the unique effects of meeting duration (30 minute vs. 60 minute) on anticipated end-of-day outcomes. Additionally, research suggests the anticipated *complexity* of work tasks may influence employee perceptions and experiences (Maynard & Hakel, 1997; Morgeson et al., 2015). Thus, we explore task complexity as a moderating variable in this follow-up study. In addition, we introduce work interruption resiliency (WIR, Zide et al., 2017) as a second moderating variable that may influence the relationship between meeting cadence variables and anticipatory outcomes.

Meeting Duration

Experiments investigating whether longer interruptions are objectively more disruptive than shorter interruptions consistently find that longer interruptions result in increased resumption lags and increased error rates (Hodgetts and Jones 2006b; Monk et al., 2008; Altmann et al., 2017). It takes more time for individuals to resume a primary task following a longer interruption, and people are more prone to losing their place in the task procedure (Altmann et al., 2017). These longer interruptions can cumulate to consume a substantial portion of an employees' workday. For example, two 60-minute meetings aggregate to occupy a total of 120 minutes of an employee's day, whereas two

30-minute meetings would accumulate to only 60 minutes (i.e., 1 hour). In other words, meeting duration naturally influences the total time employees are spending in meetings in a given day. Research continuously suggests these cumulative interruptions lead to increased perceptions of emotional strain, rumination, subjective workload, and greater need for recovery compared to isolated interruptions (Baethge et al., 2015; Brumby et al., 2019).

Building from previous findings, and operating under the assumption that meetings serve as interruptions, we expect the duration of the meeting (30 vs. 60 minutes) will influence anticipated feelings about the day in terms of productivity and positive affect. Further, we replicate Study 1 by again considering the relationship between meeting spread (dispersion) and anticipatory reactions to the day:

Hypothesis 5. Meeting duration is negatively related to employees (a) anticipated productivity and (b) anticipated positive affective reactions.
Hypothesis 6. Meeting spread is negatively related to employees (a) anticipated productivity and (b) anticipated positive affective reactions.

Daily Task Complexity

Tasks differ in their cognitive complexity, with highly complex tasks increasing the attentional, memory and reasoning demands which significantly influences employee's performance on the task (Robinson, 2001). Thus, *task complexity* refers to the level of stimulating and challenging demands associated with a particular task (Maynard & Hakel, 1997), which affects how individuals perceive, handle, and complete the task. Research on software developers found that when these employees are focused on highly complex tasks requiring an increased level of cognitive demand, for each task switch they need at least 15 minutes of concentration to get back into the flow of their initial work task (Abad et al., 2018b). When a day consists of multiple interruptions, involving several task-switches, this lag time adds up to consume a substantial portion of the developers' day. In turn, taking time away from their completion of important individual work tasks (DeMarco & Lister, 2013). This may decrease perceptions of daily productivity, as additional time is lost in both interruption and resumption lags during high-complex work compared to low-complex work.

Task complexity is often treated as the psychological experience of the task-doer (Campbell, 1988), as it is up to the individual task-doer to decide if the assigned task is complex or not. The concept of subjective task complexity is thought of as the task solver's perception of the complexity of the task (Braarud, 2001; Maynard & Hakel, 1997). Perceptions of task complexity

likely influences individuals' confidence that they can successfully accomplish the task. For example, research finds subjective task complexity mediates the relationship between objective task complexity and task performance (Maynard & Hakel, 1997). Further, subjective task complexity serves as a mediator between cognitive ability and task performance (Maynard & Hakel, 1997). Thus, people's perceptions of how complex a task will be is highly meaningful in regard to subsequent task performance.

Event system theory suggests when events (such as individual work tasks) are predicted to be highly demanding and complex, individuals may feel they need deep concentration to attend to the event compared to events low in complexity or demand (Morgeson et al., 2015; Zhang et al., 2023). When interruptions (i.e., meetings) occur throughout the day, time is lost that could have been used to tend to the (complex) task or event. In line with this reasoning, we predict:

Hypothesis 7. Task complexity moderates the negative relationship between meeting duration and (a) anticipated productivity and (b) anticipated positive affective reactions such that the relationship is stronger on days with high task complexity and weaker on days with low task complexity.
Hypothesis 8. Task complexity moderates the negative relationship between meeting spread and (a) anticipated productivity and (b) anticipated positive affective reactions such that the relationship is stronger on days with high task complexity and weaker on days with low task complexity.

Work Interruptions Resiliency (WIR)

Research suggests individuals differ in their response to workplace interruptions (Williams et al., 2017). Specifically, individuals vary in their temperament and resilience to the negative task-based effects of work interruptions (Van Den Berg et al., 1996). For example, research finds individuals high in characteristics such as strength of excitation (i.e., the ability to do work) and mobility (i.e., the ability to give one impulse priority over another) need less time to resume tasks following an interruption compared to those low on these temperament traits (Van Den Berg et al., 1996). Similarly, research suggests cognitive ability may be predictive of individuals' task resumption post-interruption, with higher cognitive ability being associated with shorter resumption times (Cades et al., 2010; Foroughi et al., 2016). Given these preliminary findings on individual differences pertaining to the responses to interruptions, Zide and colleagues (2017) introduced a new trait-based characteristic – work interruption resiliency (WIR) – as an explanation of these differences between people.

Work interruption resiliency refers to an individual's ability to effectively cope with and recover from interruptions or disruptions in the workplace while maintaining productivity and focus on their tasks (Zide et al., 2017). It involves strategies, skills, and behaviors that help individuals minimize the negative impact of interruptions on their work performance and quickly return to their original tasks after the interruption has occurred. Work interruption resiliency encompasses adaptability, time management, concentration, and the capacity to handle unexpected disruptions without significant loss of efficiency or quality in one's work (Zide et al., 2017).

Considering we argue meetings function similarly to workplace interruptions, we expect those high in work interruptions resiliency will be less negatively impacted by meetings. First, high resiliency individuals can efficiently switch between tasks and regain their concentration following an interruption, minimizing the disruption's impact on their workflow (Werner et al., 2011; Zide et al., 2017). Second, employees with high WIR may have developed strategies or mental frameworks to anticipate and manage interruptions. Third, high resiliency individuals might experience lower stress levels in response to interruptions (Mark et al., 2008; Rees et al., 2015), which can improve their cognitive functioning and decision-making during these interruptions. Last, individuals with high work interruption resiliency may have accumulated experience in managing interruptions over time, making them more adept at maintaining productivity in such situations (Mark et al., 2008).

In essence, high work interruption resiliency individuals exhibit a combination of psychological traits, skills, and strategies that enable them to mitigate the negative effects of interruptions and continue to perform effectively in a disrupted work environment. Thus, in Study 2, we consider the trait work interruptions resiliency (WIR) as a potential moderating variable in the relationship between meeting duration, meeting spread and the two anticipated outcome variables. We predict:

Hypothesis 9. Work interruption resiliency (WIR) moderates the negative relationship between meeting duration and (a) anticipated productivity and (b) anticipated positive affective reactions such that the relationship is stronger for those low in WIR and weaker for those high in WIR.

Hypothesis 10. WIR moderates the negative relationship between meeting spread and (a) anticipated productivity and (b) anticipated positive affective reactions such that the relationship is stronger for those low in WIR and weaker for those high in WIR.

See Figure 4 for the full hypothesized model.

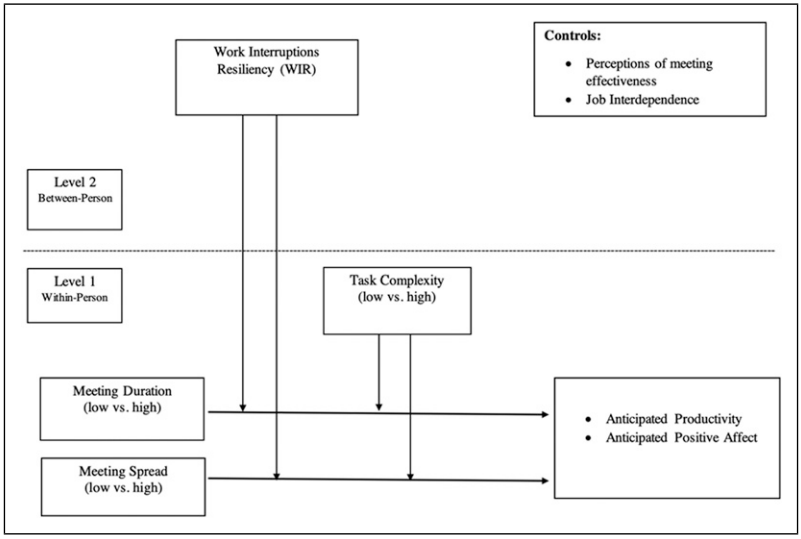

Figure 4. Hypothesized model for Study 2.

Method

Below, we describe our participants, data exclusions, manipulations, and measures in the study. Research materials and analytic code are available on OSF.[8] Data are not available due to their proprietary nature. This study's design and its analysis were not preregistered.

Participants

Participants for our second study were recruited from the same two large Pharmaceutical companies based in the Northeast, United States. To increase our sample size, we also recruited a similar sample using a LinkedIn network. The same qualifications for participation were applied.

A total of 251 participants completed the onetime questionnaire (178 from the Pharmaceutical companies; 73 from LinkedIn). We eliminated participants that indicated they spend less than 6 hours of time in work meetings per week ($n = 23$), as well as those that indicated they work less than 35 hours per week ($n = 3$) as they failed to meet inclusion criteria. Like in Study 1, we also eliminated those that indicated they were 'not at all confident' that the feelings they just reported would be representative of what they would actually feel in the given situation/s ($n = 3$).

