Teleworker Well-Being in COVID-19 as a Function of Change in the Work/Home Boundary: A Multilevel Response Surface Approach

Tanya Elise Mitropoulos

Dissertation submitted to the faculty of the Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of

Doctor of Philosophy
In
Psychology

Charles Calderwood, Chair
Rachel Diana
Rosanna Breaux
Ning Hsu

November 14, 2023
Blacksburg, VA

Keywords: Telework, work/home boundary, well-being, response surface analysis, COVID-19

Teleworker Well-Being in COVID-19 as a Function of Change in the Work/Home Boundary: A Multilevel Response Surface Approach

Tanya Elise Mitropoulos

ABSTRACT

This dissertation explored how a change in the work/home boundary stemming from a mandatory switch to full-time telework influenced employee well-being. Organizational scholars have called for more investigations into how crisis events impact employees, and the COVID-19 pandemic presented an opportunity to examine a change in employees' work and home domains as it unfolded. Additionally, as full-time telework becomes a more common way of work, understanding how this once rare work arrangement affects employee well-being holistically is important. Using boundary theory, I hypothesized that a switch to full-time telework would increase the level of integration between employees' work and home domains, and that a greater change in integration level would associate with worse daily well-being outcomes. To explain this association, I turned to recovery theorizing and proposed daily work-related rumination and lack of psychological detachment as linking mechanisms. Additionally, I expected that teleworkers whose current level of integration was closer to their preferred level would experience better well-being. Using multilevel response surface analysis (MRSA), which enabled illustration of these complex associations in a more nuanced manner than is possible via either change scores or moderation analyses, I found that maintaining higher work/home integration both before and after telework co-varied with worse holistic well-being through work-related rumination and lack of psychological detachment. I also found that having higher integration than preferred and even high integration when preferred associated with worse well-being through work-related rumination and lack of psychological detachment. Based on these results, I

point to boundary work and its facilitation of segmentation as a potential means of protecting employee well-being in the event of a future crisis that moves work into the home.

Teleworker Well-Being in COVID-19 as a Function of Change in the Work/Home Boundary: A Multilevel Response Surface Approach

Tanya Elise Mitropoulos

GENERAL AUDIENCE ABSTRACT

This dissertation examined the influence of the COVID-19-induced abrupt and mandatory switch to telework on employees' well-being. More understanding is needed regarding how crisis events impact employees, according to organizational scholars, and the COVID-19 pandemic presented an opportunity to conduct an investigation of change in employees' work situations in real time. As employees experienced change in numerous ways due to the pandemic and stay-at-home orders, I expected that experiencing greater changes in the separation between one's work and home would correlate with well-being impairments. I expected that less separation (i.e., more *integration*) between work and home would associate with the tendency to ruminate about work during non-work time (*work-related rumination*) and an inability to detach from work (lack of *psychological detachment*), which would in turn relate to worse well-being. I also anticipated that employees whose preference in level of work/home integration more closely matched their current situation would enjoy better well-being, potentially due to less work-related rumination and better psychological detachment. Instead, I found that maintaining old habits in how closely integrated employees keep their work and home lives from before to during telework associated with worse well-being. Employees who had more work/home integration pre-telework and maintained more integration during telework showed worse well-being through more work-related rumination and less psychological detachment. Preferring more integration did not appear to protect one's well-being, as those teleworkers who both preferred and enacted more work/home integration had worse well-being through more work-related rumination and less

psychological detachment, as did those who had more integration than preferred. Based on these findings, I recommend that in crisis situations and abrupt, mandatory transitions to full-time telework, teleworkers protect their ability to recover from the workday's often strenuous demands by creating separation between work and home. Employees, organizations, and managers can all facilitate *boundary work*, wherein the teleworker performs actions to create greater separation between work and home, even when fully working from home.

Acknowledgements

I want to offer my sincere gratitude toward the people who supported me through my tenure as a Doctoral student. Thank you to my advisor, Charles Calderwood, for all of your help across the past half a decade. Your thorough explanations to questions ranging from trivial to complex statistical and shockingly prompt, detailed feedback have made me a better statistician, writer, and researcher. Your support of this study in particular is why it exists today. Somehow you managed to help make it happen during the COVID and childcare shutdowns, which I now have an even greater appreciation for.

I also want to thank my committee members, Rachel Diana, Rosanna Breaux, and Ning Hsu, for your advice and insights across this process. I am one of a lucky and likely few who actually enjoyed sharing my dissertation research plans and other graduation milestones with you, and this is a better dissertation with all of your help. To my lab mates, especially Molly Minnen, Emily Rost, and Fiyinfunjah Dosumu, thank you for the fun moments of grad school. I owe you all my social life over the past 5 years. You even managed to keep grad school from feeling isolating during the COVID years and make me feel lucky I spent that time in Blacksburg. And to the Virginia Tech Psychology Department, I cannot imagine spending my PhD tenure in a better community.

To my parents, Sonia and Jim Mitropoulos, not only have I appreciated your genuine interest in my research, but also your support in choosing this path. Finally, to my husband Andrew Choi, I want to thank you for always believing in me, encouraging me, and helping me in whatever way I needed. You've managed to play dad, employee, house manager, and cheerleader for the past few months and are still standing. I love you and let's move on to the next chapter.

Contents

1 Introduction

In early 2020, a significant portion of the workforce in the United States and around the globe experienced an upheaval in the way of work (Kniffin et al., 2020). As COVID-19-induced lockdowns occurred, employees were forced into their homes to work. At the height of lockdown in the U.S. in March 2020, 62% of employees reported working from home (Gallup, 2020), many of them doing so exclusively and full-time. Prior to this global event, just 2.6% of U.S. employees worked from home full-time (Allen et al., 2015). Therefore, the majority of these teleworkers were navigating a new work life and home life without experience or guidance (Andrade & Lousa, 2021). Given that both work and home circumstances impact an individual's well-being (e.g., Edwards & Rothbard, 2000), it is unsurprising that the media around this time reported impairments in Americans' mental health (e.g., Searing, 2020).

In terms of scientific research on the link between working from home (i.e., *telework*) and well-being, a number of studies exist (see Oakman et al., 2020, for a review), albeit with mixed results. Most investigations of the impact of telework on employees center on *telecommuters*, or employees who telework part-time and typically voluntarily (Allen et al., 2015; Gajendran & Harrison, 2007). But the kind of telework introduced by the pandemic was full-time and mandatory. Those two distinctions are very important, as telecommuters most value the flexibility and autonomy granted by their teleworking arrangement (Knight & Westbrook, 1999). Thus, employees working from home during the COVID-19 pandemic might experience fewer benefits and more downsides to telework. A handful of studies have come out recently that focus on the association between well-being and telework during COVID-19, thus addressing telework in the mandatory and full-time context. However, rarely do these studies focus on well-being holistically, tending to focus on work-family conflict (e.g., Ziedelis et al., 2021; Andrade

& Lousa, 2021; Vaziri et al., 2020) or a single component of well-being (e.g., Tedone, 2022), nor do they measure the sudden *change* to full-time telework experienced by the current workforce.

The COVID-19 pandemic presented a rare opportunity to observe and measure an upheaval in real time. Organizational research has limited work on disruptive events, yet understanding the nature of these events and their impact on individuals is important (Eby et al., 2015). Unexpected events are likely to result in particularly acute well-being shocks for individuals (Hobfoll, 1991; Bundy et al., 2017). Thus, gaining insight into who may suffer most and why, both of which the current dissertation strives to provide, may help scientists and practitioners understand how to better manage workers that are facing personal or societal-level crises.

This dissertation focuses specifically on the change in the *work/home boundary* (i.e., the separation between one's work and home domains; Nippert-Eng, 1996b) in the transition to full-time telework during the onset of the COVID-19 pandemic as a predictor of employee well-being. Well-being outcomes of teleworkers have traditionally been overlooked in favor of work-family conflict (Gajendran & Harrison, 2007). However, while work-family conflict is important, an investigation of well-being presents a more holistic view of an individual's physical, cognitive, and emotional health (Frone & Tidwell, 2015). Furthermore, work-family conflict may be more relevant to employees with children under 18 years old, which a majority of the U.S. workforce does not have (Bureau of Labor Statistics, 2020). Thus, I take a multifaceted approach to measuring employee well-being, as has been recommended by organizational scholars (Frone & Tidwell, 2015). Furthermore, I propose work-related rumination (i.e., continued thoughts about work; Cropley & Zijlstra, 2011) and a lack of psychological detachment from work as mechanisms that connect changes in the work/home

boundary to teleworker well-being. I also investigate the contribution of personal preference in work/home boundary management to well-being, acknowledging the role that individual differences may play in the full-time teleworking context.

I leverage boundary theory (Ashforth et al., 2000) and recovery-relevant theorizing (Meijman & Mulder, 1989; Hobfoll, 1989; Sonnentag & Fritz, 2015) as guiding frameworks for my hypotheses. To perform the investigations, I utilize a daily diary study design to examine day-to-day well-being. To analyze my findings, I utilize response surface analysis (RSA). This technique allows for a more nuanced view into how a change from or alignment with the current situation (in this case, an employee's work/home boundary) influences an outcome than either change scores or moderation analysis (Shanock et al., 2010). To employ RSA in the current dissertation's daily diary design, I use multilevel RSA (MRSA) to investigate the links between changes at the person-level context and nightly well-being.

1.1 Contributions

This dissertation offers theoretical, analytical, and practical contributions to the organizational literature. First, I investigate the work/home boundary and employee well-being in the context of a crisis event as it unfolds. Researchers have called for more research into the impact of crisis events on employee well-being (Eby et al., 2015; Bundy et al., 2017), but such contexts are often difficult to capture in research studies. The pandemic presented a rare opportunity to collect data from a group of employees as they newly experienced a societal upheaval. Thus, this dissertation helps lend insight into how changes stemming from a crisis event unfold to influence employee well-being.

The context of this dissertation is also important in its focus on full-time teleworkers. Most research on telework has been of telecommuters (Allen et al., 2015; Gajendran & Harrison,

2007), who typically value the flexibility gained through their part-time telework arrangement (Knight & Westbrook, 1999). Full-time telework, however, lacks much of the flexibility in choice of work location and appears to blur the work and home domains to a greater extent (Raghuram et al., 2003), which may explain a "crucial threshold" beyond which teleworking no longer facilitates employee well-being (Golden & Veiga, 2005, p. 60). Therefore, the nature of full-time telework may differ from that of part-time telework in important ways, especially with respect to the work/home boundary and employee well-being.

Diverging from other studies of full-time teleworkers in the pandemic, the current dissertation focuses on the *change* in the work/home boundary from before to during telework. Just as research is lacking on crisis events, so is organizational research that examines the impact of change on employee well-being (for exceptions, see Munton & West, 1995; Isaksson & Johansson, 2000; and Isaksson, 1990). I propose an explanation for change affecting employees in the form of exacerbated work-related rumination, turning to recovery theorizing for support. I also utilize recent advancements in MRSA (e.g., Nestler et al., 2019; Fan & Han, 2018) to examine the unfolding of change in a nuanced way.

Analytically speaking, this dissertation provides an advanced demonstration of MRSA within the organizational literature in two capacities. First, I use MRSA in a situation wherein two Level-2 predictors predict Level-1 outcomes. To perform this analysis, I adapt Nestler et al.'s (2019) approach that models exclusively Level-1 variables in the MRSA context to the current Level-2-predictor context. Second, I apply this analysis in a test of indirect effects (i.e., from the Level-2 predictors to the Level-1 outcomes via Level-1 mechanisms). I hope that this dissertation demonstrates the utility of applying MRSA to investigations of change.

From a practical standpoint, this dissertation offers insight into how changes in employee circumstances and societal upheavals impact individual well-being, which lends guidance in how to handle future unexpected, disruptive, and traumatic societal events. Understanding the nature and impact of these events grows more important as scientists expect crises like pandemics to become more common (Montanari, 2020). I uncover why certain employees may experience worse impairments to well-being in the form of work-related rumination. I also show how employees' preferences in their work/home boundary play a role in influencing their well-being in full-time teleworking circumstances. As full-time telework becomes more normalized, a tendency toward work/home integration and consequent work-related rumination can be detrimental to the well-being of this growing population of employees. By investigating changes in the work/home interface as they unfolded, I hope that this dissertation can guide employees and help organizations and supervisors to better protect their workforce's well-being in the face of the next pandemic or disruptive global event.

2 Literature Review

2.1 Teleworker Well-Being

According to Gallup, 42% of the U.S. workforce in 2019 (i.e., shortly before the onset of the COVID-19 pandemic) had ever teleworked (Jones, 2023). After the onset of the pandemic in 2020, this figure has risen to encompass about half of the U.S. workforce. Yet, whether telework benefits or detracts from employee well-being remains ambiguous. In this manner, research into the well-being of teleworkers lags behind practice. In response to the sudden expansion of telework due to COVID-19, Oakman et al. (2020) performed a rapid review of recent studies (post-2007) on the relationship between telework and the two primary components of well-being, physical and psychological health (Inceoglu et al., 2018). The authors found results to vary

widely. Of the three studies found relating telework to physical health, one study found improvements, one found decrements, and one found improvements for men but no effects for women. The results were also scattered regarding the association between telework and mental health: eleven studies found improvements, four found decrements, and six found mixed or no effects on well-being.

The inconsistency in findings may be partially attributable to an inconsistency in the teleworkers sampled. Samples ranged from employees working from home one day every two weeks (Anderson et al., 2015) to just two samples teleworking full-time (Tietze & Nadin, 2011; Eddleston & Mulki, 2017). Additionally, only one sample was teleworking involuntarily (Kaduk et al., 2019). Moderators pertaining to the frequency of telework (i.e., the extent to which an employee works from home; e.g., Suh & Lee, 2017) often created variability in findings, suggesting that the nature of telework is relevant to the processes influencing one's well-being.

Previous research has mirrored this inconsistency in findings. Allen et al. (2015) found in their telework review "an impressive array of evidence" supporting a role of telework frequency in influencing outcomes (p. 60). These authors cite Golden and Veiga's (2005) warning of a "crucial threshold in the amount of time an individual can telecommute, beyond which there are diminishing returns" (p. 60). In their meta-analytic review of the telework literature, Gajendran and Harrison (2007) warned of heterogeneity in how telework impacted individuals, a lack of research on full-time teleworkers, and a lack of consistency in the frequency of telework within samples. The authors were also unable to study involuntary telework due to a lack of extant research on this topic.

Furthermore, neither of these reviews reported directly on the impact of telework on employee well-being. Gajendran and Harrison (2007) found the teleworking literature to focus

on three themes: autonomy, work-family conflict, and workplace relationships. Thus, while they reported largely positive impacts on employees in the form of job satisfaction, performance, turnover intent, and role stress, they did not attend to well-being given the lack of prior work. With respect to the impact on the employee, Allen et al. (2015) also primarily focused on job-relevant outcomes, like job performance, satisfaction, commitment, and role stress.

Since the COVID-19 outbreak, a handful of studies have examined the impact of mandatory full-time teleworking on various employee outcomes. In a recent exception to the lack of research relating full-time telework to well-being-relevant outcomes, Mandeville et al. (2022) found that teleworkers who experienced more violations of their work/home boundary early in the pandemic reported worse subjective well-being (measured as a single-factor variable) two weeks later. Additionally, Allen et al. (2021) and Tedone (2022) studied particular facets of employee well-being (work-life balance and emotional exhaustion, respectively) in full-time teleworker samples during COVID-19. Allen et al. (2021) found that teleworkers who preferred greater segmentation in their work/home boundary experienced better work-life balance, and Tedone (2022) found that more after-hours email use predicted worse emotional exhaustion. Similar to prior to the pandemic, though, much of this work has focused on work-family conflict (e.g., Ziedelis et al., 2021; Andrade & Lousa, 2021; Vaziri et al., 2020).

Understanding how employee well-being more generally is affected by teleworking arrangements is important. Not only did telework expand in direct response to the COVID-19 pandemic, it is expected to remain more common relative to before the pandemic: Gallup (2020) projected that 41% of US workers are likely to continue working from home after the pandemic. Additionally, pandemics are expected to be more frequent in the future (Montanari, 2020), which could further bolster instances of full-time telework.

To gain insight into the impact of rapidly switching to full-time telework on employee well-being, this dissertation takes a multifaceted approach to measuring well-being. Well-being is often conceptualized as comprising a physical component and a psychological component, which breaks down further into cognitive and affective facets (Inceoglu et al., 2017). Indeed, telework has been shown to have the potential to influence both the physical and psychological facets of well-being (Oakman et al., 2020). Furthermore, a transition to full-time telework may impact each of these three separate components in a different manner. However, to my knowledge, no study of full-time teleworkers has measured employee well-being in this multifaceted manner.

Therefore, it is important that a study on the switch to full-time telework in relation to employee well-being captures the multiple components of well-being. Given that this dissertation focuses on the impact of a change in the way of work, I operationalized the three facets of well-being (physical, cognitive, and affective; Inceoglu et al., 2017) using constructs shown to associate with work-related factors (e.g., Frone & Tidwell, 2015). Specifically, I measured physical fatigue to capture the physical component of well-being (Frone & Tidwell, 2015); physical fatigue is the feeling of not being able to carry out physical activity during and at the end of the workday. I measured vigor to reflect the cognitive facet of well-being (Schaufeli et al., 2006); vigor represents mental vitality and the capacity and willingness to work even in difficult tasks. I used positive and negative affect to capture the affective component of well-being (Barrett & Russell, 1998; Watson & Clark, 1994); positive and negative affect comprise the, generally speaking, good and bad dimensions of emotional experience. Because each of these components have been shown to vary between workdays (e.g., Minnen et al., 2020), I measured daily fluctuations in well-being.

Taking a work/home boundary lens to employee well-being is an appropriate approach given the context surrounding the current dissertation. The work/home interface was likely very disrupted by a switch to full-time telework because the spatial facet of the work/home boundary was weakened, if not entirely removed. This dissolution affected both the home and work domains. A disruption in just a single domain has been linked to well-being impairments (e.g., Tims et al., 2013; Doherty et al., 1989). In this case, though, employees experienced disruptions in both domains, likely exacerbating well-being impairments further (LaPierre et al., 2016). In the following sections, I outline a nuanced account of how the work/home boundary influences employee well-being generally. Where possible, I address relationships in the contexts of changes in the work/home boundary and full-time telework, although limited theoretical and empirical work on these contexts exist.

2.2 The Work/Home Boundary

According to boundary theory (Ashforth et al., 2000), the separateness between work and home varies based on the nature of the boundary between the two domains. This boundary separates the work and home domains in three ways: physically, temporally, and psychologically (Allen et al., 2014). Most boundaries are physical and temporal, with employees typically working in a physical workplace outside of the home (spatial separation) and at designated times (temporal separation). These standards are often culturally constructed (Ashforth et al., 2000), for example with employees going to and from work during the universally known "rush hour." Boundaries are also psychological, with employees maintaining "mental fences" between the work and home domains (Zerubavel, 1991, p. 2). This facet of the boundary is often idiosyncratically constructed (Ashforth et al., 2000), for instance with some employees refusing to discuss family matters at work or refraining from checking work emails at home.

Employees actively manage their work/home boundary (Nippert-Eng, 1996b). Some employees maintain a *weak* work/home boundary (Clark, 2000) that is also said to be *blurred* (Desrochers et al., 2005). Enacting a weak boundary promotes *work/home integration*, wherein the interface between work and home is intermeshed such that employees often address responsibilities in each domain simultaneously (Ashforth et al., 2000). In contrast, employees who separate their work and home roles such that they tend to perform work duties only at work and home duties only at home enact work/home *segmentation*. A segmented work/home interface is said to have a *strong* boundary, with more separation and less overlap between the work and home domains (Clark, 2000).

The actions one takes to maintain their desired level of work/home segmentation versus integration is called *boundary work* (Nippert-Eng, 1996b). These actions include keeping separate calendars for work and family events (an example of segmentation), decorating one's office with family photos (an example of integration), and more. However, external circumstances like being forced into working from home often dictate the extent to which an employee can enact a particular level of segmentation versus integration (Edwards & Rothbard, 1999). For example, the COVID-19 outbreak forced changes that likely altered many employees' work/home boundaries. Employees with sick relatives may have had to take work time to care for them. When schools closed, working parents often handled their child's schooling and their own job simultaneously. Many employees also began working from home full-time. With the office effectively moved into the home, the spatial component of the work/home boundary dismantled, and many employees likely faced a newly integrated work/home interface due to forced and unanticipated telework. As the next section discusses, a transition to full-time telework likely results in an increase in integration between the work and home domains.

2.3 The Work/Home Boundary and the Unplanned Switch to Telework

In a teleworking situation, only the temporal and behavioral elements of the work/home boundary remain intact, and even those become more vulnerable to violations. Teleworking employees often have their work equipment at home, typically in the form of Information and Communication Technology (ICT), so many employees are able to work throughout a longer time span (Andrade & Lousa, 2021). In fact, ICT research has shown that access to work-related technology often leads to employees spending their leisure (i.e., home domain) time on work-related activities (see Chen & Karahanna, 2018, for a review). Both quantitative and qualitative studies of teleworkers have supported the notion that access to work technology in the home encourages longer work hours (e.g., ILO, 2021). For example, in a study of full-time teleworkers, many interviewed participants reported always feeling a pull to return to work, as opposed to office work when they were unable to continue working when home (Eddleston & Mulki, 2017).

This pull is likely particularly strong for employees who have not created a separate workspace within the home, as they are surrounded by reminders of work. Nippert-Eng (1996a, p. 579) referred to these other-domain cues as "mental 'dirt,'" or pollution, from other domains. This pollution removes focus from the domain at hand, making teleworkers more likely to engage in home-related activities during work time and work-related activities during off-job time. For example, teleworkers have reported spending work hours attending to home duties like cooking and cleaning (Tietze & Nadin, 2011). These *interdomain transitions* are reflective of greater integration between the two domains.

Without supervisors or coworkers around them, employees might further struggle to focus on work activities during traditional work hours. Teleworkers have less direct managerial

and social pressure to persist in work activities, and their environment lacks many of the work-related cues to keep work on their minds. Instead, they may be surrounded by home-related cues and sometimes people, making them more likely to engage in home-related activities during work time. In cases where teleworkers' partners, roommates, children, or other cohabitants are at home with them during the workday, these people can create distractions, pulling them away from their work (Allen et al., 2014). These interruptions can serve to further integrate work and home in a couple of ways – first by inserting home-related activities into the workday, and second by potentially extending the workday into traditionally non-work hours in order to finish neglected work tasks.

Additionally, in a teleworking context, the commute no longer exists to offer a clear signal that the workday is now over. For example, one new full-time teleworker complained in a recent article that: "When I commute on my journey, my tube journey, I would like a little crochet, and I don't think I appreciated how much of a switch off that was for me. Mentally it put me, like, you're away from work, you're now home, and it gave me that transition, and I haven't found something to replace it" (Gourlay et al., 2021, p. 384). Thus, this change in the work-to-home transition, namely in the form of its removal, resulted in a degree of integration that this employee has found distasteful. Accordingly, despite the commute creating stress for employees, most workers report wanting some commuting time (McAlpine & Piszczek, 2023).

Despite these challenges, maintaining a strong boundary between work and home is possible in a teleworking situation (Ahrentzen, 1990; Kreiner et al., 2009). Thus, while much focus has been placed on the current and future changes in the workforce, many factors have and can remain the same. To retain a spatial boundary, teleworkers can designate a room in their home as their office and restrict work-related activities to this one area. Teleworkers can also

perform boundary work to hide work-related pollution when transitioning to off-job time. For example, one full-time teleworker explained her strategy to enact a strong boundary between work and home: “At the weekend I close the laptop off and I bury it under something. I can’t see it anymore” (Gourlay et al., 2021, p. 384).

To counteract cohabitants who might be encouraging further integration, teleworkers can instruct their children, partner, and other cohabitants not to interrupt them during particular hours or when they are in their workspace. For example, a telecommuter explains that when working from home, “With my family, I find I just have to communicate clearly when I am really not available” (Fonner & Stache, 2012, p. 43) Some employees have even reported fewer interruptions than in the office, allowing employees to better retain focus on their work in a teleworking situation (Hickman, 2019). Also, many teleworkers live alone and therefore avoid interruptions and pressure from family members and cohabitants that pulls them away from work during work hours.

Disciplined teleworkers can also maintain a working schedule to keep a temporal boundary in place, such as using “typical ‘office hours’ to structure my day: 9-noon work, noon-1 lunch, 1-5 work” (Fonner & Stache, 2012, p. 40). Some jobs and family situations might externally require a set working schedule, too. Collaborative work might require that workers be working during certain hours, as in this telecommuter’s situation: “I have to be online and answering phones and emails between 8am and 5pm. When my boss emails me, he expects me to answer within a few minutes” (Fonner & Stache, 2012, p. 39). Working parents might have family responsibilities at designated times that necessarily pull them away from the work domain, like picking children up from school.

Despite the possibility of performing such boundary work to maintain a strong boundary in a teleworking situation, researchers often assume that telework equates to high work/home integration, to the point of even operationalizing telework as such (e.g., Basile & Beauregard, 2016). Only a handful of quantitative studies have explicitly measured the change in work/home integration resulting from a switch to full-time telework, in part due to a lack of studies capturing this switch. Turning to a COVID-19 study for insight, the results of Vaziri et al. (2020) suggest an increase in integration when switching to full-time telework. These authors found that most workers (although not specifically a sample of teleworkers) whose work-family conflict and enrichment norms changed due to the pandemic experienced increases in both work-family conflict and enrichment, both of which reflect more overlap between the two domains (e.g., Eddleston & Mulki, 2017). Quantitative work has also shown increases in working hours following the pandemic (ILO, 2021), which suggests an increase in work/home integration due to the switch to telework. Research on telecommuters has also supported more work/home integration on teleworking days relative to office-work days (e.g., Delanoeije et al., 2019).

Qualitative findings back up the notion that telework generally increases work/home integration. Case studies of employees who switched to telework report behaviors indicative of increased integration, like combining work and home demands and rearranging work schedules to align with family duties (Tietze & Nadin, 2011; Collins et al., 2013). However, the majority of these case study samples were not forced into unplanned telework (see Harris, 2003, for an exception). Instead, the participants in these samples opted to transition to telework, with many reporting doing so in order to mesh their work and home roles together (i.e., in order to achieve more work/home integration). These teleworkers also generally report more positive well-being resulting from this transition (e.g., Tietze & Nadin, 2011) relative to those forced into telework

(Harris, 2003). I explore the complexities surrounding the well-being implications of full-time telework as a function of the work/home boundary in the following section.

2.4 The Shift to Telework, the Work/Home Boundary, and Employee Well-Being

Whether employees benefit more from enacting a particular work/home boundary management strategy (i.e., integration versus segmentation) remains unclear. Boundary theory enumerates well-being advantages and drawbacks to each strategy, presenting them largely in terms of cross-domain interruptions, transitions, and inter-role conflict.

According to boundary theory (Ashforth et al., 2000), cross-domain interruptions are more common with increased work/home integration and can have a deleterious impact on well-being by disrupting one's peace of mind. At the same time, though, greater integration can alleviate this disruptive impact by making cross-domain interruptions more affectively neutral events. However, in contrast to boundary theory predictions, pastors who experienced more frequent cross-domain interruptions reported more physical exhaustion and negative emotions (Sonnentag et al., 2010), suggesting that while integration might reduce the affective impact of each interruption, a greater accumulation may be worse.