This resulted in a final sample of 222 participants (169 from Pharmaceutical companies, 53 from LinkedIn; 51% female, 49% male). The majority of the sample were mid- to high-level managerial employees (35% executive level, 29% mid-management), sixty-seven percent of the sample indicated that their job involves work that is precise, scientific and intellectual, and more than half (52%) of the sample was between the ages of 35 and 55. A majority of the sample indicated being with the company between 1 and 10 years (48%).

Procedure and Design

Like in Study 1, participants were asked to complete a one-time survey capturing anticipated feelings based on hypothetical workday schedules. The survey presented a vignette describing a day at work, including two meetings and a set deliverable due by the end of the day. In this study, both the duration and the spread of the two meetings varied depending on the schedule. Further instructions were provided before each of the eight schedules presented, indicating how complex the deliverable is expected to be (i.e., the task complexity condition). All participants viewed the same set of scenarios in random order. After each schedule, respondents reported anticipated feelings (e.g., predicted productivity and affective reactions with the day). Part 2 of the survey included general questions that captured individual level of WIR, perceptions of general meeting effectiveness at work, job interdependence, and demographics.[9]

Manipulation of Factors. Factor A represented the manipulation of meeting duration: A day consisting of two, 30-minute meetings, and a day with two, 60-minute meetings. Factor B, consisted of meeting spread: Low meeting spread (back-to-back meetings), and high spread (meetings with a total of 4 hours in between). Factor C was reflected in the written instructions presented before each schedule, representing task complexity: a scenario with tasks low in complexity and a scenario with tasks high in complexity. See the online appendix for the full factorial design[10].

Experimental Vignette. We slightly adapted the vignette used in Study 1, modifying the scenario to include an expected constant of two meetings scheduled for the day. Here, we hold meeting quantity fixed at two, and instead manipulate meeting duration (i.e., length) in the scenarios. To further ensure the vignette was realistic, we again conducted a follow-up verbal protocol analysis with two SMEs prior to administering the survey to participants. See the online appendix to view the Study 2 vignette and an example of a calendar schedule.

Measures

Realism. The same four items from Study 1 were included on the survey to ensure respondents viewed the vignette as realistic and could imagine themselves in the given work situation. Ninety-two percent of respondents indicated the scenario was very or somewhat realistic, and over 95% of the sample said they could imagine themselves in the given situation. Post-survey, approximately 87% of participants responded that it was *not* difficult to imagine themselves in the work situation while completing the survey, and 55% percent of participants reported they were very confident the feelings they reported accurately represent what they would feel in the given situations (43% indicated they were somewhat confident). Three participants (roughly .01% of our sample) stated they were not at all confident that their feelings would be representative of how they actual felt in the given work situations. These participants were eliminated from analyses.

Anticipated Productivity. The same five items from Study 1 were used to measure predicted daily productivity. Coefficient alpha ranged from .84 to .95 across all eight scenarios (average $\alpha = .90$).

Anticipated Positive Affect. We used the same four items from Study 1 to measure anticipated end-of-day affect. Coefficient alpha ranged from .68 to .78 across all scenarios (average $\alpha = .74$).

Work Interruptions Resiliency (WIR). We assessed participants' ability to recover from work interruptions using five items taken from the Work Interruptions Resiliency Scale (WIR) by Zide et al. (2017). We asked participants to "imagine that it is a typical day of work for you. Please rate on a five-point scale how difficult it would be for you to immediately resume working on a typical task after the following conditions (1 = Not at all difficult, 5 = Extremely difficult)." The following five conditions were, "Your supervisor initiates a non-work-related conversation with you", "Your co-worker asks for help on a task he/she is working on", "Your supervisor gives you a new task to work on", "You receive a work-related phone call", "Your supervisor announces a spontaneous staff meeting." ($M = 3.22$, $SD = 1.10$; $\alpha = .83$).

Demographics. We collected demographic information (e.g., age, gender, job level, tenure) to better understand our sample. We used the same measures as in Study 1.

Potential Control Variables

Perceived Meeting Effectiveness. We used the same six items to assess general perceptions of meeting effectiveness to include as a control variable (M = 57.75%, SD = 16.96%, α = .78).

Job Interdependence. Like Study 1, and in alignment with the theory of activity regulation (Zijlstra et al., 1999), we also assessed participants job interdependence to explore as a potential control variable. We used the same four items taken from Pearce and Gregersen (1991) to capture the interdependence of participants' work tasks (M = 4.05, SD = .84; α = .71).

Results

Means, standard deviations and correlations are displayed in Table 4. The two outcome variables, anticipated productivity and anticipated positive affect, were moderately correlated. The correlation ranged from .43 to .64 across all eight scenarios: (average α = .54). In this study, both meeting effectiveness and job interdependence were related to our two dependent variables, therefore we included these two variables as controls in our analyses (Spector & Brannick, 2011).

Model Building

We tested the hypotheses using the same repeated-measures approach to multilevel modeling (MLM) as in Study 1. We first estimated a null model to understand the percent of variance in outcome variables that was due to between-person variance compared to within-person variance. ICC1 for anticipated productivity was .27. This indicates roughly 27% of variance is within-person. The ICC1 for anticipated positive affect was .32, suggesting 32% of variance for this outcome variable is within-person.

Hypothesis Testing

Given the repeated-measure structure of our data, the multilevel code was most appropriate for analyses. In adherence to the recommendations on the inclusion of control variables, we tested the model with and without the theoretically relevant control variables - perceptions of meeting effectiveness and job interdependence - to see observed differences (Becker, 2005; Spector & Brannick, 2011). Results were the same with or without the variables.

Table 4. Means, Standard Deviations, and Correlations With Confidence Intervals for Variables in Study 2.

Variable	*M*	*SD*	1	2	3	4
1. Perceptions of meeting effectiveness	57.75	16.96				
2. Job interdependence	4.05	.84	.16 [.02, .29]*			
3. Work Interruption Resiliency (WIR)	3.22	1.10	−.06 [-.20, .08]	−.07 [-.21, .06]		
4. Anticipated productivity	4.21	.51	.27 [.13, .39]**	.17 [.03, .30]*	−.29 [−.41, −.16]**	
5. Anticipated positive affect	3.43	.52	.21 [.07, .34]**	.23 [.09, .36]**	−.27 [−.40, −.14]**	.54 [.43, .64]**

Note. Between-person correlations; N = 222. Meeting effectiveness ranged from 0 to 100(%).M and SD are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). indicates $p < .05$. indicates $p < .01$.

Results from Hypotheses 3–5 can be found in Table 5. Hypothesis 3 was fully supported. The results from Hypothesis 5 show a statistically significant relationship between meeting duration and (a) anticipated productivity and (b) positive affect. As meeting duration increased, anticipated productivity ($\gamma = -.12$, $p < .05$) and positive affect both decreased ($\gamma = -.15$, $p < .05$). Similarly, results from Hypothesis 6 reveal a significant relationship between meeting spread and the two outcome variables, anticipated productivity ($\gamma = -.23$, $p < .01$) and anticipated positive affect ($\gamma = -.14$, $p < .01$). As meetings increased in spread on the calendar, both anticipated productivity and end-of-day positive affect decreased. These relationships were robust even after perceptions of meeting effectiveness and job interdependence were accounted for.

Hypothesis 4 was also fully supported. Hypothesis 7, predicting an interaction between meeting duration and task complexity, was supported for both anticipated productivity ($\gamma = -.15$, $p < .01$) and anticipated positive affect ($\gamma = -.17$, $p < .01$). Hypothesis 8, predicting an interaction between meeting spread and task complexity, was also supported for both anticipated productivity ($\gamma = -.26$, $p < .01$). and anticipated positive affect ($\gamma = -.21$, $p < .01$). Namely, the negative relationships between meeting cadences and anticipated outcomes were stronger on days with high task complexity and weaker on days with low task complexity. View Figures 5-8 for the interaction plots.

Hypothesis 5, exploring WIR as a moderating variable, was partially supported. Work interruption resiliency moderated the relationship between meeting spread and anticipated productivity ($\gamma = -.08$, $p < .05$) and positive affect ($\gamma = -.09$, $p < .05$), such that the relationship was stronger for those low in WIR and weaker for those high in WIR (see Figures 9 and 10 for interaction plots). This provides support for Hypothesis 10. However, the interaction between meeting duration and WIR (Hypothesis 9) was not supported. No significant interactions were found between individual level of WIR and meeting duration on the two dependent variables ($p > .05$) Figure 11.

Summary of Results: Study 2

As we predicted, meeting duration and meeting spread were negatively related to both anticipated positive affect and anticipated productivity. The amount of task complexity moderated these relationships, indicating these effects are stronger on days that are expected to have highly complex tasks. Last, the individual trait, WIR, moderated the relationship between meeting spread and anticipated productivity and anticipated positive affect. These relationships were stronger for those low in WIR and weaker for those high in WIR,

Table 5.