Similarly, more inter-domain transitions accompany increased work/home integration, which lowers well-being due to the energetic expenditure in crossing the work/home boundary. Again, Ashforth and colleagues explain that greater integration can reduce this negative impact, though, because a weaker boundary is easier to cross. In fact, extreme work/home integration is theorized to create an "amorphous, all-purpose self" capable of automatic, effortless transitions (Nippert-Eng, 1996, p. 103).

Increased work/home integration also results in more overlap between the roles occupied in each domain, which can create inter-role conflict (Ashforth et al., 2000; Allen et al., 2014).

Inter-role conflict is the clash between responsibilities of one role with those of the other role (Allen et al., 2014) and is theorized to lead to impaired well-being (Ashforth et al., 2000). For example, a teleworking boss yelling about a sales deal during negotiations faces extreme discomfort when interrupted by his toddler who is accustomed to seeing her dad smiling and laughing with her. In their sample of working mothers, Williams et al. (1991) found that more instances of attending to work and home roles simultaneously, which characterizes situations of inter-role conflict, correlated with worse mood. The clash of occupying two roles at once is also theorized to create confusion as well as anxiety over upholding the wrong role at the wrong time (Ashforth et al., 2000; Nippert-Eng, 1996). But that said, the roles of individuals with higher integration tend to be less stark and thereby create less conflict between them (Ashforth et al., 2000; Nippert-Eng, 1996b). Therefore, boundary theory shies away from pointing to a specific boundary management strategy as the optimal one for employee well-being.

It is possible that employees who have recently *switched* to telework, by force rather than by choice, and for the first time like most of the pandemic-induced teleworking workforce, may experience more of the drawbacks than advantages of work/home integration. Due to their lack of teleworking experience, new full-time teleworkers likely have not yet established with cohabitants guidelines regarding when to (not) interrupt them while working. A lapse in this behavior could make interruptions both more plentiful, thus extending the workday with repercussions for employee well-being, and more aversive, directly hampering employee well-being. These teleworkers' novice status in balancing the work role in the home may also result in temporarily high role confusion.

In a rare case study of employees forced to switch to full-time telework, an employee complained: "[My family] knew when I was home that my time was for them and that I had

switched off, now it is confusing. It is difficult not to get distracted when I am working at home by other jobs that need doing just to keep things ticking over. My working day has extended from 8 am to 10 p.m" (Harris, 2003, pp. 13-14). This teleworker's experiences of role confusion and cross-domain interruptions that extend his workday appear to leave him distressed. In fact, a link between more boundary violations and worse well-being in a COVID-19-induced full-time teleworking sample has been found (Mandeville et al., 2022).

Similarly, brand new teleworkers likely have to invest more energy into crossing work and home boundaries due to their lack of practice or established "rites of passage" that make inter-domain transitions easier as they become routinized (Ashforth et al., 2000, p. 478). In their study of full-time teleworkers, Eddleston and Mulki (2017) found a workforce characterized by "an inability to exit the work role" (p. 18). This sample did not undergo a recent switch to telework, but it is likely that inexperienced teleworkers will find exiting the work role even more difficult, which could explain the inflation of work hours observed during the pandemic (ILO, 2021).

However, just as boundary theory points to possible advantages of a more integrated work/home boundary, there is some empirical evidence of employees benefitting from a switch to full-time telework and the resulting increase in work/home integration. One sample of women who chose to switch to full-time telework, many of them giving up career opportunities to do so, enjoyed their new way of work so much that the researchers struggled to learn of any drawbacks because the women did not want to jeopardize the pilot program (Collins et al., 2013). A similar sample of newly teleworking women reported an "overwhelmingly positive response" to full-time telework (Tietze & Nadin, 2011, p. 327). This group of mostly mothers also sacrificed promotions to switch to full-time telework and reported benefits like less stress, feeling like

better mothers, and being more relaxed. These participants credited the flexibility gained in full-time telework in part for their improved well-being; in other words, they took advantage of the potential for work/home integration to improve their well-being. In particular, they combined work and home tasks for greater efficiency, and they saved time by not commuting to a physical workplace. That said, participants also reported performing some boundary work to separate work from home, such as "[making] it clear to their children from the outset that when they were working they were not to be disturbed" (p. 328). Therefore, the nature of the work/home boundary relative to the full-time teleworking situation likely plays a role in whether an employee benefits or suffers from a change to telework. These discrepant findings also suggest that other variables and individual differences (such as preferences in the work/home boundary) likely influence a full-time teleworker's well-being, possibilities I explore in the following sections.

2.5 Links to Teleworker Well-Being: Recovery and Rumination

A recovery theory framework presents a clearer stance in terms of which strategy, integration or segmentation, better protects employee well-being. Recovery theories suggest that a bleeding of work into home life removes opportunities for nightly recovery, leading to worse well-being for those maintaining higher work/home integration (Wepfer et al., 2017). More specifically, the effort-recovery model (ERM) proposes that an employee must spend time not engaging in work in order to recover from work (Meijman & Mulder, 1998). Consequently, employees have fewer opportunities for recovery when the workday extends itself into leisure time, an indicator of greater integration that has been observed in teleworking situations (e.g., Harker Martin & MacDonnell, 2012) and especially in full-time telework in the COVID-19 context (ILO, 2021).

Conservation of resources (COR) theory further surmises that when an employee is unable to regain the resources used for work through recovery, they are more likely to experience a "loss spiral," which is a cycle of continued depletion of resources associated with poor well-being (Hobfoll, 1989). Taking this dissertation's COVID-19 context into account, Hobfoll (1991) directly applies COR theory to the context of a traumatic event. He claims that resource depletion will occur even more rapidly in such a context, pointing to an even greater need for recovery in workers undergoing stressful life upheavals like a pandemic. This accelerated cycle of depletion could partially explain the high levels of burnout seen in the newly teleworking population following the onset of the pandemic (Parmar, 2021).

The stressor-detachment model specifically identifies the recovery experience of psychological detachment as the linchpin between work-related stressors and impaired well-being (Sonnentag & Fritz, 2015). Greater work/home integration could serve as such a stressor, as mental detachment from work is hampered by a continual return to work during home time (a sign of greater integration). Empirical work supports this notion that behaviors associated with more work/home integration predict poor psychological detachment. Boundary crossing from work to home, maintaining a weak spatial work/home boundary, and a preference to integrate the work and home domains (which typically associates with the practice of doing so; Olson-Buchanan & Boswell, 2006) have all been shown to correlate with worse psychological detachment from work (Barber & Jenkins, 2014; Sonnentag et al., 2010; Hahn & Dormann, 2013).

Extending theorizing from the stressor-detachment model, it is reasonable to expect that work-related rumination would also serve as a linking mechanism from work/home integration to impaired well-being. Work-related rumination refers to the engagement in perseverative thoughts

about work during off-job time (Cropley & Zijlstra, 2011). Therefore, work-related rumination represents a lack of psychological detachment. Greater work/home integration has been found to associate with more work-related rumination (Danner-Vlaardingerbroek et al., 2013), as have symptoms of high work/home integration like longer hours worked (Querstret & Cropley, 2012).

Cropley and Zijlstra (2011) identified two types of work-related rumination: affective rumination and problem-solving pondering. Affective rumination comprises negative perseverative thoughts about work, while problem-solving pondering comprises neutral or positive thoughts about work that are meant to be productive. While affective rumination generally associates with worse employee well-being than problem-solving pondering (Weigelt et al., 2019), both reflect a lack of detachment from work and therefore both may link job stressors to worse recovery and well-being.

Quantitative evidence for psychological detachment, affective rumination, and problem-solving pondering serving as linking mechanisms from boundary management to well-being outcomes in a teleworking context is limited. In a sample of pastors, a group whose work often extends outside the boundaries of a physical workplace, Sonnentag et al. (2010) found that having an in-home office and having one phone number for both work and home – signs of greater integration – related to lack of psychological detachment from work, which in turn predicted greater need for recovery and emotional exhaustion.

Turning to full-time teleworkers in the COVID-19 pandemic, Kerman et al. (2021) found that more boundary violations (an indicator of greater integration) predicted less domain satisfaction through unfinished tasks. While work-related rumination was not directly measured, unfinished tasks are congruous to work-related rumination as a linking mechanism due to the Zeigarnik effect: unfinished tasks remain cognitively active even when moving to a different

domain (Zeigarnik, 1938). Additionally, two studies of teleworkers during the pandemic found that psychological detachment linked characteristics of high work/home integration (after-hours email use, telepressure [Tedone, 2022], and lack of organizational resources for work/home segmentation [Ziedelis et al., 2021]) to work-family conflict. In turn, Tedone (2022) observed that work-family conflict predicted emotional exhaustion, a sign of poor well-being.

Tedone (2022) also found that the link from telepressure to emotional exhaustion through psychological detachment was stronger in a newly teleworking sample than in an in-office sample measured prior to the pandemic. This heightening of emotional exhaustion from a mental pull to work in the COVID-19 context aligns with COR theory's suggestion that traumatic events may exacerbate resource drains. This finding also suggests that those employees experiencing more dramatic changes in the work/home interface may be particularly affected by the switch to telework, as they may find the change more traumatic.

Qualitative studies also lend support for a link between boundary management and well-being through psychological detachment and work-related rumination in a full-time teleworking context. Full-time teleworkers reported struggling to exit the work domain and spoke of work-related pollution in the home constantly reminding them of work, which they found distressful (Eddleston & Mulki, 2017). They complained of having work "always in the back of your mind" (Eddleston & Mulki, 2017, p. 17). A constant nagging pull to work has reportedly led to feelings of strain in both the employee and the employee's family: "It is becoming a strain that I feel I am always at work -- my wife says we can't get away from it" (Harris, 2003, p. 13).

Those employees who found this increased overlap in the work and home domains more distressing may be those who experienced a greater change in their work/home boundary relative to before telework. Thus, employees experiencing a greater shift in the work/home boundary

may have worse well-being outcomes through a lack of mental detachment and an increase in ruminative tendencies. Similarly, Eddleston and Mulki (2017) propose that even more important to employee outcomes than the choice of boundary management strategy (i.e., integration versus segmentation) was the teleworker's perception of their control over that boundary. If a teleworker's boundary more drastically changed from their previously enacted boundary, then they are likely to perceive a lack of control and more distress. Furthermore, if a teleworker's boundary has digressed farther from their desired boundary, then they too may be more distressed, a notion I discuss in the following section.

2.6 Individual Differences in Boundary Management and Teleworker Well-Being

Recognizing the presence of both advantages and disadvantages in enacting work/home integration versus segmentation, researchers have suggested that one's preferences plays an important role in determining which strategy is optimal (Nippert-Eng, 1996b). *Segmentation preference* refers to an employee's preferred level of separation between the work and home domains (Kreiner, 2006). The degree of contrast between the identity one assumes in each domain is theorized to influence segmentation preference (Kossek et al., 2006), whereby those with greater contrast between roles are likely to prefer a stronger, protective boundary (Ashforth et al., 2000). Segmentation preference is believed to be a stable characteristic (Kossek et al., 2006), and employees tend to enact their boundary accordingly (Powell & Greenhaus, 2010). However, as discussed, external circumstances often dictate the extent to which employees are able to uphold their preferred level of work/home integration. COVID-19 forced changes that very likely altered employees' work/home boundaries, potentially pushing them closer to or farther from their preferred level of work/home integration.

Research on employee samples of mostly teleworkers during COVID-19 present mixed support for the importance of enacting one's desired level of work/home integration to well-being. A preference for integration has been associated with less work-life balance (a negative outcome; Allen et al., 2021) and an increase in work-life enrichment (a positive outcome; Vaziri et al., 2020). Other researchers found no evidence for an effect of integration preference on expected outcomes, like boundary violations, domain satisfaction (Kerman et al., 2021), and work-home conflict (Ziedelis et al., 2021). However, none of these studies specifically tested the *alignment* of integration preference with current boundary management strategy on employee outcomes. The incipient study of preference for segmentation versus integration looked specifically at the relationship between congruence in segmentation preference with segmentation ability and employee outcomes (Kreiner, 2006). These authors did find well-being-related benefits in that alignment, such as lower employee stress. However, the study did not utilize a teleworking sample. It is possible that the potential for overlap in the work and home domains is so great in a full-time teleworking sample that a particular boundary management strategy is more beneficial, regardless of preference.

3 Hypothesis Development

3.1 The Work/Home Boundary as a Function of Telework

When switching from working outside the home to full-time telework (i.e., exclusively working from home), the nature of the boundary between work and home is very likely to change, although the degree to which it may change and the corresponding consequences of these changes are unclear. First and foremost, working from home largely (if not entirely) removes the spatial element of the work/home boundary. Now, the work and home domains take up the same physical space, and the boundary becomes only conceptual. Cohabitating

teleworkers rely on the people they live with to respect their temporal and behavioral boundaries, for example by refraining from interrupting. Prior to the pandemic, home-to-work interruptions typically took the form of taking (or ignoring) a call from home while in the office. But in full-time teleworking circumstances, children, spouses, and cohabitants can physically invade the workspace and demand attention. Furthermore, with employees working in the home, employees and their cohabitants alike might struggle to recognize a difference between work hours and leisure hours.

Both pre- and during-COVID-19, empirical researchers have suggested an increase in work/home integration stemming from telework. Teleworkers have reported more scheduling flexibility than office workers (Hill et al., 1996), as well as more interdomain transitions when working from home compared to the office (Delanoeije et al., 2019), both of which indicate higher integration. Evidence from the pandemic has overwhelmingly supported the phenomenon of increased work hours when transitioning to full-time working from home (e.g., ILO, 2021), which has also been linked with increased work/home integration (Desrochers et al., 2005). Furthermore, given the newness of working from home to those forced to abruptly switch to telework due to the pandemic, it is likely that new teleworkers have not yet established firm boundaries and that cohabitants have not yet learned to respect attempts at boundary enactment, making an increase in work/home integration particularly likely.

Hypothesis 1: On average, teleworkers' during-telework work/home boundary will be more integrated than their pre-telework work/home boundary.

3.2 Teleworker Well-Being as a Function of the Work/Home Boundary

3.2.1 Change in the Work/Home Boundary

Empirical work is lacking, if not nonexistent, that directly measures how a change in the work/home boundary influences well-being (Hernandez, 2020). In one near exception, Harris (2003) conducted a case study of office workers that were forced to switch to full-time telework. The participants reported many ill effects from doing so, such as work intensification, longer hours, feeling always attached to work, and a blurring between work and home boundaries. Curiously, despite their myriad complaints, most reported not wanting to return to the office. However, this study did not quantify a relationship between the variables relevant to the work/home boundary and these employee outcomes. Another study in which participants involuntarily switched to telework – but part-time telework, not full-time – also found ill effects, wherein more telework associated with higher strain-based work-family conflict (LaPierre et al., 2016). Research into associations found with voluntarily switching to part-time telework have generally found better employee outcomes, such as better work-life balance (Tietze & Nadin, 2011; Collins et al., 2013). The subjects of these studies generally wanted to engage in telework to obtain the greater work/home flexibility implicit in teleworking arrangements. Consequently, I evaluate the role of work/home integration preferences in a subsequent section. For the current dissertation, though, the sample of interest encompasses employees who were forced into telework due to the COVID-19 pandemic, rather than a potentially range-restricted subsample who opted into telework.

Looking to theory, boundary theory contends that those who enact more segmentation between work and home tend to have worse inter-role conflict between their work and home roles (Ashforth et al., 2011). Given that full-time telework is expected to increase work/home integration (Kniffin et al., 2020), employees who previously enacted a more segmented work/home boundary will likely suffer from worse inter-role conflict. New teleworkers likely

have not yet established clear boundaries with cohabitants nor personal habits to facilitate inter-domain transitions, making cross-domain interruptions more frequent and distressing. Theories of recovery also dictate that increased integration will remove opportunities for recovery, for example by reducing the amount of time away from work (Meijman & Mulder, 1998), with poor implications for well-being outcomes. COR theory further contends that unexpected and traumatic events, such as a worldwide pandemic, can result in particularly rapid loss of resources (Hobfoll, 1991). Therefore, I expect that those who experienced a bigger change in their level of work/home integration due to full-time telework during COVID-19 will experience worse well-being from day-to-day.

Hypothesis 2: A greater disparity between pre- and during-telework work/home integration levels will associate with worse daily well-being.

3.2.2 The Mental Work/Home Boundary

In addition to the spatial, temporal, and behavioral characteristics of the work/home boundary captured in work/home integration level, "mental fences" exist within individuals too (Zerubavel, 1991, p. 2). Work-related rumination is the act of continuing to think about work after work (Cropley & Zijlstra, 2011) and represents the extent to which an employee fails to psychologically detach from work at the end of the day. The argument for a link from more work/home integration to impaired well-being through elevated work-related rumination is straightforward: by definition, more overlap between the work and home domains as well as more transitions between the two should associate with more inter-domain thoughts and less psychological detachment (Junker et al., 2020). In turn, less mental detachment from work results in less opportunities for recovery (Meijman & Mulder, 1989) and thereby impaired well-being (Sonnentag & Fritz, 2015). To my knowledge, no study has examined affective rumination

and problem-solving pondering in the context of full-time telework, but empirical support does exist for behaviors associated with more segmentation predicting more psychological detachment (Ziedelis et al., 2021; Tedone, 2022) and in turn better well-being (Tedone, 2022).

However, the focus of this dissertation is *change* in the work/home boundary, not enactment strategy alone. Because pre-telework habits like working in a separate building facilitate disconnect from work (Ashforth et al., 2000), the switch to full-time telework may make employees particularly susceptible to work-related rumination. Those employees experiencing more disruption in their work/home boundary may find this switch more traumatic, which could exacerbate resource loss (Hobfoll, 1991) and potentially hinder employees' abilities to psychologically detach from and resist ruminating about work. Because less psychological detachment and more work-related rumination are linked to impaired well-being (Weigelt et al., 2019; Sonnentag & Fritz, 2015), I suggest psychological detachment and work-related rumination as linking mechanisms from a change in work/home integration to daily well-being.

A case study of employees who voluntarily versus mandatorily switched to full-time telework provides some insight into *why* changes in the work/home boundary influenced well-being outcomes. A common complaint among employees who were forced into full-time telework was the blurring between work and home domains, a phenomenon that they were not used to and caused some to complain "I feel I am always at work" and "[Before telework, my family] knew when I was home that my time was for them and that I had switched off, now it is confusing" (Harris, 2003, p. 13). Therefore, a greater change in new full-time teleworkers' work/home boundary likely results in worse mental overlap, and in turn worse well-being outcomes. Because psychological detachment and the two types of work-related rumination, affective rumination and problem-solving pondering, have been found to differentially relate to

both boundary management (e.g., Kinnunen et al., 2016; Minnen et al., 2020) and employee well-being (e.g., Weigelt et al., 2019; Minnen et al., 2020), I will investigate these factors as distinct variables. The model corresponding to Hypotheses 3-5 is displayed in Figure 1.

Hypotheses 3a-c: A greater disparity between pre- and during-telework levels of work/home integration will predict (a) less daily psychological detachment, (b) more daily affective rumination, and (c) more daily problem-solving pondering.

Hypotheses 4a-c: (a) Less daily psychological detachment, (b) more daily affective rumination, and (c) more daily problem-solving pondering will predict worse daily well-being.

Hypotheses 5a-c: A greater disparity between pre- and during-telework levels of work/home integration will predict worse daily well-being through (a) less daily psychological detachment, (b) more daily affective rumination, and (c) more daily problem-solving pondering.

3.2.3 Work/Home Boundary Preference

In contrast to the largely negative outcomes reported in the limited empirical findings on employees forced to switch to telework, *voluntarily* switching to telework generally predicted better outcomes. Two samples of working women who gave up career aspirations in favor of flexibility showed mostly positive outcomes (Tietze & Nadin, 2011; Collins et al., 2013). The women in these two studies rearranged their work schedules around their kids, felt like they were better mothers, and reported work-life balance improvements. In a direct comparison of employees electing versus being mandated to telework (albeit not full-time), Kaduk et al. (2019) found telework to associate with higher emotional exhaustion in those involuntarily teleworking compared to those doing so by choice. These findings suggest that employees' *preferences* with

respect to telework play a significant role in determining how telework influences their well-being.

These findings align with prior research indicating better outcomes for individuals who employ a boundary management strategy that more closely matches their preferred degree of work/home integration (Kreiner, 2006). However, the results pertaining to studies on mandated teleworkers have been inconsistent, ranging from no effect of segmentation preference on domain satisfaction and work-home conflict (Kerman et al., 2021; Ziedelis et al., 2021) to a beneficial impact of preference for segmentation on work-life balance (Allen et al., 2021) to a beneficial impact of preference for *integration* on work-family conflict (Vaziri et al., 2020). That said, none of these studies analyzed the *fit* between segmentation preference and enactment on outcomes, instead looking at moderating or direct effects. Thus, I expect that a closer fit between a new teleworker's enacted and preferred work/home boundary will relate to better daily well-being.

Hypothesis 6: A closer match between preferred and current (i.e., during telework) work/home integration levels will associate with better daily well-being.

To my knowledge, no study has examined the fit between boundary management strategy and preference in relation to work-related rumination or psychological detachment. Based on the reports of full-time teleworkers in the aforementioned case studies, those who wanted more integration seemed to obtain it and appreciate it (e.g., Tietze & Nadin, 2011), but those reports fail to capture the role of work-related rumination in this appreciation. There is limited quantitative work examining the impact of segmentation preference on psychological detachment, but these studies test segmentation preference alone – not in congruence to enactment. Scientists found that a preference for segmentation predicted more psychological

detachment (Tang et al., 2018; Hahn & Dormann; 2013; Park et al., 2011), albeit not in samples of teleworkers. In a COVID-19 study, segmentation preference did not associate with psychological detachment (Ziedelis et al., 2021). However, these tests are likely fundamentally different from one measuring the impact of *congruence* between enactment and preference based on the nuanced investigation performed by Tang et al. (2018). Tang and colleagues found that segmentation preference predicted psychological detachment only in employees who had high control over their work/home boundary and through actual boundary enactment. In other words, it appears that the enactment of work/home segmentation predicts psychological detachment, moreso than preference for segmentation. Park et al. (2011) made the same conclusion when they found that the link between segmentation preference and psychological detachment was partially mediated by segmentation enactment.

Therefore, these prior empirical investigations may fundamentally differ from those measuring the impact of *fit* between preference and enactment on psychological detachment, in that they effectively measured the impact of boundary enactment. The current dissertation's sample of newly teleworking employees adds an additional layer of complexity in that the participants may not have established their desired work/home boundary components yet, such as setting communication rules with cohabitants or setting up a designated work space. Therefore, these new teleworkers are likely not yet enacting their preferred boundary management strategy. Thus, the link between congruence in segmentation enactment and preference and work-related rumination remains unclear for the current context. As a result, I leave investigations of the relationships between enactment-preference congruence, work-related rumination, and well-being as research questions. The model corresponding to Research Questions 1-2 is displayed in Figure 2.

Research Question 1a-c: Does a greater disparity between preferred and current (i.e., during telework) levels of work/home integration predict (a) daily psychological detachment, (b) daily affective rumination, and (c) daily problem-solving pondering?

Research Question 2a-c: Does a greater disparity between preferred and current (i.e., during telework) levels of work/home integration predict daily well-being through (a) daily psychological detachment, (b) daily affective rumination, and (c) daily problem-solving pondering?

3.3 Study Overview

In response to a call for more organizational research on employee well-being in crisis events (Eby et al., 2015; Bundy et al., 2017), the current dissertation examines how changes in the work/home boundary influence the well-being of new full-time teleworkers. Using boundary theory and recovery theories as guiding frameworks, I hypothesize that a greater change in the work/home boundary predicts worse well-being for new full-time teleworkers, with work-related rumination and a lack of psychological detachment explaining this relationship. Recognizing that particular individuals may benefit from a switch to telework, I also suggest that a closer fit between one's preferred and enacted boundary management strategy will associate with better daily well-being.

With much of the workforce still working from home full-time and likely to continue doing so (Charlton, 2021), this dissertation aims to improve clarity regarding how full-time and involuntary telework impacts employees. My findings shed light on how employees may better navigate their new work/home landscape when switching to full-time telework in a crisis, as well as how organizations and managers may be able to protect their employees' well-being. Pandemics may become more frequent in the future (Montanari, 2020), and so understanding

how crises, changes in employees' work and home situations, and full-time telework influence individuals' well-being is important.

To address gaps in research pertaining to full-time and involuntary teleworkers, as well as the impact on well-being, I make a multipronged investigation into how changes in employees' work/home boundary under full-time telework conditions relate to their daily well-being. First, I examine whether the discrepancy between one's boundary management strategy prior to versus while teleworking predicts their daily well-being. This investigation presents a rare opportunity to explore what happens when an employee suddenly and abruptly transitions to telework. Second, I test (a lack of) psychological detachment and work-related rumination as mechanisms explaining the link from alignment between pre- and during-telework levels of work/home integration to daily well-being. This analysis is akin to testing one's *mental* work/home boundary as a linking mechanism from change in work/home integration to well-being. Third, I test the role of work/home boundary preference in shaping well-being by testing whether the match between one's preferred and current (i.e., during-telework) boundary management strategy relates to daily well-being. As detailed further in the Analytic Approach section below, I use MRSA to test my hypotheses in a nuanced way.

Deviating from other studies of boundary management and telework that have largely focused on work-family conflict outcomes (Gajendran & Harris, 2007), this dissertation highlights the impact on well-being more generally. Prior empirical work has failed to agree on how telework influences well-being (Oakman et al., 2020), an important shortcoming given the expanded sect of the teleworking workforce (Gallup, 2020). To evaluate well-being, I measure physical fatigue, vigor, negative affect, and positive affect, which comprise physiological, motivational, and affective components reflective of general well-being (Minnen et al., 2020). To

capture daily fluctuations, I measure these constructs at bedtime when the employee has navigated a full day of home and work duties and to account for the possibility of working into the evening. I collected the data for this dissertation in the U.S. when the pandemic was relatively new – in April and May, 2020, soon after most states enacted stay-at-home orders (Secon, 2020).

4 Method

4.1 Procedure

The sample consisted of inexperienced full-time teleworkers (see inclusion criteria in Table 1) who were working from home due to the pandemic. To be eligible to participate, participants were required to be (1) at least 18 years old, (2) working and residing in the United States, (3) working full-time (at least 32 hours per week) in a paid employment position, (4) primarily working outside the home Monday – Friday prior to the COVID-19 outbreak, and (5) currently working exclusively from home because of the COVID-19 outbreak. All data were collected between April and May 2020, when stay-at-home orders were in effect in most states in the U.S. (Secon, 2020).

The sample of teleworking employees were recruited through my personal and professional networks, social media announcements, and word of mouth. Interested participants indicated their interest over email, at which point I responded with further details about the study. Specifically, I sent an email reply with information about the study's purpose (i.e., that the study pertained to teleworking habits in relation to recovery and well-being), general procedure, compensation details, and eligibility criteria. This email also contained the hyperlink to an online *opt-in survey*, which was required to be completed to enroll in the study.