Multilevel Modeling Results Using Anticipated Productivity as the Criterion

Variable	Estimate	Std. Error	*df*	t-value	*p*>|t|
(Intercept)	3.65	.19	207.80	19.30	.00***
L2 meeting effectiveness	.01	.00	204.10	3.67	.00***
L2 job interdependence	.06	.04	202.80	1.56	.12
L1 meeting spread	−.23	.04	1431.00	−6.27	.00***
L1 meeting duration	−.12	.04	1429.00	−3.12	.00**
L1 task complexity (TC)	−.36	.06	1424.00	−6.08	.00***
L2 WIR	−.10	.04	513.70	−2.60	.01**
Meeting spread x TC	−.26	.07	1424.00	−3.83	.00***
Meeting duration × TC	−.15	.07	1424.00	−2.26	.02*
Meeting spread × WIR	−.08	.03	1399.00	−2.40	.02*
Meeting duration × WIR	.02	.03	1398.00	.71	.48

Multilevel Modeling Results Using Anticipated Positive Affect as the Criterion

Variable	Estimate	Std. Error	*df*	t-value	*p*>|t|
(Intercept)	2.87	.20	210.80	14.24	.00***
L2 meeting effectiveness	.01	.00	204.40	2.60	.01*
L2 job interdependence	.09	.04	204.30	2.16	.03*
L1 meeting spread	−.14	.03	1428.00	−4.53	.00***
L1 meeting duration	−.15	.03	1427.00	−4.64	.00***
L1 task complexity (TC)	−.35	.05	1423.00	−7.28	.00***
L2 WIR	−.07	.04	390.40	−1.98	.04*
Meeting spread x TC	−.21	.06	1422.00	−3.71	.00***
Meeting duration x TC	−.17	.06	1423.00	−2.97	.00**
Meeting spread x WIR	−.09	.03	1397.00	−3.21	.00**
Meeting duration x WIR	−.03	.03	1396.00	−.96	.34

Note. WIR = Work interruption resiliency, L1 = Level 1, L2 = Level 2. * indicates $p < .05$. ** indicates $p < .01$. *** indicates $p < .001$. Estimates are unstandardized.

suggesting resiliency to work interruptions can mitigate the negative effects of meeting spread (i.e., dispersion) on employees anticipated daily outcomes.

General Discussion

In this paper, we explored the effects of various meeting schedules on employees anticipated feelings about how the day will go. Specifically, we considered the influence of daily meeting spread (i.e., dispersion), meeting quantity (i.e., frequency), and meeting duration (i.e., length) on anticipated

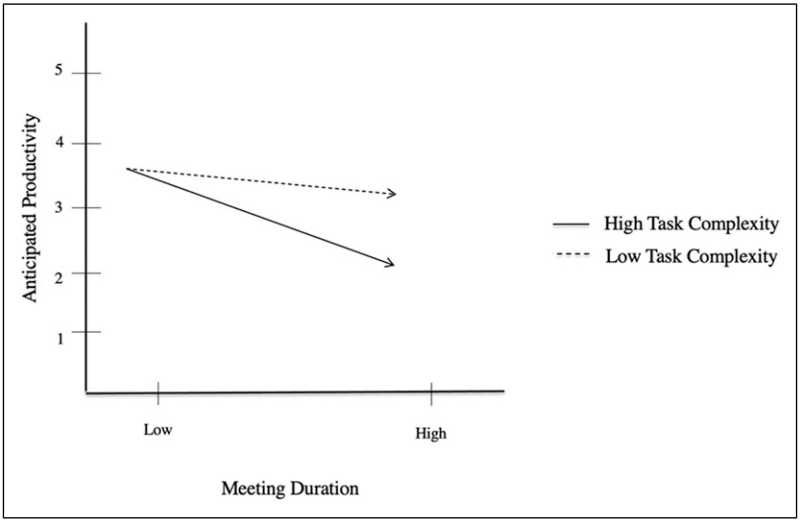

Figure 5. Interaction of task complexity and meeting duration as related to anticipated productivity.

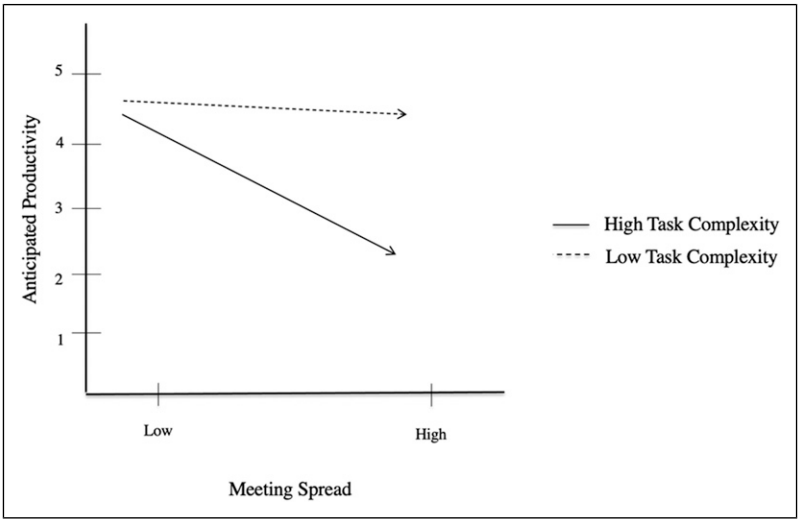

Figure 6. Interaction of task complexity and meeting spread as related to anticipated productivity.

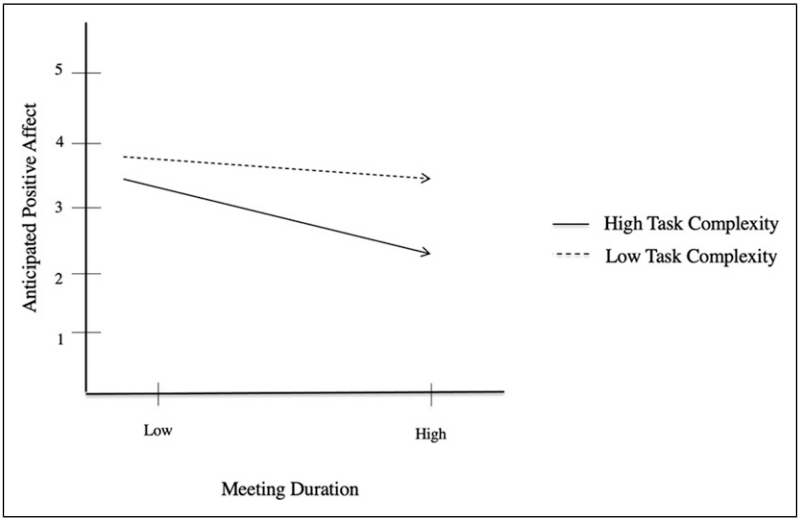

Figure 7. Interaction of task complexity and meeting duration as related to anticipated positive affect.

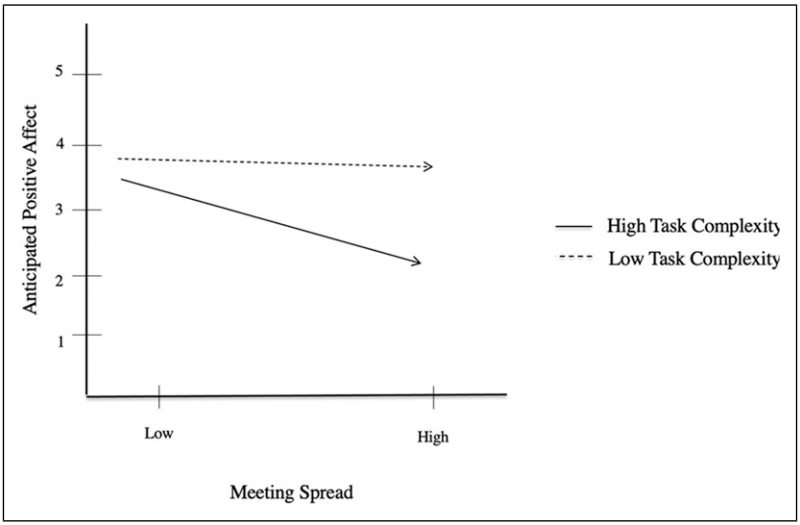

Figure 8. Interaction of task complexity and meeting spread as related to anticipated positive affect.

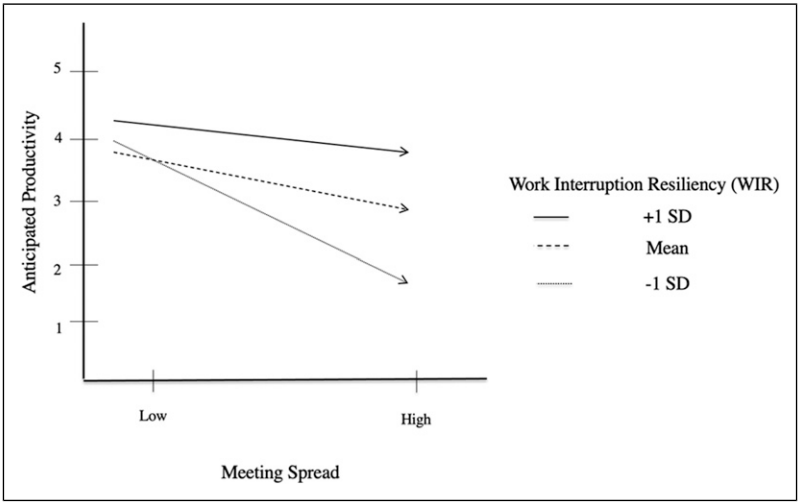

Figure 9. Interaction of meeting spread, and work interruption resiliency as related to anticipated productivity.