The opt-in survey was a 30-minute online survey that began with an informed consent document and, subsequently, inclusion criteria screening questions. Participants who either declined to provide informed consent or did not meet the inclusion criteria were thanked for their time but did not progress further in the opt-in survey. Consenting and eligible participants continued to answer questions in the survey pertaining to demographic information; select statistical control measures; and the predictors of interest, namely one's level of work/home integration prior to teleworking, level of work/home integration currently while teleworking, and preferred level of work/home integration. These measures are described further in the Measures section.

The opt-in survey also contained four attention check items for quality control purposes (Bennet et al., 2016). These items asked participants to mark the requested response (e.g., "Please select 'Occasionally' for this question") and thus served as markers of whether the participant was taking the survey seriously. Participants who failed to select the requested response for more than one attention check item were dismissed from the study by being routed to a screen informing them that their responses had rendered them ineligible for the study.

Participants who successfully completed the opt-in survey were then invited to participate in the daily survey portion of the study. After receiving a study reminder (via email) on the Sunday following completion of the opt-in survey, participants received links to the 10-minute daily surveys each day Monday-Friday of the following work week. More specifically, every weekday morning at 6 a.m. for one work week, participants received a link to a *morning survey*, along with the instruction to complete the survey within 30 minutes of waking. The morning survey contained measures of well-being (i.e., pre-work morning fatigue, vigor, positive affect, and negative affect), but measures from the morning survey were not included in the scope of

this dissertation[1]. Every weekday evening at 9 p.m., participants received a link to a *bedtime survey*, with the instruction to complete this survey within 30 minutes of going to bed. The bedtime survey contained measures of the outcomes of interest, namely one's current during-telework level of well-being in terms of fatigue and vigor; as well as the mechanisms of interest, namely post-work psychological detachment, affective rumination, and problem-solving pondering. This survey also contained a measure of work demands for statistical control purposes.

All surveys were hosted on the Qualtrics survey platform, a popular website for delivering self-report questionnaires in the social sciences. Additionally, participants could request that the daily surveys be sent at alternate times to better fit their wake/sleep schedule. At the conclusion of the daily survey period, participants were compensated based on the level of their survey completion: $10 for the opt-in survey and $10 per day they completed both daily surveys, for up to $60 total.

4.2 Sample and Power Analysis

In total, 108 people indicated interest in the study and were sent the opt-in survey. Ninety-five people submitted the opt-in survey and were invited to participate in the daily survey period. Of these 95 participants, 14 people were omitted from data analysis for the following reasons: (1) providing opt-in survey responses that suggested violation of at least one inclusion criteria (e.g., listing typical weekly work hours as less than 32; $n = 9$) or (2) completing fewer than 70% of daily surveys compliant with the data recording protocol (e.g., completing the bedtime survey in the morning; see Fisher & To, 2012; $n = 5$). Thus, 81 participants ($N = 81$)

[1] This dissertation was part of a larger data collection effort that focused on both pre-work and post-work experiences that could change in response to an abrupt, unplanned move to full-time telework.

comprised the final sample, who completed daily surveys on 374 out of 405 study days (n = 374, 92.3% study day response rate).

Of the 81 participants, 63.0% were female and 25.9% were married (the remaining were never married [71.6%] or divorced [2.5%]). The sample was made up of relatively young workers, with an average age of 29.4 years old (SD = 7.0). Four participants (4.9%) were parents, with only two of those participants having their children living in the home (2.5%). That said, in response to the question "Do you consider yourself the primary caregiver for anyone in your household?" roughly one fifth of the sample (18.5%) reported being a primary caregiver for someone in the household.

Participants primarily were employed in knowledge work jobs. For example, nearly a third of participants worked in research, data analysis, or engineering (29.6%), nearly a fifth in business operations (17.3%), and roughly a tenth in the technology sector (11.1%). The remaining participants worked in a variety of white-collar jobs, including in K-12 education (8.6%), healthcare, social work, and community work (9.9%), communications and marketing (6.2%), law (2.5%), and arts, fashion, and entertainment (4.9%). One participant held a blue-collar job in manufacturing (1.2%), and the remaining did not provide this occupational information (8.6%). The average participant had not been with their organization long, with an average organizational tenure of 2.8 years (SD = 3.2) and only four participants (4.9%) spending more than five years in their current organization. The majority of participants (61.7%) had no supervisory function in their job. Participants largely reported working a 40-hour workweek; overall, participants reported spending an average of 42.2 hours working per week (SD = 6.4), which is similar to how long they reported working per week prior to COVID-19 (M = 43.8

hours, *SD* = 6.9). About half of participants (51.9%) said they spent exactly 40 hours working per week.

A post-hoc power analysis was performed to determine the power to detect a medium effect size (r = .30; Cohen, 1992) given my sample size of 81 participants. To obtain a power estimate for the MRSA context, I computed the power for the interaction term to obtain a lower boundary for the power estimate. I used the InteractionPowerR package in RStudio 2021.09.0 and ran 10,000 simulations of data sets at an alpha of .05. A sample size of 81 participants produced a power of .815 to detect a medium effect size for the interaction term that is used in the computation of tests statistics in the MRSA approach.

4.3 Measures

4.3.1 Work/Home Integration: Pre-Telework Level

An employee's work/home integration level prior to teleworking in the COVID-19 pandemic was measured in the opt-in survey using the Work-Family Integration-Blurring Scale (WFIBS; Desrochers et al., 2005). This scale was created to measure employees' perceptions of how integrated their work and family domains are, which is a primary goal of this dissertation. In line with this dissertation's theoretical framework, the scale was devised and tested for construct validity using boundary theory (Ashforth et al., 2000), along with work-family border theory (Clark, 2000). The scale moderately-to-highly correlated with expected constructs based on these theoretical frameworks, like number of hours worked at home (spent reading, r = .50, p < .01; spent on the computer, r = .27, p < .01), work-family transitions (r = .42, p < .01), and boundary violations (r = .21, p < .05), suggesting construct validity.

The WFIBS contains three items that examine the overlap of work and family life, responsibilities, and roles: "It is often difficult to tell where my work life ends and my family life

begins," "I tend to integrate my work and family duties," and "In my life, there is a clear boundary between my career and my family/personal life" (reverse scored). To capture employees' pre-telework level of work/home integration, participants were asked to "Please indicate how much you agree with each statement **prior to** beginning telework in response to COVID-19." Participants answered on a 6-point Likert-type scale ranging from "Strongly disagree" to "Strongly agree." The WFIBS was administered in the opt-in survey, with participants filling it out in relation to their typical experiences prior to when they began teleworking in response to COVID-19. The original validation study for the scale produced an acceptable internal consistency estimate, with a reported α of .73 (Desrochers et al., 2005). The dissertation sample had a similar internal consistency of α = .72.

4.3.2 Work/Home Integration: Current During-Telework Level

For the sake of consistency, I administered the WFIBS to also measure one's current during-telework level of work/home integration; in other words, the level of work/home integration while full-time teleworking during the COVID-19 pandemic. Doing so also enables a more direct assessment of fit between pre- and during-telework work/home integration, given the similarity in the measurement approach taken to assess the pre- and during-COVID reports of work/home integration. In the opt-in survey, the participants answered the same three items, just modified to be in the present rather than past tense, and also on the same 6-point Likert-type scale (from "Strongly disagree" to "Strongly agree"). The prompt they received was: "Please indicate how much you agree with each statement since beginning telework in response to COVID-19." The internal consistency estimate for this administration of the scale was α = .85.

4.3.3 Work/Home Integration: Preferred Level

Integration preference was measured in the opt-in survey using Kreiner's (2006) Workplace Segmentation Preferences Scale. This scale was developed to assess the extent to which employees desire a workplace that keeps their work and home domains separate. The scale contains four items, with an example item being "I don't like to have to think about work when I'm at home." Participants were asked to indicate their "agreement or disagreement with each item in general (not how you feel today, but how you usually feel about each item)." The scale was rated using a 6-point Likert-type scale ranging from "Strongly disagree" to "Strongly agree." The original scale indicated high internal consistency, with a reported α estimate of .91; the current sample also produced an internal consistency of α = .91. This scale has been heavily used in studies pertaining to boundary theory and the impact of boundary management strategies on employee outcomes, especially work-family conflict (e.g., Yang et al., 2019). To provide consistency with the other measures of work/home integration (rather than segmentation), I reverse coded all responses to reflect work/home *integration* preference.

4.3.4 Employee Well-Being: Physical Fatigue

Physical fatigue was measured in the bedtime survey using the physical fatigue subscale of the Three-Dimensional Work Fatigue Inventory (3D-WFI; Frone & Tidwell, 2015). This construct was chosen as a reflection of the physiological component of general well-being (Minnen et al., 2020), as it was developed to capture the "physical tiredness and reduced capacity to engage in physical activity" that employees experience as a result of the workday (Frone & Tidwell, 2015, p. 274). Thus, this scale demonstrates relevance to the current dissertation in its focus on fatigue stemming specifically from the workday. Furthermore, its inception was based in large part on COR theory and in acknowledgement that the workday can continue to be fatiguing even after coming home, thus making the context of work-induced fatigue more

appropriate to the current dissertation than a scale focusing solely on fatigue from the physical workplace.

The original scale instructions told participants to report their feelings of fatigue over the past 12 months, but in the current dissertation, participants were asked to report their physical fatigue at the state level using adapted items. I administered four of the original six subscale items that were adaptable to the current moment with the prompt: "Using the scale below, please indicate the extent to which you are experiencing each of the following **RIGHT NOW**." A sample item is "I feel physically exhausted," and participants rated items on a 5-point Likert-type scale ranging from "Not at all" to "Very much." The original validation study reported an internal consistency of $\alpha = .94$. Across the 5-day survey period, I found an average internal consistency of $\alpha = .93$ ($\alpha_{min} = .893$, $\alpha_{max} = .946$).

4.3.5 Employee Well-Being: Vigor

Vigor was measured in the bedtime survey using the vigor subscale of the shortened Utrecht Work Engagement Scale (UWES-9; Schaufeli et al., 2006). The UWES has been validated, translated, and used worldwide and is the most widely used measure of work engagement (Bakker et al., 2008). As with the 3D-WFI, I chose this measure in part due to its relevance to the workday, as work engagement reflects "a positive work-related state of fulfillment" (Schaufeli et al., 2006, p. 701). Furthermore, as the positive antipode to burnout, this construct is relevant to the current dissertation's COVID-19 context that was characterized by unusually high levels of burnout (Parmar, 2021). The vigor subscale was chosen to reflect the motivational component of general well-being (Minnen et al., 2020), given that it captures an employee's willingness and ability to persevere with work and resource investment.

I administered the three-item version of the vigor subscale that is in the UWES-9. To adapt the original person-level items to pertain to the current moment, I gave participants the following prompt: "Using the scale below, please indicate the extent to which you are experiencing each of the following **RIGHT NOW**." A sample item is "I feel strong and vigorous." Participants completed this measure at the state level, rating items on a 5-point Likert-type scale ranging from "Not at all" to "Very much." A multi-country validation study of the UWES-9 produced a median internal consistency of $\alpha = .77$ for the vigor subscale (Schaufeli et al., 2006). I found an average internal consistency of $\alpha = .63$ ($\alpha_{min} = .472$, $\alpha_{max} = .744$).

4.3.6 Employee Well-Being: Affect

Negative and positive affect were measured in the bedtime survey using the circumplex emotion scale (Barrett & Russell, 1998). This scale was chosen to reflect the affective component of general well-being (Minnen et al., 2020). Further aligning with the intention of the scale in this dissertation, the circumplex emotion scale was developed to capture one's affect at the current moment (Barrett & Russell, 1998). The circumplex emotion scale contains 16 items and captures affect at the daily level. Participants were prompted with "Using the scale below, please indicate the extent that you are feeling each of the following **RIGHT NOW**," with a sample item being "Sad." Items were rated on a 5-point Likert-type scale ranging from "Not at all" to "Extremely." The negative and positive affect subscales were evaluated using the respective eight unpleasant and pleasant items in the overall scale. The current sample produced average internal consistencies for negative and positive affect of $\alpha = .82$ ($\alpha_{min} = .771$, $\alpha_{max} = .847$) and $\alpha = .89$ ($\alpha_{min} = .867$, $\alpha_{max} = .903$), respectively[2].

4.3.7 Psychological Detachment

[2] The original validation paper does not present internal consistency estimates

Employees' post-work psychological detachment was measured in the bedtime survey using the psychological detachment subscale from the Recovery Experiences Questionnaire (REQ; Sonnentag & Fritz, 2007). The REQ is a widely used measure of work recovery and has been the subject of multiple reviews and meta-analyses (e.g., Headrick et al., 2022). This focus on specifically post-work recovery makes this scale align well with the measures of vigor and physical fatigue, which similarly highlight the contribution of the workday to well-being outcomes. The subscale contains 4 items, which were adapted for the current dissertation to pertain to the daily level (specifically, to "During time after work tonight"). A sample item is "I forgot about work." Participants rated items on a 6-point Likert-type scale ranging from "Strongly disagree" to "Strongly agree." The internal consistency estimate of the subscale reported in the original validation study was $\alpha = .85$ (Sonnentag & Fritz, 2007); in the current dissertation, I found an average internal consistency of $\alpha = .91$ ($\alpha_{min} = .890$, $\alpha_{max} = .928$).

4.3.8 Work-Related Rumination

The affective rumination and problem-solving pondering components of work-related rumination were measured in the bedtime survey using the Work-Related Rumination Scale (Cropley et al., 2012). The work-related rumination scale has been shown to predict constructs relevant to the current dissertation, especially fatigue (e.g., Minnen et al., 2020) and vigor (e.g., Weigelt et al., 2019). The affective rumination and problem-solving pondering subscales have 5 items each, with example items from the respective subscales being "I was irritated by work issues" and "I found solutions to work-related problems in my free time" after adapting them to the post-work daily level. Items were rated on a 6-point Likert-type scale ranging from "Strongly disagree" to "Strongly agree." I found an average internal consistency of $\alpha = .93$ ($\alpha_{min} = .907$,

α_{max} = .959) for affective rumination and α =.84 (α_{min} = .781, α_{max} = .881) for problem-solving pondering[3].

4.3.9 Statistical Control Variables

Participants completed Rodell and Judge's (2009) hindrance stressors scale in the bedtime survey to control for the varying amounts of work demands faced each workday. Hindrance stressors are work-induced demands that promote distress rather than eustress, and as such they typically prevent employees from reaching goals and attaining personal growth (LePine et al., 2005). Hindrance stressors in particular have been associated with negative employee outcomes, such as strain and reduced motivation (see LePine et al., 2005, for a meta-analytic review). Employees filled out this eight-item scale, rating daily-level hindrance stressors with the prompt "Today in my work." A sample item is "I had to go through a lot of red tape to get my job done," rated on a 6-point Likert-type scale ranging from "Strongly disagree" to "Strongly agree." The internal consistency of the scale estimated in Rodell and Judge (2009) was α = .83; I estimated an average internal consistency of α = .82 (α_{min} = .781, α_{max} = .853) in this dissertation.

Participants' gender and marital status were also included as statistical controls. A meta-analysis found that women tend to ruminate more than men across multiple types of rumination (Johnson & Whisman, 2013). Marital status has also been shown to co-vary with work-related rumination, wherein Cropley et al. (2006) found that being married was associated with less work-related rumination before bedtime. Additionally, women also tend to handle more household responsibilities than men (Zhao et al., 2011), which could create a discrepancy in male versus females' well-being at night. Married teleworkers may differ in their well-being

[3] The original validation paper does not present internal consistency estimates

relative to single teleworkers as a result of the social support that they receive from their spouse, which may help combat feelings of isolation that can be detrimental to full-time teleworker well-being (Hickman, 2009).

4.4 Analytic Approach

The majority of hypotheses were evaluated using MRSA, as explained subsequently. Hypothesis 1, which proposed that the work/home boundary would be more integrated while teleworking than prior to telework, was tested using a paired samples *t*-test, computed in SPSS Version 28. Hypothesis 4, in which I expected that less psychological detachment and more work-related rumination would predict worse daily well-being, was tested by running a multilevel path analysis with Bayes estimation in Mplus Version 8.4 (Muthén & Muthén, 2017). Statistical significance was evaluated using the 95% credible interval (i.e., a 95% credible interval that does not contain zero), in agreement with the approach taken below.

I tested the remaining hypotheses by adapting the MRSA approach of Nestler et al. (2019), which sets the foundation for applying RSA to multilevel data. RSA enables researchers to examine how the congruence and discrepancy between two predictor variables relate to a criterion variable. This method gives deeper insight into this complex relationship than either difference scores or moderated regression by offering a three-dimensional view of the relationship and breaking down which predictor components contribute to the criterion (Shanock et al., 2010).

I adapted Nestler et al.'s (2019) core approach that focuses on situations in which the predictors are at Level 1 to the current dissertation's context, in which predictor variables are at Level 2. I followed these authors' recommendations to grand-mean center the predictors, estimate within-person variance in the criterion at Level 1, and then I entered the Level 2

polynomial terms as predictors of the random intercept of the criterion variable at the between-person level. I computed these analyses in Mplus Version 8.4 (Muthén & Muthén, 2017).

In line with Nestler et al.'s (2019) approach, focal predictors, their squared terms, and their interaction term were entered as predictors of the criterion. In cases where multiple constructs comprise the criterion (e.g., the physiological, motivational, and affective components of employee daily well-being), each construct was entered as a single criterion variable in separate models to render joint effects terms interpretable in an RSA framework (Edwards & Cable, 2009). For example, in the test of Hypothesis 2, which states that a greater disparity between pre- and during-telework work/home integration levels will associate with worse daily well-being, pre-telework work/home integration level and during-telework work/home integration level are the focal predictors. Thus, these two variables, their squared terms, and their interaction were entered as predictors into four separate models: one each for nightly physical fatigue, vigor, negative affect, and positive affect as the criterion variable.

Four *surface parameters* were then computed from the coefficients of the polynomial regression results: the congruence slope, congruence curvature, incongruence slope, and incongruence curvature (see Shanock et al., 2010). The surface parameters define the three-dimensional shape of the relationship between the predictors and criterion (i.e., the *response surface*) and represent how different combinations of the two focal predictors relate to the criterion. The incongruence curvature, which tests the effect of discrepancy on a criterion, is the crux of this dissertation's hypotheses, as explained in more detail below. Even so, all four parameters are computed as part of each MRSA and provide insight into how the nature of one's work/home boundary influences their well-being. So, I report and interpret all four surface parameters in my results.

The *congruence slope* tests whether the congruence between the two focal predictor variables influences the criterion variable. A statistically significant and positive congruence slope indicates that higher levels of *both* predictors associate with a higher value of the criterion; a statistically significant and negative congruence slope indicates that higher levels of both predictors associate with a lower value of the criterion. A statistically significant and negative congruence slope in the context of testing the relationship from pre- and during-telework work/home integration to well-being would signify that higher levels of both pre- and during-telework work/home integration co-vary with lower well-being.

The *congruence curvature* indicates whether the relationship from the two focal predictors to the criterion variable is linear. If this value is statistically significant, then there is curvature in this relationship. A positive value indicates that the criterion is higher when the two predictors are higher, as well as when they are lower. A statistically significant and positive congruence slope in the context of testing the relationship from pre- and during-telework work/home integration to well-being would suggest that well-being is higher in employees with higher integration and in employees with higher segmentation. If the congruence curvature is not statistically significant, then the relationship from the two focal predictors to the criterion is linear.

The *incongruence slope* examines whether a disparity in a particular direction, meaning when a particular predictor is greater than the other, influences the criterion. In the case of a statistically significant incongruence slope, the sign of incongruence slope indicates whether the outcome is higher or lower when the first predictor is greater than the second. As an example, a statistically significant and positive incongruence slope would indicate that well-being is high when current work/home integration is higher than pre-telework work/home integration.

The *incongruence curvature* quantifies whether a disparity between the two focal predictors influences the criterion (Shanock et al., 2010). A statistically significant value indicates that disparity between the predictors relates to the criterion. A negative value means that a greater disparity relates to a lower value of the criterion variable. For example, a statistically significant and negative incongruence curvature would signify that the change in work/home integration level from pre- to during-telework relates to lower daily well-being.

To test my hypotheses, I specifically evaluated the incongruence curvature surface parameter. For positive facets of well-being (i.e., positive affect and vigor), Hypothesis 2 expects a negative incongruence curvature, indicating that as the disparity grows, positive well-being decreases. For negative reflections of well-being (i.e., negative affect and physical fatigue), Hypothesis 2 expects a positive incongruence curvature, representing that a greater change relates to more negative well-being. Similarly, Hypothesis 6 expects that a closer match between preferred and current (i.e., during telework) integration will associate with better well-being; in other words, that a larger disparity will relate to worse well-being.

Hypotheses 5a-c and Research Question 2 offer mechanistic explanations for the proposed work/home boundary-to-well-being relationships. To test psychological detachment and work-related rumination as mechanisms in a MRSA framework, I used Fan and Han's (2018) methodology for testing indirect effects in the RSA context, extending this approach to multilevel data. Specifically, I created block variables from the raw data to obtain single-variable representations of each surface parameter. Each block variable was entered into a multilevel indirect effects analysis as the predictor variable. Following Fan and Han's example in which they computed separate models per predictor, mediator, and criterion variable, I computed 48 indirect effect models to examine Hypotheses 5a-c: 4 predictor block variables (congruence

slope, congruence curvature, incongruence curvature, incongruence slope) x 3 mediator variables (psychological detachment, affective rumination, problem-solving pondering) x 4 criterion variables (physical fatigue, vigor, positive affect, negative affect). The 12 models with incongruence curvature as the predictor reflect the tests of Hypotheses 5a-c; the remaining 36 models were performed as supplemental analyses to observe how combinations of a different nature of pre- and during-telework integration (e.g., high integration both prior to and while teleworking) predict well-being through work-related rumination. I computed another 48 indirect effects models to explore Research Question 2, where again the 12 models corresponding to the incongruence curvature predictor are direct examinations of Research Question 2, and the other 36 illustrate whether other combinations of preferred and current (i.e., during-telework) integration (e.g., higher integration currently than preferred) relate to well-being through work-related rumination for exploratory purposes.

I used the Bayes estimator when estimating all models, whose use of prior information related to variable distribution and lack of dependence on specific point estimates avoids issues of variance underestimation seen in maximum likelihood estimation with smaller samples (Heck & Thomas, 2015). Furthermore, Bayesian estimation better accounts for uncertainty and is more likely to produce model convergence than maximum likelihood estimation in models with random coefficients (Heck & Thomas, 2015; Asparouhov & Muthen, 2020), as is the case in the hypothesized indirect effect models.

For these indirect effect tests, I used the Monte Carlo method of Preacher and Selig (2012), which applies to multilevel contexts, takes into account covariances, and retains statistical power relative to other methods to evaluate the statistical significance of the indirect

effect coefficients. I inferred statistical significance of the indirect effects from the 95% credible interval (i.e., a 95% credible interval that does not contain zero).

5 Results

5.1 Change in Work/Home Integration

To test Hypothesis 1, I evaluated the degree and direction of change in work-life integration from pre- to during-telework. Participants reported more segmented work and home roles pre-telework (M = 2.63 on a 6-point scale; 1 [*strongly disagree*] to 6 [*strongly agree*], SD = 1.10) compared to while teleworking (M = 3.44 on the same 6-point scale; SD = 1.29). This difference was statistically significant (t = 5.74, p < .01; d = 0.67), supporting Hypothesis 1.

Hypotheses 2-5 focused on the inter-relationships between the change in the work/home boundary from pre- to during-telework, work-related rumination, and well-being. Hypothesis 2 stated that a greater change in integration level between pre-telework and current teleworking circumstances would correlate with worse well-being. The polynomial regression results for this hypothesis, including all surface parameters, are displayed in Table 3. The four response surfaces corresponding to the relationship between change in integration and the four facets of well-being are shown in Figure 3. Hypothesis 2 was not supported, as I did not find evidence for a direct association of the incongruence curvature with either of the four facets of well-being (physical fatigue [*Est.* = -.017(.169), 95% C.I.: = (-.338, .237)], negative affect [*Est.* = -.109(.113), 95% C.I. = (-.341, .102)], positive affect [*Est.* = -.057(.126), 95% C.I. = (-.292, .194)], and vigor [*Est.* = -.115(.115), 95% C.I. = (-.333, .096)], which together constitute the measures of physical, emotional, and cognitive well-being included in this dissertation). That said, I did find relationships from the congruence slope to physical fatigue (*Est.* = .257(.099), 95% C.I. = (.045, .477)) and negative affect (*Est.* = .157(.067), 95% C.I. = (.015, .293)), which indicates that the

continuation of a highly integrated work/home interface from pre- to during-telework associated with worse well-being. I also observed an association between during-telework integration and negative affect (*Est.* = .110(.052), 95% C.I. = (.013, .221)).

Hypothesis 3, which pertained to the association between the change in pre- to during-telework integration level with work-related rumination, was also not supported. These results are displayed in Table 4, and the response surfaces are shown in Figure 4. There was no evidence for the relationship between the incongruence curvature and affective rumination (*Est.* = .006(.193), 95% C.I. = (-.415, .362)), problem-solving pondering (*Est.* = -.211(.165), 95% C.I. = (-.570, .098)), and psychological detachment (*Est.* = .021(.206), 95% C.I. = (-.380, .370)). However, I did find that the congruence slope predicted affective rumination (*Est.* = .337(.116), 95% C.I. = (.093, .561)), problem-solving pondering (*Est.* = .473(.100), 95% C.I. = (.273, .665)), and psychological detachment (*Est.* = -.398(.120), 95% C.I. = (-.582, -.120)), indicating that keeping higher integration both pre- and during-telework related to more work-related rumination. Additionally, the incongruence slope correlated with problem-solving pondering (*Est.* = -.305(.151), 95% C.I. = (-.608, -.031)), which demonstrates that having a more integrated work/home interface while teleworking than before telework associated with more problem-solving pondering. I also observed associations between during-telework integration and affective rumination (*Est.* = .318(.089), 95% C.I. = (.149, .499)), problem-solving pondering (*Est.* = .383(.077), 95% C.I. = (.250, .535)), and psychological detachment (*Est.* = -.361(.093), 95% C.I. = (-.516, -.155)).

Hypothesis 4 evaluated the direct effect from work-related rumination and psychological detachment to well-being. These results are displayed in Tables 5a and 5b. Given that for this hypothesis test, both the predictor and criterion variables are at Level 1, I evaluated both the

within-person (Table 5a) and between-person (Table 5b) direct effects. At the within-person level, Hypothesis 4a was supported, in that psychological detachment correlated with each of the four measures of well-being (physical fatigue [*Est.* = -.071(.034), 95% C.I.: = (-.126, -.001)], negative affect [*Est.* = -.097(.022), 95% C.I. = (-.133, -.049)], positive affect [*Est.* = .125(.028), 95% C.I. = (.083, .191)], and vigor [*Est.* = .095(.030), 95% C.I. = (.040, .151)]). Hypothesis 4b was supported at the within-person level, as well, given that affective rumination associated with each facet of well-being (physical fatigue [*Est.* .137(.036), 95% C.I.: = (.086, .218)], negative affect [*Est.* = .139(.024), 95% C.I. = (.103, .199)], positive affect [*Est.* = -.157(.033), 95% C.I. = (-.206, -.082)], and vigor [*Est.* = -.107(.033), 95% C.I. = (-.153, -.034)]). Hypothesis 4c was partially supported at the within-person level, as problem-solving pondering correlated with positive affect (*Est.* = -.014(.039), 95% C.I. = (-.067, .076)). However, evidence was not found for a relationship with the other measures of well-being (physical fatigue [*Est.* = .065(.047), 95% C.I.: = (-.029, .153)], negative affect [*Est.* = .042(.030), 95% C.I. = (-.004, .108)], and vigor [*Est.* = -.029(.038), 95% C.I. = (-.097, .050)]).