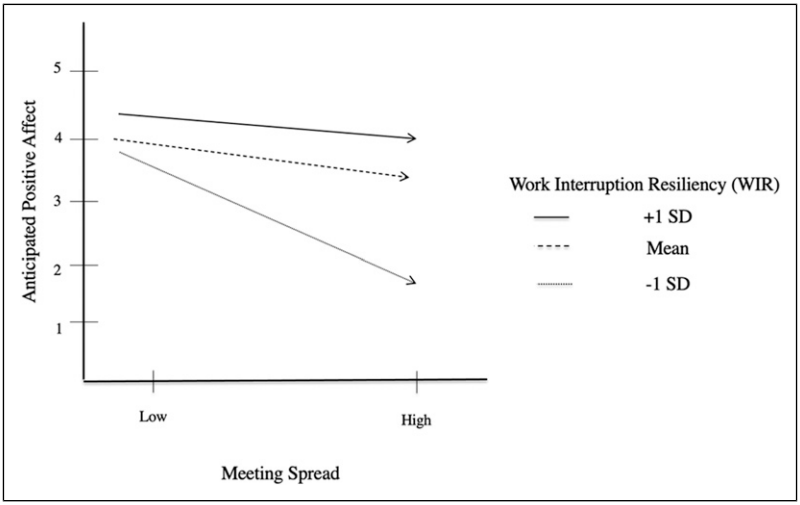

Figure 10. Interaction of meeting spread, and work interruption resiliency as related to anticipated positive affect.

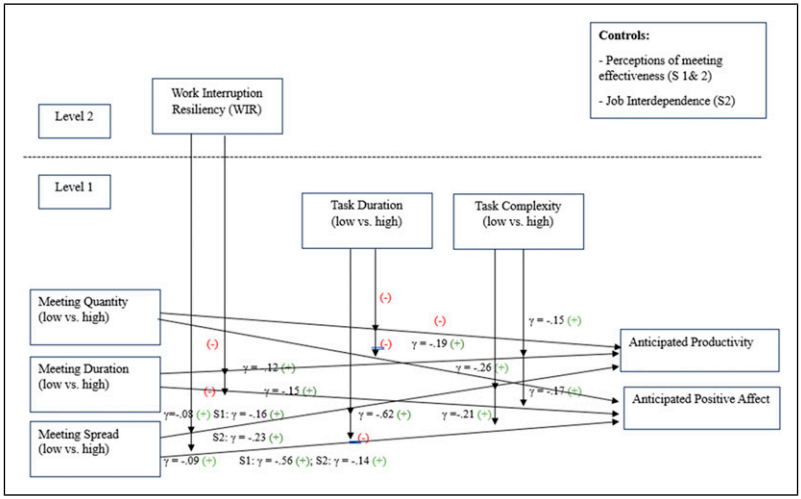

Figure 11. Full theoretical model including hypotheses and findings (results are color coded according to significance). Note S1 refers to variables included in study 1 and S2 refers to variables in study 2.

productivity and positive affect. In both Studies 1 & 2, we found meeting spread to be a meaningful variable in terms of anticipatory daily outcomes. Namely, the dispersion of meetings was negatively related to both anticipated positive affect and productivity across studies. Together, these findings provide converging evidence that meetings dispersed throughout the workday may lower employees expected daily productivity and elicit negative emotions.

While meeting quantity (i.e., the number of meetings on the calendar) did not hamper anticipations of productivity, meeting duration (i.e., the total amount of time spent in meetings that day) influenced *both* anticipated affect and productivity in Study 2. This suggests the amount of time spent (or lost) to meetings effects both initial affective reactions and anticipated levels of accomplishment for the day. Perhaps it is the total time spent in meetings that influences anticipated productivity as opposed to the number of meetings on the calendar.

We considered features of the daily task/s as moderating variables in the above relationships. In Study 1, we found that the expected duration of work tasks influenced the relationship between meeting spread and productivity. This suggests when daily task demands are high, the negative relationship between meeting spread and anticipated productivity is heightened. This

finding is consistent with research on interruptions, which shows time demands can influence the relationship between task interruptions and performance outcomes (Baethge & Rigotti, 2013). However, task duration did not influence the relationship between meeting quantity and anticipated daily outcomes. This could be because meeting time demands were held constant at 2 hours in Study 1. Essentially, employees would "lose" the same 2 hours that day to meeting time, regardless of the number of meetings on their calendar.

In Study 2, we explored task *complexity* as a moderating variable, finding the expected complexity of the daily task/s moderates the relationships between meeting cadences (meeting duration, meeting spread) and both anticipated outcomes (productivity, positive affect). These findings align with research on knowledge workers: when these employees are faced with a high workload, the expected negative effects of task switching are stronger (Adamczyk & Bailey, 2004) as employees will require more time to switch between tasks during times of high cognitive demand (DeMarco & Lister, 2013). We can conclude that the expected complexity of daily work tasks is a meaningful variable in the relationship between meeting scheduling cadences and anticipatory end-of-day outcomes.

Last, we considered an individual characteristic – WIR - as a second moderating variable in Study 2. Our findings indicate those high in resiliency to work interruptions are less affected (in terms of anticipated productivity and affect) by meeting dispersion compared to their counterparts. Those high in this trait may have an easier time resuming a task post-interruption (Zide et al., 2017). Therefore, these individuals (a) likely do not feel as negative of an initial reaction to highly dispersed meetings and (b) likely feel they can still be productive despite dispersed meetings on their calendar.

Although there is overlap in findings across the two dependent variables (anticipated productivity and positive affect), there were differences as well. These differences could be explained by considering the inherent nature of the dependent variables. It has been suggested that the link between employees' more short-lived feeling states (e.g., moods, affect, emotions) and performance measures (e.g., productivity levels) is inconsistent because of the time lag problem: employees' moods and emotions may be fleeting and short-lived, while performance measures tend to reflect longer periods of evaluation (Miner & Glomb, 2010; Wright & Staw, 1999). This could explain the different findings for the two dependent variables in our research. The positive affect variable captured a mood-state, or initial emotional reactions to each workday calendar. Productivity, on the other hand, asked employees to anticipate their ability to accomplish work tasks over the course of the day. Perhaps, while initially experiencing negative emotional responses to a heavy meeting load, folks did not feel their overall productivity levels would

necessarily be compromised by such meetings. This could explain why high meeting quantity was related to a reduction in positive affect in Study 1 - but did not hinder individuals expected daily productivity.

Theoretical Implications

Meetings are an everyday aspect of organizational life. They provide opportunity for idea generation, collaboration, consensus decision-making, communication, and work socialization (Allen et al., 2014). It is important to understand how to optimize work meetings to capitalize on the opportunities that they bring to employees, teams, and organizations. So far, a majority of the research and theory on meetings has focused on tactics and behaviors specific to the meeting event (e.g., Mroz et al., 2018; Niederman & Volkema, 1999; Schwartzman, 1986), providing insight into the successful facilitation of meetings (e.g., agenda use, who to invite, time management, stewardship). However, the scheduling cadences or patterns of these meetings has often been overlooked. In our work, we leverage literature on task interruptions and anticipatory reactions to explore how employees anticipate their day will go based on their meeting schedule. Our research on the scheduling cadences of meetings offers new insights for the broader model of how meetings fit into the daily work experience.

Our perspective also contributes to the emerging field of research on work and workday designs. While traditional studies have predominantly focused on job and role characteristics (e.g., Grant & Parker, 2009; Parker et al., 2017), recent research has expanded its scope to examine the structural elements of work design, including a closer examination of task attributes and transitions within a job and throughout the workday (e.g., Leroy et al., 2021). Our work extends these explorations by demonstrating daily work schedules can be analyzed not only in isolation of singular events (e.g., meetings) but also in conjunction with various workday activities (e.g., meetings *and* individual work tasks). We demonstrate that the combination of these work activities/events can significantly impact critical outcomes such as anticipated productivity and positive affect. In doing so, we make a meaningful contribution to the ongoing and emerging field of research on workday scheduling, which represents a valuable aspect of micro-work design (Elsbach & Hargadon, 2006).

Our studies also contribute to event systems theory, which suggests the impact of an event is influenced by the demands it places on time, attention, and effortful processing (Morgeson et al., 2015). The magnitude of an event is greater when it requires more time, attention, and cognitive effort. Further, this theory argues the magnitude of one event can interact with the strength of

other events in the environment, collectively influencing outcome variables. In support of this, our findings show how meetings and individual work tasks (which are types of work events) can interact to influence anticipated outcomes such as productivity and affect. Event time and event strength are identified as crucial dimensions in this theory. Event time is primarily defined by the duration of the event, indicating how much time an individual work task is expected to take. Event strength refers to the level of attention and cognitive effort needed for an event (Morgeson et al., 2015). The theory posits that longer event durations and heightened complexity make events more influential in impacting outcomes. The significant interactions between meeting cadence variables and both expected task duration (event length) and expected task complexity (event strength) provide support for these two critical dimensions of event systems theory.

Further, the notion that the *anticipation* of daily meetings likely has an effect on employees predicted work experiences is novel and unique. The suggestion that the scheduling of meetings may carry important anticipatory outcomes for employees opens the door for future scholars to consider the implications of various patterns or trends of meetings over time. Additionally, our research suggests anticipatory reactions, in and of themselves, are a viable construct for future research and theory in the organizational sciences. Our findings contribute to the research on anticipated emotions (e.g., decision affect theory; self-fulfilling prophecy) and extend this literature to a work context. This offers opportunity to continue studying anticipated reactions and or emotions to work scenarios, and how employees' anticipations relate to their subsequent decision-making processes.