At the between-person level, Hypothesis 4a was not supported, as evidence for psychological detachment co-varying with well-being was not found (physical fatigue [*Est.* = -.137(.123), 95% C.I.: = (-.389, .114)], negative affect [*Est.* = -.121(.081), 95% C.I. = (-.257, .059)], positive affect [*Est.* = .100(.089), 95% C.I. = (-.070, .270)], and vigor [*Est.* = .049(.087), 95% C.I. = (-.087, .243)]). Hypothesis 4b was partially supported at the between-person level. Affective rumination associated with three facets of well-being (physical fatigue [*Est.* = .514(.108), 95% C.I.: = (.293, .695)], negative affect [*Est.* = .297(.068), 95% C.I. = (.174, .437)], and vigor [*Est.* = -.158(.073), 95% C.I. = (-.294, -.021)]), but no evidence for a connection between affective rumination and positive affect was found (*Est.* = -.107(.075), 95% C.I. = (-

.244, .031)). Hypothesis 4c was also partially supported at the between-person level, as problem-solving pondering correlated with negative affect (*Est.* = .216(.074), 95% C.I. = (.069, .348)). No evidence was found connecting problem-solving pondering to the other facets of well-being (physical fatigue [*Est.* = .172(.125), 95% C.I.: = (-.032, .434)], positive affect [*Est.* = .047(.080), 95% C.I. = (-.114, .176)], and vigor [*Est.* = .032(.086), 95% C.I. = (-.129, .248)]).

Hypothesis 5 examined the indirect effect from change in integration level to well-being through work-related rumination and psychological detachment. The corresponding results are shown in Table 6, along with the results pertaining to the indirect effect models with congruence slope, congruence curvature, and incongruence slope as the predictor. The models testing a link between the incongruence curvature and negative and positive affect through affective rumination were computed without statistical control variables. These models did not converge using the same parameters as in the other indirect effect analyses, nor did they converge when modifying the Monte Carlo parameters to be more lenient by increasing the minimum convergence interval and raising the number of iterations to try for convergence. Therefore, I removed the statistical control variables to free additional degrees of freedom, which can improve the chance of convergence (Cohen et al., 2003).. Hypothesis 5 was not supported, as support for an indirect effect from the incongruence curvature to well-being through work-related rumination was not found.

Work-related rumination and psychological detachment did serve as linking mechanisms from surface parameters that were not explicitly hypothesized to facets of well-being, as indicated in Table 6. In particular, affective rumination served as a linking mechanism between the congruence slope and physical fatigue (*Est.* = .592(.204), 95% C.I. = (.250, 1.053)), negative affect (*Est.* = .381(.128), 95% C.I. = (.170, .672)), positive affect (*Est.* = -.239(.118), 95% C.I. =

(-.508, -.040)), and vigor (*Est.* = -.294(.123), 95% C.I. = (-.573, -.096)), reflecting worsened holistic well-being when integration remained higher both pre- and during-telework through affective rumination. Affective rumination also served as a linking mechanism for the relationships between the incongruence slope and physical fatigue (*Est.* = -.618(.214), 95% C.I. = (-1.124, -.276)), negative affect (*Est.* = -.406(.136), 95% C.I. = (-.709, -.181)), positive affect (*Est.* = .251(.121), 95% C.I. = (.054, .519)), and vigor (*Est.* = .297(.124), 95% C.I. = (.090, .572)), indicating worse holistic well-being when integration was higher while teleworking than before telework through affective rumination.

Problem-solving pondering also connected the congruence slope to physical fatigue (*Est.* = .458(.160), 95% C.I. = (.198, .820)) and negative affect (*Est.* = .218(.109), 95% C.I. = (.029, .460)), which indicates that higher pre- and during-telework related to worse physical fatigue and negative affect through problem-solving pondering. Also, problem-solving pondering connected the incongruence slope to negative affect (*Est.* = -.264(.122), 95% C.I. = (-.532, -.059)), which means that higher during- than pre-telework integration associated with worse negative affect through problem-solving pondering.

Psychological detachment linked the congruence slope to positive affect (*Est.* = .195(.104), 95% C.I. = (.037, .444)), which signifies a relationship between higher pre- and during-telework and higher positive affect through psychological detachment. Psychological detachment also linked the incongruence slope to positive affect (*Est.* = -.205(.113), 95% C.I. = (-.469, -.020)), which indicates an association between higher during- than pre-telework integration and higher positive affect through psychological detachment. These findings are discussed further in the Discussion.

5.3 Preference for Integration

Hypothesis 6 and Research Questions 1 and 2 surrounded the inter-relationships between one's preference for work/home integration, current level of work/home integration during telework, work-related rumination, and well-being. Results pertaining to Hypothesis 6 are shown in Table 7 and in Figure 5. No evidence was found for a relationship between the incongruence curvature and the four facets reflecting well-being (physical fatigue [*Est.* = .233(.143), 95% C.I. = (-.046, .521)], negative affect [*Est.* = .129(.100), 95% C.I. = (-.108, .314)], positive affect [*Est.* = .038(.105), 95% C.I. = (-.158, .249)], vigor [*Est.* = .025(.098), 95% C.I. = (-.160, .208)]), and so Hypothesis 6 was not supported. An association between the incongruence slope and negative affect was observed (*Est.* = -.254(.093), 95% C.I. = (-.434, -.078)). Because this value was negative, it represents that when one's integration level when teleworking during COVID-19 was higher than preferred, negative affect was higher. I also observed correlations between during-telework integration and negative affect (*Est.* = .123(.046), 95% C.I. = (.038, .214)) and physical fatigue (*Est.* = .140(.072), 95% C.I. = (.012, .285)).

Research Question 1, which questioned whether a disparity between preferred and current (i.e., during telework) integration level would predict work-related rumination, found partial support. These results are displayed in Table 8, with the response surfaces shown in Figure 6. While the discrepancy between preferred and current telework did not show evidence for being supported in relation to problem-solving pondering (*Est.* = .286(.144), 95% C.I. = (-.032, .541)) and psychological detachment (*Est.* = -.012(.174), 95% C.I. = (-.377, .346)), this discrepancy was related to affective rumination (*Est.* = .370(.165), 95% C.I. = (.010, .678)). The positive value of this result means that as one's actual enacted integration grew more different from one's preferred integration, affective rumination was higher. In addition, the incongruence slope predicted both affective rumination (*Est.* = -.402(.152), 95% C.I. = (-.722, -.113)) and problem-

solving pondering (*Est.* = -.357(.132), 95% C.I. = (-.620, -.091)), indicating that when one's level of integration was higher than preferred, they experienced more work-related rumination. Finally, the congruence slope predicted problem-solving pondering (*Est.* = .326(.132), 95% C.I. = (.051, .593)) and psychological detachment (*Est.* = -.563(.160), 95% C.I. = (-.829, -.268)) in such a way that when a teleworker's preferred and actual integration levels were both high, they experienced more problem-solving pondering and less psychological detachment. I also observed associations between during-telework integration and affective rumination (*Est.* = .305(.075), 95% C.I. = (.158, .449)), problem-solving pondering (*Est.* = .338(.066), 95% C.I. = (.214, .467)), and psychological detachment (*Est.* = -.268(.081), 95% C.I. = (-.418, -.101)), as well as between integration preference and psychological detachment (*Est.* = -.286(.134), 95% C.I. = (-.556, -.000)).

Research Question 2 examined the indirect effect of the disparity between preferred and actual work/home integration on well-being through work-related rumination and psychological detachment. These results are displayed in Table 9. I found no evidence for this disparity relating to well-being through work-related rumination, as the incongruence slope was not observed to relate to either of the four well-being facets through work-related rumination.

Relationships were found between other surface parameters and well-being through work-related rumination and psychological detachment, especially through affective rumination. Affective rumination served as a linking mechanism between the congruence slope and physical fatigue (*Est.* = .678, 95% C.I. = (.310, 1.144)), negative affect[4] (*Est.* = .510, 95% C.I. = (.260,.839)), positive affect (*Est.* = -.274, 95% C.I. = (-.579, -.054)), and vigor (*Est.* = -.325, 95% C.I. = (-.636, -.123)), reflecting worsened holistic well-being when participants both preferred

[4] This model was computed without statistical controls in order to achieve model convergence.

and enacted higher integration through affective rumination. Affective rumination also served as a linking mechanism in a relationship between the incongruence slope and physical fatigue (*Est.* = -.555, 95% C.I. = (-.986, -.243)), negative affect (*Est.* = -.368, 95% C.I. = (-.666, -.150)), positive affect (*Est.* = .220, 95% C.I. = (.040, .473)), and vigor (*Est.* = .279, 95% C.I. = (.084, .544)), indicating worse holistic well-being when integration was higher than preferred through affective rumination.

Problem-solving pondering also connected the congruence slope to physical fatigue (*Est.* = .566, 95% C.I. = (.245, 1.005)) and negative affect (*Est.* = .279, 95% C.I. = (.036, .585)), which indicates that higher levels of preferred and enacted integration co-varied with worse physical fatigue and negative affect through problem-solving pondering. Problem-solving pondering connected the incongruence slope to negative affect (*Est.* = -.291, 95% C.I. = (-.589, -.052)), too, showing that a higher level of integration than preferred associated with worse negative affect by way of problem-solving pondering.

Psychological detachment linked the congruence slope to positive affect (*Est.* = .246, 95% C.I. = (.053, .517)), which signifies that higher levels of preferred and enacted integration co-varied with more positive affect through psychological detachment. The implications of these results are investigated further in the Discussion.

6 Discussion

6.1 Summary of Results

An abrupt transition to telework, which characterizes the context of the current dissertation, was expected to impact employees' work/home interface and, in turn, well-being, given that both the work and home domains have been shown to influence employee well-being (Edwards & Rothbard, 2000). As anticipated, work/home integration increased when employees

were teleworking relative to working in an office, supporting Hypothesis 1. I did also find a connection from pre- and during-telework work/home integration to well-being, although not in the way that I expected. Contrary to Hypothesis 2, the *maintenance* of high work/home integration from prior to during telework predicted worse physical and emotional well-being, meaning that the stability rather than change in integration from pre- to during-teleworking in response to the COVID-19 pandemic influenced well-being.

Turning to work-related rumination in relation to changes in the work/home interface, I found support for Hypothesis 3b, wherein a greater change in work/home integration associated with more affective rumination. Support for changes in integration predicting problem-solving pondering and psychological detachment were not found, though. I also did not find evidence for the change from pre- to during-telework integration relating to well-being through work-related rumination and psychological detachment, and so Hypothesis 5 was not supported.

The *consistency* in a high integration level, however, was found to associate with worse well-being through more work-related rumination and psychological detachment. In particular, the consistency in integration from pre- to during-telework related to all four facets of well-being through affective rumination. Having higher integration while teleworking relative to before teleworking also predicted worse well-being through work-related rumination and psychological detachment, especially through affective rumination.

Looking at how the fit between preferred and current (i.e., during-telework) work/home integration influenced well-being, I did not find support for an association between a closer match and well-being, and so Hypothesis 6 was not supported. That said, having more integration than preferred did associate with worse negative affect. Having higher integration than preferred also associated with more affective rumination and problem-solving pondering. In

answer to Research Question 1, a greater disparity between one's preferred and current work/home boundary did predict more affective rumination (although no support for links to problem-solving pondering or psychological attachment were found). Having both high integration and a preference for this high level of integration related to more problem-solving pondering and less psychological detachment. Regarding Research Question 2, having more integration than preferred and having higher integration even when preferred associated with worse emotional, cognitive, and physical well-being through affective rumination. Problem-solving pondering also served as a linking mechanism from high integration preference and enactment to worse physical fatigue and negative affect, as well as from higher integration than preferred to worse negative affect.

6.2 Summary of Contributions

This investigation presented a rare opportunity to explore what happens when employees suddenly and abruptly transition to telework. Unexpected events such as the pandemic are likely to result in particularly acute well-being shocks for individuals (Hobfoll, 1991; Bundy et al., 2017), yet they are understudied in an organizational context (Eby et al., 2016; Bundy et al., 2017). This employee sample was also interesting in that the participants were full-time and involuntary teleworkers, a group that is similarly understudied (Gajendran & Harrison, 2007) but is expected to grow (Gallup, 2020). In light of the possibility for future crisis events that may drive workers into the home unexpectedly (Montanari, 2020), I wanted to provide insight into how a sudden change in the work/home boundary can influence employee well-being holistically, as well as why well-being may be affected and who might be most affected. By doing so, the results of this dissertation may help guide employees, organizations, and managers to better prepare to support a full-time teleworking workforce in the event of a future crisis.

This dissertation tested whether work/home integration increased in full-time teleworking circumstances relative to primarily office-based work. I did find that, on average, work/home integration increased from before to during telework. While this notion is often assumed in organizational literature (e.g., Basile & Beauregard, 2016), it is rarely empirically and quantitatively evaluated. This increase was expected given the weakening of the spatial component of the work/home boundary when switching to full-time telework, but it is possible to perform boundary work to maintain separation between the work and home domains even when working at home full time. As my subsequent results suggest, performing boundary work could help protect full-time teleworkers' well-being.