Relatedly, our findings provide evidence that meetings are perceived similarly to workplace interruptions, expected to interfere with workflow, even when they are planned/scheduled. Despite the recent conceptualization of workplace interruptions that contended interruptions must be, by definition, spontaneous, or unplanned (Puranik et al., 2020), our findings suggest that even planned events, such as workplace meetings, are evaluated similarly to interruptions. Our work integrates the literature on workplace meetings and interruptions by suggesting meetings *serve* as a form of workplace interruption, resulting in comparable reactions and outcomes for employees. We encourage future research in meeting science to leverage and build upon a similar interruptions framework to explore how meetings can operate as disruption to one's workday. We argue the interruptions literature should expand their definition to include planned events, such as appointments and meetings, because our research indicates they can elicit similar anticipations and responses from employees.

Practical Implications

Our findings suggest several practical implications for employees, leaders and organizations on how to best schedule meetings. First, employees should be mindful of how their meeting calendar schedule influences their end-of-day perceptions. Our findings suggest that when within their control, employees should attempt to limit their meeting load and cluster necessary meetings together to reduce the amount of time lost to interruptions and task-switching. Strategies individuals can take to protect their individual work time include using calendar blocking - blocking out specific time slots on the calendar for focused work or personal tasks. Employees could label these blocks as "Do Not Schedule" or something similar to signal that they are unavailable for meetings during those times. This way, certain timeframes are protected from coworkers and leaders scheduling unexpected meetings. Similarly, individuals can utilize scheduling tools and software that allow others to gauge availability without necessarily knowing the details of the schedule. This way, they can find suitable meeting times without seeing specific appointments. Another strategy involves setting and communicating clear boundaries. Individuals should clearly communicate their preferred meeting times and boundaries to colleagues, supervisors, and assistants to ensure peers understand their availability and preferences. Last, when in their control, individuals can schedule their meetings during natural transition times (e.g., lunch breaks) to reduce the amount of total task-switching in the day.

From a leader perspective, managers should strive to schedule fewer and shorter meetings in one workday to protect time devoted to individual work tasks and recovery. By scheduling meetings in succession as opposed to dispersed throughout the workday, leaders reduce employees experience of task-switching and the associated recovery costs. When project load is high or when tasks are highly complex, leaders should greatly consider reducing the amount of meeting load and dispersion for employees. Leaders can also cater to the unique needs of their employees. We found those low in work interruption resiliency anticipated lower affect and productivity when meeting dispersion was high. Thus, individuals who have low resiliency to interruptions are more negatively impacted by dispersed calendar schedules compared to those high in this resiliency trait. Leaders should consider how different employees respond to various meeting cadences and attempt to mitigate the negative experiences for these employees. Leaders should also be mindful of participants' time zones and daily rhythms when scheduling meetings to avoid scheduling meetings during employees' lunch breaks or after-work hours. Ultimately, managers should lead by example; demonstrating effective meeting practices by respecting others' time.

Finally, organizations should consider establishing meeting norms or company policies that protect employees' free time. Following recommendations often discussed in practice, organizations could adopt a meeting-less Monday policy, where no meetings are scheduled on Monday's (Nehdi, 2020). Or, organizations could reserve certain hours in the day where no meetings can be scheduled (Saunders, 2017). These policies would allow all employees to have designated time to work on individual tasks throughout the day or week, allowing for work immersion to take place during these uninterrupted hours.

Limitations and Future Directions

There are study limitations that must be kept in mind. First, we used vignette-style designs in our studies. A common concern with EVM is creating a realistic scenario that resonates with the selected sample. However, we followed guidelines offered by Aguinis and Bradley (2014) in our creation of our vignettes. We consulted with subject matter experts from our sample, and conducted a verbal protocol analysis, to increase the realism of our scenarios for our specific sample. Additionally, we feel it would not have been ethical (or feasible) to manipulate employees' actual work or meeting schedules in a field setting, so a vignette approach was appropriate given our circumstances. Future research could replicate or extend the current vignette design to provide further evidence for and confidence in the realism of our vignette scenario. Future research could also explore specific characteristics of the meetings (e.g., who they are with, meeting purpose) to see if factors of the meeting itself influence anticipations about the day. Future research could also explore characteristics of the job, such as job interdependence or nature of the job (e.g., white collar, blue collar), to see how job characteristics influence employees' perceptions of their meeting schedules.

Additionally, leveraging events system theory, future research could utilize a similar vignette-style design to manipulate other factors on the calendar schedules beyond meetings (e.g., phone calls, appointments, other organizational events) to see if other work-related events or experiences elicit similar anticipations about the day. While our research focused on daily meeting schedules, future research could consider weekly meeting cadences, exploring the effects of meeting quantity, duration and spread on a weekly level. This would allow us to see the implications of aggregated meeting load and dispersion over consecutive days.

Our study centered all meetings around midday to control for time-of-day effects. Future research might investigate the implications of having morning vs. afternoon meetings. Future meeting scholars should also consider the

implications of various meeting cadences in a virtual setting (e.g., daily Zoom meetings) to see if anticipated reactions hold when meetings are virtual or hybrid. The effects of task-switching and recovery costs may look different for virtual meetings, in remote work, and for hybrid teams. Research should investigate other variables (both within and between persons) that may influence employee perceptions of or reactions to meeting cadences. Examples include individual levels of time-management skill, conscientiousness, and ability to recover from work. Finally, our research considers scheduled meetings, or meetings that are expected based on the daily calendar. Future research should explore the implications of unscheduled or spontaneous meetings.

We note that the two dependent variables in our studies were measured anticipatorily, given our interest in anticipated feelings. Given our preliminary survey findings on meeting calendar reactions, coupled with extant research on self-fulfilling prophecies and decision-making processes suggesting anticipated feelings are quite accurate (Mellers & McGraw, 2001), we have reason to believe participants anticipatory responses are representative of how they would actually feel in the given situations. Regardless of their accuracy, we believe employees anticipated experiences and emotions are valuable to research in and of themselves, as they likely influence how the employee goes about the day. Still, future research would benefit from capturing actual meeting experiences in real time. For example, a study may distribute end-of-day surveys to a sample of employees, having them report their daily meeting calendar and answer subsequent questions about the workday. Future research could utilize experience sampling methodology (ESM) to capture affective states and/or reactions after each meeting over a series of days.

Conclusion

Organizations rely on work meetings for collaboration, teambuilding, and communication. Unfortunately, meetings may be experienced as interruptions that have a negative impact on employees' anticipations of a good and productive workday. The present study investigated various meeting schedules, seeking to find a schedule that reduces the perceived disruptiveness of meetings and promotes positive employee work experiences in terms of daily anticipations. Overall, our findings suggest when there are fewer and shorter meetings scheduled for the day, and the meetings are grouped together (back-to-back), employees anticipate higher levels of daily productivity and positive affect. Characteristics of the daily tasks may influence this relationship, as does an individual's resiliency to work interruptions. These insights contribute to (a) meetings research and practice, (b) research on task

interruptions and workflow, and (c) offer promise for exploring anticipated feelings in the organizational sciences. Future research should continue to explore the effects of various meeting cadences on employee anticipations, experiences and outcomes to make meetings a more enjoyable aspect of employee work life.

Declaration of Conflicting Interests

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ORCID iD

Liana M. Kreamer https://orcid.org/0000-0003-3688-8104

Data Availability Statement

In the paper, we describe our sampling plan, data exclusions, all manipulations, and all measures in the study. Research materials and analytic code are available on the Open Science Framework: https:/osf.io/9adxu/?view_only=2492b309306143d7b6e59506df97caf1. Data are not available due to their proprietary nature but are available from the corresponding author on reasonable request. All data were analyzed in R, using the lmer function from the nlme package. This study's design and its analysis were not preregistered.

Notes

1. Seventy-six participants responded to a 3-item survey, posted to LinkedIn and Facebook via an online link. The three items on the survey were as follows: (Q1) Do you usually view your work calendar in the morning, prior to beginning the day, to see what you have on tap? (Q2) When you view your work calendar prior to beginning the day, do you find it sparks an emotion or feeling about how your day will be (e.g., it should be a good day, or a productive day, or a boring day, or a frustrating day, etc.)? (Q3) From your experience, how accurate are these initial feelings about how the day will go compared to the actual feelings you experience at the end of the day?
2. https://osf.io/9adxu/?view_only=2492b309306143d7b6e59506df97caf1.
3. The full survey is available on the open science framework (OSF): (https://osf.io/9adxu/?view_only=2492b309306143d7b6e59506df97caf1).
4. The amount of actual time spent in meetings each day was held constant, at 2 hours. However, this time was broken up into two conditions: 4, 30-minute and 2, 60-minute.

5. Despite differing spreads, all meetings were centered around midday to control for time-of-day effects. By centering the meeting spread around midday, we are able to control for alternative explanations such as individual preferences for certain meeting times (e.g., favoring morning meetings).
6. Estimating the hypothesized relationships by considering the influence of other variables is an established way of ruling out alternative explanations (Bernerth & Aguinis, 2016; Spector & Brannick, 2011). Keeping in mind that an excessive number of control variables may also reduce statistical power and, in fact, generate a suppression effect, we chose control variables based on their theoretical relevance and significant correlations with the core variables in the model (Bernerth & Aguinis, 2016; Spector & Brannick, 2011).
7. To test the assumption that participants consider meetings to be interruptive to their day, we included an item after each calendar schedule that read: "Given the above calendar schedule and expected deliverable, today at work I believe I would… (1) feel like I was interrupted often throughout the day." We ran a t-test between the two extreme schedules: Condition 4 = High quantity, high spread, high task duration; Condition 5 = Low quantity, low spread, low task duration. The condition with high meeting quantity, high spread and high task duration had the highest mean interruption score of 3.88 out of 5. The condition with low meeting quantity, low spread and low task duration had the lowest mean interruption score of 2.27 out of 5. There was a significant difference in these means suggesting that on average, participants find days with high meeting quantity and spread accompanied by time consuming tasks to be most interruptive and days with low meeting quantity, low spread, and low task duration to be the least interruptive to their day.
8. https:/osf.io/9adxu/?view_only=2492b309306143d7b6e59506df97caf1
9. The full survey 2 is available on the open science framework (OSF): (https://osf.io/9adxu/?view_only=2492b309306143d7b6e59506df97caf1).
10. Like in Study 1, all meetings were centered around midday to control for time-of-day effects.

References

Abad, Z. S. H., Karras, O., Schneider, K., Barker, K., & Bauer, M. (2018a). Task interruption in software development projects: What makes some interruptions more disruptive than others? In Proceedings of the 22nd International Conference on Evaluation and Assessment in Software Engineering 2018 (pp. 122–132).

Abad, Z. S. H., Noaeen, M., Zowghi, D., Far, B. H., & Barker, K. (2018b). Two sides of the same coin: Software developers' perceptions of task switching and task interruption. In Proceedings of the 22nd International Conference on Evaluation and Assessment in Software Engineering 2018 (pp. 175–180).

Adamczyk, P. D., & Bailey, B. P. (2004). If not now, when? The effects of interruption at different moments within task execution. In Proceedings of the 2004 Conference on Human Factors in Computing System - CHI '04 (pp. 271–278).

Aguinis, H., & Bradley, K. (2014). Best practice recommendations for designing and implementing experimental vignette methodology studies. *Organizational Research Methods*, *17*(4), 351–371. https://doi.org/10.1177/1094428114547952

Aguinis, H., & Kraiger, K. (2009). Benefits of training and development for individuals and teams, organizations, and society. *Annual Review of Psychology*, *60*(1), 451–474. https://doi.org/10.1146/annurev.psych.60.110707.163505

Ajzen, I., & Sheikh, S. (2013). Action versus inaction: Anticipated affect in the theory of planned behavior. *Journal of Applied Social Psychology*, *43*(1), 155–162. https://doi.org/10.1111/j.1559-1816.2012.00989.x

Allen, J. A., Beck, T., Scott, C. W., & Rogelberg, S. G. (2014). Understanding workplace meetings. *Management Research Review*, *39*(9), 791–814.

Allen, J. A., Yoerger, M. A., Lehmann-Willenbrock, N., & Jones, J. (2015). Would you please stop that!? *Journal of Management Development*, *34*(10), 1272–1287. https://doi.org/10.1108/jmd-02-2015-0032

Altmann, E. M., & Trafton, J. G. (2004). Task interruption: Resumption lag and the role of cues. *Proceedings of the Annual Meeting of the Cognitive Science Society*, *26*(26), 43–48. https://doi.org/10.1037/xap0000117

Altmann, E. M., Trafton, J. G., & Hambrick, D. Z. (2017). Effects of interruption length on procedural errors. *Journal of Experimental Psychology: Applied*, *23*(2), 216. https://doi.org/10.1037/xap0000117

Andreasson, R., Lindblom, J., & Thorvald, P. (2017). Interruptions in the wild: Portraying the handling of interruptions in manufacturing from a distributed cognition lens. *Cognition, Technology & Work*, *19*(1), 85–108. https://doi.org/10.1007/s10111-016-0399-6

Baethge, A., & Rigotti, T. (2013). Interruptions to workflow: Their relationship with irritation and satisfaction with performance, and the mediating roles of time pressure and mental demands. *Work & Stress*, *27*(1), 43–63. https://doi.org/10.1080/02678373.2013.761783

Baethge, A., Rigotti, T., & Roe, R. A. (2015). Just more of the same, or different? An integrative theoretical framework for the study of cumulative interruptions at work. *European Journal of Work and Organizational Psychology*, *24*(2), 308–323. https://doi.org/10.1080/1359432x.2014.897943

Bailey, B., & Konstan, J. (2006). On the need for attention-aware systems: Measuring effects of interruption on task performance, error rate, and affective state. *Computers in Human Behavior*, *22*(4), 685–708. https://doi.org/10.1016/j.chb.2005.12.009

Becker, T. E. (2005). Potential problems in the statistical control of variables in organizational research: A qualitative analysis with recommendations. *Organizational research methods*, *8*(3), 274–289. https://doi.org/10.1177/1094428105278021

Bell, D. (1982). Regret in decision making under uncertainty. *Operations Research*, *30*(5), 961–981. https://doi.org/10.1287/opre.30.5.961

Bernerth, J. B., & Aguinis, H. (2016). A critical review and best-practice recommendations for control variable usage. *Personnel Psychology*, *69*(1), 229–283. https://doi.org/10.1111/peps.12103

Bliese, P. (2013). Package 'multilevel. Available at: https://cran.r-project.org/web/packages/multilevel/multilevel.pdf (accessed date 15 July 2020).

Boehm-Davis, D. A., & Remington, R. (2009). Reducing the disruptive effects of interruption: A cognitive framework for analysing the costs and benefits of intervention strategies. *Accident Analysis & Prevention*, *41*(5), 1124–1129. https://doi.org/10.1016/j.aap.2009.06.029

Braarud, P. Ø. (2001). Subjective task complexity and subjective workload: Criterion validity for complex team tasks. *International Journal of Cognitive Ergonomics*, *5*(3), 261–273. https://doi.org/10.1207/s15327566ijce0503_7

Brixey, J., Robinson, D., Johnson, C., Johnson, T., Turley, J., Zhang, J., & Brixey, J. (2007). A concept analysis of the phenomenon interruption. *ANS. Advances in Nursing Science*, *30*(1), 26–42. https://doi.org/10.1097/00012272-200701000-00012

Brumby, D. P., Janssen, C. P., & Mark, G. (2019). How do interruptions affect productivity? In *Rethinking productivity in software engineering* (pp. 85–107). Apress.

Cades, D. M., Werner, N. E., Boehm-Davis, D. A., & Arshad, Z. (2010). What makes real-world interruptions disruptive? Evidence from an office setting. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, *54*(4), 448–452. https://doi.org/10.1177/154193121005400437

Campbell, D. J. (1988). Task complexity: A review and analysis. *Academy of management review*, *13*(1), 40–52. https://doi.org/10.5465/amr.1988.4306775

Conner, M., Godin, G., Sheeran, P., & Germain, M. (2013). Some feelings are more important: Cognitive attitudes, affective attitudes, anticipated affect, and blood donation. *Health Psychology*, *32*(3), 264. https://doi.org/10.1037/a0028500

Crede, M., Chernyshenko, O., Stark, S., Dalal, R., & Bashshur, M. (2007). Job satisfaction as mediator: An assessment of job satisfaction's position within the nomological network. *Journal of Occupational and Organizational Psychology*, *80*(3), 515–538. https://doi.org/10.1348/096317906x136180

Cumming, G. (2014). The new statistics: Why and how. *Psychological science*, *25*(1), 7–29.

Czerwinski, M., Horvitz, E., & Wilhite, S. (2004). A diary study of task switching and interruptions. In Proceedings of the 2004 Conference on Human Factors in Computing Systems - CHI '04 (pp. 175–182).

Deluga, R. J., & Masson, S. (2000). Relationship of resident assistant conscientiousness, extraversion, and positive affect with rated performance. *Journal of Research in Personality*, *34*(2), 225–235. https://doi.org/10.1006/jrpe.1999.2272

DeMarco, T., & Lister, T. (2013). *Peopleware: Productive projects and teams*. Addison-Wesley.

Edwards, M. B., & Gronlund, S. D. (1998). Task interruption and its effects on memory. *Memory*, *6*(6), 665–687.

Elsbach, K. D., & Hargadon, A. B. (2006). Enhancing creativity through "mindless" work: A framework of workday design. *Organization Science*, *17*(4), 470–483. https://doi.org/10.1287/orsc.1060.0193

Feldman, E., & Greenway, D. (2021). It's a matter of time: The role of temporal perceptions in emotional experiences of work interruptions. *Group & Organization Management*, *46*(1), 70–104. https://doi.org/10.1177/1059601120959288

Fletcher, K. A., & Bedwell, W. L. (2016). An initial look at the effects of interruptions on strain. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, *60*(1), 1269–1273. https://doi.org/10.1177/1541931213601295

Fletcher, K. A., Potter, S. M., & Telford, B. N. (2018). Stress outcomes of four types of perceived interruptions. *Human factors*, *60*(2), 222–235. https://doi.org/10.1177/0018720817738845

Flynn, E., Barker, K., Gibson, J., Pearson, R., Berger, B., Smith, L., & Flynn, E. (1999). Impact of interruptions and distractions on dispensing errors in an ambulatory care pharmacy. *American Journal of Health-System Pharmacy: AJHP: Official Journal of the American Society of Health-System Pharmacists*, *56*(13), 1319–1325. https://doi.org/10.1093/ajhp/56.13.1319

Fong, C., & Wyer, R. (2003). Cultural, social, and emotional determinants of decisions under uncertainty. *Organizational Behavior and Human Decision Processes*, *90*(2), 304–322. https://doi.org/10.1016/s0749-5978(02)00528-9

Foroughi, C. K., Werner, N. E., McKendrick, R., Cades, D. M., & Boehm-Davis, D. A. (2016). Individual differences in working-memory capacity and task resumption following interruptions. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *42*(9), 1480. https://doi.org/10.1037/xlm0000251

Foulk, T. A., Lanaj, K., & Krishnan, S. (2019). The virtuous cycle of daily motivation: Effects of daily strivings on work behaviors, need satisfaction, and next-day strivings. *Journal of Applied Psychology*, *104*(6), 755–775. https://doi.org/10.1037/apl0000385

Gabriel, A., Diefendorff, J., Erickson, R., & Gabriel, A. (2011). The relations of daily task accomplishment satisfaction with changes in affect: A multilevel study in nurses. *The Journal of Applied Psychology*, *96*(5), 1095–1104. https://doi.org/10.1037/a0023937

Gabriel, A. S., Podsakoff, N. P., Beal, D. J., Scott, B. A., Sonnentag, S., Trougakos, J. P., & Butts, M. M. (2019). Experience sampling methods: A discussion of critical trends and considerations for scholarly advancement. *Organizational Research Methods*, *22*(4), 969–1006. https://doi.org/10.1177/1094428118802626

Gilovich, T., Medvec, V., & Gilovich, T. (1995). The experience of regret: What, when, and why. *Psychological Review*, *102*(2), 379–395. https://doi.org/10.1037/0033-295x.102.2.379

Grant, A. M., & Parker, S. K. (2009). 7 redesigning work design theories: The rise of relational and proactive perspectives. *The Academy of Management Annals*, *3*(1), 317–375. https://doi.org/10.5465/19416520903047327

Grawitch, G., Granda, S., & Barber, L. (2008). Do prospective workday appraisals influence end-of-workday affect and self-monitored performance? *Journal of Occupational Health Psychology*, *13*(4), 331–344. https://doi.org/10.1037/1076-8998.13.4.331

Grebner, S., Semmer, N., Faso, L., Gut, S., Kälin, W., & Elfering, A. (2003). Working conditions, well-being, and job-related attitudes among call centre agents. *European Journal of Work and Organizational Psychology*, *12*(4), 341–365. https://doi.org/10.1080/13594320344000192

Greitemeyer, T. (2009). The effect of anticipated affect on persistence and performance. *Personality and Social Psychology Bulletin*, *35*(2), 172–186. https://doi.org/10.1177/0146167208326124

Hodgetts, H. M., & Jones, D. M. (2006a). Contextual cues aid recovery from interruption: The role of associative activation. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *32*(5), 1120. https://doi.org/10.1037/0278-7393.32.5.1120

Hodgetts, H. M., & Jones, D. M. (2006b). Interruption of the tower of London task: Support for a goal-activation approach. *Journal of Experimental Psychology: General*, *135*(1), 103. https://doi.org/10.1037/0096-3445.135.1.103

Huang, J. L., Curran, P. G., Keeney, J., Poposki, E. M., & DeShon, R. P. (2012). Detecting and deterring insufficient effort responding to surveys. *Journal of Business and Psychology*, *27*(1), 99–114. https://doi.org/10.1007/s10869-011-9231-8

Hunter, E. M., Clark, M. A., & Carlson, D. S. (2019). Violating work-family boundaries: Reactions to interruptions at work and home. *Journal of Management*, *45*(3), 1284–1308. https://doi.org/10.1177/0149206317702221

Ilies, R., Scott, B. A., & Judge, T. A. (2006). The interactive effects of personal traits and experienced states on intraindividual patterns of citizenship behavior. *Academy of Management Journal*, *49*(3), 561–575. https://doi.org/10.5465/amj.2006.21794672

Jett, Q. R., & George, J. M. (2003). Work interrupted: A closer look at the role of interruptions in organizational life. *The Academy of Management Review*, *28*(3), 494–507. https://doi.org/10.2307/30040736

Kashdan, T. B., Rose, P., & Fincham, F. D. (2004). Curiosity and exploration: Facilitating positive subjective experiences and personal growth opportunities. *Journal of personality assessment*, *82*(3), 291–305. https://doi.org/10.1207/s15327752jpa8203_05

Kauffeld, S., & Lehmann-Willenbrock, N. (2012). Meetings matter: Effects of team meetings on team and organizational success. *Small group research*, *43*(2), 130–158. https://doi.org/10.1177/1046496411429599

Kim, H., Shin, K., & Swanger, N. (2009). Burnout and engagement: A comparative analysis using the Big Five personality dimensions. *International Journal of Hospitality Management*, *28*(1), 96–104. https://doi.org/10.1016/j.ijhm.2008.06.001

Kirsch, I. (1985). Response expectancy as a determinant of experience and behavior. *American Psychologist*, *40*(11), 1189. https://doi.org/10.1037/0003-066x.40.11.1189

Kristjansson, K., Kircher, J., & Webb, A. (2007). Multilevel models for repeated measures research designs in psychophysiology: An introduction to growth curve modeling. *Psychophysiology*, *44*(5), 728–736. https://doi.org/10.1111/j.1469-8986.2007.00544.x

Leroy, S., Schmidt, A. M., & Madjar, N. (2021). Working from home during COVID-19: A study of the interruption landscape. *Journal of Applied Psychology*, *106*(10), 1448. https://doi.org/10.1037/apl0000972

Lin, B., Kain, J., & Fritz, C. (2013). Don't interrupt me! An examination of the relationship between intrusions at work and employee strain. *International Journal of Stress Management*, *20*(2), 77–94. https://doi.org/10.1037/a0031637

Loomes, G., & Sugden, R. (1986). Disappointment and dynamic consistency in choice under uncertainty. *The Review of Economic Studies*, *53*(2), 271–282. https://doi.org/10.2307/2297651

Luong, R., & Rogelberg, S. G. (2005). Meetings and more meetings: The relationship between meeting load and the daily well-being of employees. *Group Dynamics*, *9*(1), 58–67. https://doi.org/10.1037/1089-2699.9.1.58

Mark, G., Gudith, D., & Klocke, U. (2008). The cost of interrupted work: More speed and stress. In *Proceedings of the SIGCHI conference on human factors in computing systems* (pp. 107–110).

Matzelle, R. (2005). *The relationship between burnout and perceived daily hassles/uplifts in acute care nurses*. [ProQuest Dissertations Publishing]. https://search.proquest.com/docview/305374465/?pq-origsite=primo

Maynard, D. C., & Hakel, M. D. (1997). Effects of objective and subjective task complexity on performance. *Human Performance*, *10*(4), 303–330. https://doi.org/10.1207/s15327043hup1004_1

Mellers, B., Schwartz, A., & Ritov, I. (1999). Emotion-based choice. *Journal of Experimental Psychology*, *128*(3), 332–345. https://doi.org/10.1037/0096-3445.128.3.332

Mellers, B. A., & McGraw, A. P. (2001). Anticipated emotions as guides to choice. *Current Directions in Psychological Science*, *10*(6), 210–214. https://doi.org/10.1111/1467-8721.00151

Mellers, B. A., Schwartz, A., Ho, K., & Ritov, I. (1997). Decision affect theory: Emotional reactions to the outcomes of risky options. *Psychological Science*, *8*(6), 423–429. https://doi.org/10.1111/j.1467-9280.1997.tb00455.x

Merton, R. K. (1948). The self-fulfilling prophecy. *The Antioch Review*, *8*(2), 193–210. https://doi.org/10.2307/4609267

Miner, G., & Glomb, T. (2010). State mood, task performance, and behavior at work: A within-persons approach. *Organizational Behavior and Human Decision Processes*, *112*(1), 43–57. https://doi.org/10.1016/j.obhdp.2009.11.009

Monk, C. A., & Kidd, D. G. (2008). The effects of brief interruptions on task resumption. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, *52*(4), 403–407. https://doi.org/10.1177/154193120805200443

Monk, C. A., Trafton, J. G., & Boehm-Davis, D. A. (2008). The effect of interruption duration and demand on resuming suspended goals. *Journal of experimental psychology: Applied*, *14*(4), 299. https://doi.org/10.1037/a0014402

Morgeson, F. P., Mitchell, T. R., & Liu, D. (2015). Event system theory: An event-oriented approach to the organizational sciences. *Academy of Management Review*, *40*(4), 515–537. https://doi.org/10.5465/amr.2012.0099

Mroz, J. E., Allen, J. A., Verhoeven, D. C., & Shuffler, M. L. (2018). Do we really need another meeting? The science of workplace meetings. *Current Directions in Psychological Science*, *27*(6), 484–491. https://doi.org/10.1177/0963721418776307

Nehdi, K. M. (2020). Why we instituted meetingless mondays. *Herrmann Global*. https://blog.thinkherrmann.com/why-we-instituted-meetingless-mondays

Ng, S., Sambasivan, M., & Zubaidah, S. (2011). Antecedents and outcomes of flight attendants' job satisfaction. *Journal of Air Transport Management*, *17*(5), 309–313. https://doi.org/10.1016/j.jairtraman.2011.03.007

Niederman, F., & Volkema, R. J. (1999). The effects of facilitator characteristics on meeting preparation, set up, and implementation. *Small Group Research*, *30*(3), 330–360. https://doi.org/10.1177/104649649903000304

Nizio, K. (2021). Remote meeting statistics: "The Future of Meetings" report. *Fellow*. https://fellow.app/blog/meetings/meeting-statistics-the-future-of-meetings-report/#3

Pankok, C. Jr., Zahabi, M., Zhang, W., Choi, I., Liao, Y. F., Nam, C. S., & Kaber, D. (2017). The effects of interruption similarity and complexity on performance in a simulated visual-manual assembly operation. *Applied ergonomics*, *59*, 94–103.

Parker, S. K., Morgeson, F. P., & Johns, G. (2017). One hundred years of work design research: Looking back and looking forward. *Journal of applied psychology*, *102*(3), 403. https://doi.org/10.1037/apl0000106

Pearce, J., & Gregersen, H. (1991). Task interdependence and extrarole behavior: A test of the mediating effects of felt responsibility. *Journal of Applied Psychology*, *76*(6), 838–844. https://doi.org/10.1037/0021-9010.76.6.838

Perlow, L. A. (1999). The time famine: Toward a sociology of work time. *Administrative science quarterly*, *44*(1), 57–81. https://doi.org/10.2307/2667031

Perlow, L. A., Hadley, C. N., & Eun, E. (2017). Stop the meeting madness. *Harvard Business Review*. (July–August 2017). https://hbr.org/2017/07/stop-the-meeting-madness

Pierce, C. A., & Aguinis, H. (1997). Using virtual reality technology in organizational behavior research. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, *18*(5), 407–410. https://doi.org/10.1002/(sici)1099-1379(199709)18:5<407::aid-job869>3.0.co;2-p

Pines, H., Larkin, J., & Murray, M. (2016). Dual outcomes of psychology assignments: Perceived learning and feelings of prideful accomplishment. *Teaching of Psychology*, *43*(4), 323–328. https://doi.org/10.1177/0098628316662764

Puranik, H., Koopman, J., & Vough, H. C. (2020). Pardon the interruption: An integrative review and future research agenda for research on work interruptions. *Journal of Management*, *46*(6), 806–842. https://doi.org/10.1177/0149206319887428

Rees, C. S., Breen, L. J., Cusack, L., & Hegney, D. (2015). Understanding individual resilience in the workplace: The international collaboration of workforce resilience model. *Frontiers in psychology*, *6*(1), 73. https://doi.org/10.3389/fpsyg.2015.00073

Richard, R., Van Der Pligt, J., & De Vries, N. (1996). Anticipated affect and behavioral choice. *Basic and applied social psychology*, *18*(2), 111–129. https://doi.org/10.1207/s15324834basp1802_1

Rivis, A., Sheeran, P., & Armitage, C. J. (2009). Expanding the affective and normative components of the theory of planned behavior: A meta-analysis of anticipated affect and moral norms. *Journal of applied social psychology*, *39*(12), 2985–3019. https://doi.org/10.1111/j.1559-1816.2009.00558.x

Robinson, P. (2001). Task complexity, task difficulty, and task production: Exploring interactions in a componential framework. *Applied linguistics*, *22*(1), 27–57. https://doi.org/10.1093/applin/22.1.27

Rogelberg, S., Scott, C., & Kello, J. (2007). The science and fiction of meetings. *MIT Sloan Management Review*, *48*(2), 18–21.

Rogelberg, S. G. (2019). *The surprising science of meetings: How you can lead your team to peak performance*, Oxford University Press.

Rogelberg, S. G., Allen, J. A., Shanock, L., Scott, C., & Shuffler, M. (2010). Employee satisfaction with meetings: A contemporary facet of job satisfaction. *Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management*, *49*(2), 149–172.

Rogelberg, S. G., Leach, D. J., Warr, P. B., & Burnfield, J. L. (2006). "Not another meeting!" Are meeting time demands related to employee well-being? *The Journal of Applied Psychology*, *91*(1), 83–96. https://doi.org/10.1037/0021-9010.91.1.83

Sandberg, T., & Conner, M. (2008). Anticipated regret as an additional predictor in the theory of planned behaviour: A meta-analysis. *British journal of social psychology*, *47*(4), 589–606.

Saunders, E. G. (2017). How to establish a meeting-free day each week. *Harvard Business Review*. https://hbr.org/2017/02/how-to-establish-a-meeting-free-day-each-week

Schwartzman, H. B. (1986). The meeting as a neglected social form in organizational studies. *Research in Organizational Behavior*, *8*(1), 233–258.

Sonnentag, S., Reinecke, L., Mata, J., & Vorderer, P. (2018). Feeling interrupted—Being responsive: How online messages relate to affect at work. *Journal of Organizational Behavior*, *39*(3), 369–383. https://doi.org/10.1002/job.2239

Spector, P. E., & Brannick, M. T. (2011). Methodological urban legends: The misuse of statistical control variables. *Organizational Research Methods*, *14*(2), 287–305. https://doi.org/10.1177/1094428110369842

Speier, C., Valacich, J. S., & Vessey, I. (1999). The influence of task interruption on individual decision making: An information overload perspective. *Decision sciences*, *30*(2), 337–360.

Trafton, J. G., & Monk, C. A. (2007). Task interruptions. *Reviews of Human Factors and Ergonomics*, *3*(1), 111–126. https://doi.org/10.1518/155723408x299852

Van Den Berg, P. T., Roe, R. A., Zijlstra, F. R., & Krediet, I. (1996). Temperamental factors in the execution of interrupted editing tasks. *European Journal of Personality*, *10*(4), 233–248. https://doi.org/10.1002/(sici)1099-0984(199611)10:4<233::aid-per263>3.0.co;2-3

Van Katwyk, P., Fox, S., Spector, P., Kelloway, E., & Van Katwyk, P. (2000). Using the Job-Related Affective Well-Being Scale (JAWS) to investigate affective responses

to work stressors. *Journal of Occupational Health Psychology*, *5*(2), 219–230. https://doi.org/10.1037//1076-8998.5.2.219

Warr, P. (1990). The measurement of well-being and other aspects of mental health. *Journal of occupational Psychology*, *63*(3), 193–210. https://doi.org/10.1111/j.2044-8325.1990.tb00521.x

Werner, N. E., Cades, D. M., Boehm-Davis, D. A., Chang, J., Khan, H., & Thi, G. (2011). What makes us resilient to interruptions? Understanding the role of individual differences in resumption. In *Proceedings of the human factors and ergonomics society annual meeting* (*Vol. 55*, No. 1, pp. 296–300). Sage CA: Sage Publications.

Williams, E. J., Morgan, P. L., & Joinson, A. N. (2017). Press accept to update now: Individual differences in susceptibility to malevolent interruptions. *Decision Support Systems*, *96*(1), 119–129. https://doi.org/10.1016/j.dss.2017.02.014

Wright, T. A., & Cropanzano, R. (1998). Emotional exhaustion as a predictor of job performance and voluntary turnover. *Journal of Applied Psychology*, *83*(3), 486–493. https://doi.org/10.1037/0021-9010.83.3.486

Wright, T. A., & Staw, B. M. (1999). Affect and favorable work outcomes: Two longitudinal tests of the happy–productive worker thesis. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, *20*(1), 1–23. https://doi.org/10.1002/(sici)1099-1379(199901)20:1<1::aid-job885>3.0.co;2-w

Zhang, C., Spreitzer, G. M., & Qiu, Z. A. (2023). Meetings and individual work during the workday: Examining their interdependent impact on knowledge workers' energy. *Journal of Applied Psychology*, *108*(10), 1640–1661. https://doi.org/10.1037/apl0001091

Zhang, J., Patel, V., Johnson, T., & Shortliffe, E. (2004). A cognitive taxonomy of medical errors. *Journal of Biomedical Informatics*, *37*(3), 193–204. https://doi.org/10.1016/j.jbi.2004.04.004

Zide, J. S., Mills, M. J., Shahani-Denning, C., & Sweetapple, C. (2017). Work interruptions resiliency: Toward an improved understanding of employee efficiency. *Journal of Organizational Effectiveness: People and Performance*, *4*(1), 39–58. https://doi.org/10.1108/joepp-04-2016-0031

Zijlstra, F., Roe, R., Leonora, A., & Krediet, I. (1999). Temporal factors in mental work: Effects of interrupted activities. *Journal of Occupational and Organizational Psychology*, *72*(2), 163–185. https://doi.org/10.1348/096317999166581

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Author Biographies

Dr. Liana M. Kreamer is an Assistant Professor in the Industrial Organizational Psychology program. She earned a B.S. in Psychology in 2017 at the Pennsylvania

State University, an M.A. in I/O Psychology in 2020 from the University of North Carolina Charlotte, and her Ph.D. in Organizational Science in 2023 from the University of North Carolina, Charlotte. Her research has centered on the science behind teamwork, leadership, and workplace collaborations - with a specific focus on work meetings. She has authored over 10 peer-reviewed journal papers on teams, meetings, organizational leadership, and best practice research methodologies. During the last several years, Dr. Kreamer has extensively collaborated with leading organizations, such as Microsoft, investigating the effectiveness of their hybrid and remote work arrangements.

Dr. Steven G. Rogelberg is the Chancellor's Professor at the University of North Carolina Charlotte for distinguished national, international, and interdisciplinary contributions. He is the author of Glad We Met: The Art and Science of 1:1 Meetings (Oxford University Press, 2024) and The Surprising Science of Meetings: How You Can Lead Your Team to Peak Performance (OUP, 2019) and. He writes and speaks about leadership, teams, meetings, and engagement. Follow him on LinkedIn or find more information at stevenrogelberg.com.