This dissertation also looked at the impact of specifically a change in the work/home interface in the context of the move to full-time telework. Investigations of change in organizational contexts are relatively understudied yet are highly relevant to crisis contexts. I expected that, amidst the various changes faced in the pandemic, experiencing a greater change in the work/home boundary would relate to worse well-being. Instead, though, the results of this dissertation point to the continuation of a highly integrated work/home boundary from pre- to during-teleworking as being detrimental to well-being. Therefore, while boundary theory discusses both advantages and disadvantages to integration (Ashforth et al., 2000), in the context of rapidly switching to full-time telework it appears that the disadvantages to integration prevail. This is perhaps due to lack of ability to recover, as I found that maintaining higher integration predicts more work-related rumination, which may extend the workday such that employees are unable to regain the resources used in facing work demands (Meijman & Mulder, 1998). Furthermore, a preference for integration did not serve as a protective factor, as both preferring and enacting high integration was linked to worse well-being through work-related rumination.

When experiencing situations of intense change, employees may not know what is best for them and adapting to the new circumstances rather than leaning on old habits may be beneficial.

MRSA served as a useful tool for investigating the nuanced relationships between two independent variables and a criterion. By examining the relationship between predictors and criterion along four dimensions (i.e., congruence slope, congruence curvature, incongruence slope, and incongruence curvature), I was able to find that the *sameness* rather than change in work/home integration had a stronger association with employee well-being. Additionally, by investigating well-being from three angles (i.e., emotional, cognitive, and physical), I was able to demonstrate that work/home integration may harm employees in a holistic way, as maintaining high integration related to worse emotional, cognitive, and physical well-being through work-related rumination.

6.3 Boundary Theory in a New Context

This dissertation occurred under the backdrop of a crisis event, wherein COVID-19 forced a sudden shift to full-time telework for many office workers like the current sample. These workers' offices moved into their homes, thus changing the nature of their work/home boundary and making Ashforth et al.'s (2000) boundary theory an appropriate lens through which to examine the changes they experienced. With the removal of the spatial element of the work/home boundary, the new teleworkers' level of work/home integration was expected to increase, which the current results support. Boundary theory focuses on inter-role conflict as a key drawback of work/home integration, where individuals struggle with how to behave when faced with simultaneous and sometimes contrasting demands of multiple identities. Boundary theory would expect employees with a stronger boundary prior to telework to have greater contrast between roles, motivating this prior segmentation between work and home. Therefore, I

expected that employees with greater change in their work/home boundary would suffer worse role confusion and thus would display the worst well-being. This reasoning, however, was not supported by my findings, as the change in integration was not found to associate with well-being.

As a chief benefit of integration, boundary theory (Ashforth et al., 2000) points to the ease at which employees can transition between roles. Boundary theory states that employees with high work/home integration can transition from their work role to their home role more effortlessly than those who have more segmented work and home roles. This benefit may not hold in a newly full-time teleworking context, though. Boundary theory assumes a sample of experienced integrators when discussing the pros and cons of integration versus segmentation. The theory states that employees enacting integration have a work role and a home role that are similar to one another, and that this similarity is what makes transitioning between roles easier. However, the current set of employees who were forced into full-time telework did not necessarily have this agreement between roles. Regardless of the level of agreement versus contrast between their work and home roles, these employees had to enter a situation characterized by work/home integration.

Furthermore, transitioning between roles appears very different in a typical office-working context that characterized the pre-COVID-19 work domain. Employees tend to have "rites of passage" (Ashforth et al., 2000, p. 478) that facilitate inter-domain transitions being routinized and effortless. Rites of passage facilitate adopting the proper mindset for the work role and leaving one's home behind, then at the end of the day exiting the work role and leaving work thoughts behind. These rites of passage, like commuting, exercising at the gym before work, or going to happy hour on the way home from work, were likely disrupted by the pandemic,

though. Without these rites of passage, cross-domain transitions may have become effortful even for those who had high integration prior to teleworking. Therefore, boundary theory's assumption that those with high integration have routines to ease a highly integrated lifestyle may not hold for the current dissertation's context, which could partially explain the current findings' departure from boundary theory's expectations.

In fact, having the experience of high integration prior to teleworking can be viewed as a detriment to the current sample of full-time teleworkers, as having high integration both before and during telework correlated with worse well-being, but having lower integration before telework than during did not. These employees with high integration both before and during telework likely performed less boundary work than other employees, as they were in the habit of allowing more blurring between domains. It could be that some limit to healthy integration exists, and this set of employees allowed their work/home interface to reach an unhealthy place.

Reaching an unhealthy point of integration is more likely when full-time teleworking. When working in an office, having high work/home integration looks like having family pictures on one's desk, answering work emails from home, stepping out to make calls pertaining to the other domain, etc. The two domains are never physically intermeshed as they are when fully working from home. When full-time teleworking, an employee is surrounded not just by reminders of home when working, but by the actual home. So throughout the workday, they can see reminders of home-related tasks, and they can do them. Similarly, they have the technology they need to perform work activities during standard after-work hours. Consequently, teleworkers' work time tends to extend and bleed into home time (ILO, 2021). Their co-workers may further exacerbate this boundary blurring, as co-workers who had to care for their children during the day, for example, may be more likely to email them at night. Furthermore, they are

used to thinking about work while at home because they do so all day long. In this environment, high integration may be particularly insidious.

Taking the crisis event context into consideration, resource depletion is expected to occur even more rapidly in such an environment (Hobfoll, 1991). This expectation points to an even greater need for recovery in employees undergoing stressful life upheavals like a pandemic. Recovery theories suggest that a bleeding of work into home life removes opportunities for nightly recovery (Meijman & Mulder, 1998), leading to worse well-being for those maintaining higher work/home integration (Wepfer et al., 2017). So, while maybe at some point a full-time teleworker can reach an "amorphous, all-purpose self" capable of thriving in a fully integrated work/home interface (Nippert-Eng, 1996, p. 103), the peak of a crisis event is unlikely to be that time. Instead, when in a crisis context, prioritizing recovery through work/home separation could be the more appropriate choice, even for employees who have typically engaged in integration. The results of the current dissertation suggest that maintaining certain habits when one's circumstances have dramatically changed may not be the healthiest option, as the continuation of high integration when switching to full-time telework associated with worse well-being. Instead, adapting to the new situation as to protect one's resources may be the healthier option.

6.4 Work-Related Rumination in a Full-Time Teleworking Context

The results of the current dissertation support the notion that an environment of high integration bleeds over into one's mind in the form of work-related rumination. Maintaining high integration associated with more affective rumination and problem-solving pondering, as well as with less psychological detachment. So, having more experience with integration did not prevent employees from ruminating. This subset of employees who enacted a weak boundary prior to telework and continued to do so during telework may have already engaged in work-related

rumination regularly and kept up doing so during the pandemic. Alternatively, it could be that having work physically in the home produces an environment particularly suitable for work-related rumination, and so perhaps this subset of employees became more vulnerable to high rumination when full-time teleworking. Of note, even in the face of the numerous challenges and changes employees were facing during the pandemic, they specifically ruminated about work when engaging in high work/home integration. Unfortunately, my results indicate that doing so predicted impaired well-being in this population that likely was already vulnerable given the crisis backdrop.

In the current sample, new teleworkers who had high integration both before and during telework, as well as those who had higher integration when teleworking than prior, suffered worse emotional, physical, and cognitive well-being through work-related rumination and lack of psychological detachment. In turn, the current findings support the notion that higher work-related rumination serves as a mechanism by which high integration relates to worse well-being in new full-time teleworkers. Affective rumination in particular connected the maintenance of high integration from pre- to during-telework to worse emotional, cognitive, and physical well-being. As negative perseverative thoughts about work during off-job time, affective rumination is the type of rumination expected and demonstrated to be harmful to well-being (Weigelt et al., 2019). Prior studies have consistently shown that affective rumination leads to worse outcomes like chronic and acute fatigue (e.g., Querstret & Cropley, 2012), and this construct has even been identified as a linking mechanism from indicators of high work/home integration like after-hours emailing to impaired well-being (Minnen et al., 2021). Therefore, an intervention that protects teleworkers from engaging in negative thoughts about work during off-job time may be useful to employees, as discussed further below.

Unlike affective rumination, problem-solving pondering does not consistently lead to impaired well-being and in fact has been positioned as potentially beneficial. This form of rumination comprises productive thoughts about work, with these thoughts being affectively neutral or positive. In its original framing, this construct was thought to engage creativity and create fulfillment in those who find their work intrinsically motivating (Cropley & Zijlstra, 2011), which could enhance an employee's well-being. In empirical studies, more problem-solving pondering in the evening has been linked to less fatigue (Querstret, 2014), but also to more fatigue (Querstret, 2014). In a meta-analysis, Weigelt et al. (2019) found that problem-solving pondering related (positively) to positive facets of well-being like vigor and work engagement more than to negative components. My findings, however, do not support the notion of a beneficial rumination, as more problem-solving pondering like affective rumination led to worse well-being. Specifically, keeping high integration associated with worse physical fatigue and negative affect through problem-solving pondering, and having higher integration while teleworking than before telework related to worse negative affect through problem-solving pondering.

The current dissertation's findings are in line with the effort-recovery model, which states that recovery of the resources expended when working cannot occur when still using those resources (Meijman & Mulder, 1998), such as by solving work problems. Additionally, Brosschot and colleagues' (2005) extension of the Cognitive Activation Theory of Stress (CATS; Ursin & Eriksen, 2004) proposes that well-being becomes impaired by rumination due to maintaining prolonged activation that turns into stress. By identifying and thinking over problems related to work, employees may be keeping a stress response activated to the detriment of their well-being. It could be that occasional activation through problem-solving pondering

may be okay when coming home from office work, but that the continuation of activation when working from home becomes detrimental in teleworking circumstances. This explanation could also point to why I failed to find the expected associations between problem-solving pondering and the positive sides of well-being, positive affect and vigor. Furthermore, COR theory's proposition that traumatic events exacerbate resource drains could contribute to employees' heightened need for recovery time at the onset of the pandemic and a no-longer salutary effect of problem-solving pondering.

Psychological detachment, on the other hand, served as a linking mechanism between the work/home interface and positive affect only. In Weigelt et al.'s (2019) meta-analysis, psychological detachment was the strongest predictor of the positive side of general well-being, like life satisfaction and flourishing. Similarly here, having psychological detachment served as a link between low integration and more positive affect. Thus, the ability to detach from work may explain how teleworkers can come to thrive in a full-time working from home situation.

The stressor-detachment model points to psychological detachment as the linchpin between work-related stressors and impaired well-being (Sonnentag & Fritz, 2015). However, psychological detachment played a less pronounced role in linking the work/home interface to impaired well-being than affective rumination in this sample of new full-time teleworkers. While engagement in affective rumination implies less psychological detachment, these two constructs appear not to be opposite sides of a single spectrum, a notion that was also supported in the work-related rumination construct's incipient study (Cropley et al., 2011). Instead, affective rumination comprises specifically negatively emotional thoughts about work, while lack of psychological detachment reflects engagement in any thoughts about work, regardless of emotionality. In a crisis context, the negativity aspect of thoughts about work may be particularly

influential on well-being. Alternatively, it may be the negative emotionality that makes rumination about work particularly harmful when surrounded by reminders of work, in a context where complete psychological detachment may be unreasonable. Even so, attainment of psychological detachment appears to be valuable in protecting one's well-being when full-time teleworking during a crisis event and may serve an important role in achieving good well-being, like positive affect.

6.5 Preference for Integration when Full-Time Teleworking

The current dissertation's investigation of work/home integration preference was novel in a couple of ways. First, associations between integration preference and work-related rumination remain understudied, but my findings suggest that work-related rumination plays an important role in linking individual-level boundary preference to well-being outcomes. Second, while a number of studies have examined integration preference alone on individual outcomes (e.g., Allen et al., 2021), none to my knowledge have tested how the *fit* between preferred and actual level of integration relates to individual outcomes[5]. Employees do not always employ their preferred boundary management strategy, and so it could be important to consider the actual nature of the boundary in these studies of boundary preference. In the current dissertation, I observed that the actual level of integration related more strongly to well-being than one's preference, as I found associations between actual integration level and well-being, but I failed to find evidence for relationships between integration preference and either of the four measures of well-being. Surprisingly, I also found that for some teleworkers, enacting their preferred boundary associated with worse well-being.

[5] Kreiner (2006) tested the impact of fit between employees' preferred level of segmentation and workplace segmentation supplies, which represent the resources a workplace provides towards achievement of desired segmentation level. While similar to enacted level of segmentation/integration, this construct is not the same as enacted segmentation because employees may not have used the resources available to them.

Generally, one would expect that when an individual's reality aligns with their preferences, their well-being would be better. In line with this notion, I did find that having more work/home integration than preferred related to worse emotional well-being. However, in contradiction to that logic, I also found that having *and* preferring higher levels of integration associated with worse well-being through work-related rumination. The potential for overlap, both physical and mental, in the work and home domains may be so great in a full-time teleworking context that segmentation appears to be more beneficial regardless of preference.

The current investigation sheds light on similar organizational research conducted during COVID-19, which found that teleworkers who preferred greater segmentation in their work/home boundary experienced better work-life balance (Allen et al., 2021). These authors had also expected that a preference for integration would co-occur with better rather than worse life outcomes in their sample of employees who were fully working from home. Similarly, the current dissertation found that those who preferred segmentation engaged in more psychological detachment after work. Given the results in the current dissertation, teleworkers who prefer segmentation may perform more boundary work and enact a stronger boundary, leading to better recovery and well-being outcomes through less work-related rumination. The boundary work that teleworkers can do to increase their work/home segmentation is discussed subsequently.

6.6 Practical Implications

Crisis events like pandemics may become more frequent in the future (Montanari, 2020), and so understanding how crises and changes in employees' work and home situations influence their well-being is important. In line with COR theorizing that crisis events can exacerbate resource drains (Hobfoll, 1991), I have found that protecting one's recovery potential (i.e., through work/home segmentation) is important in a crisis context. Changing and adapting one's

habits to better suit the new context could be key to maintaining a healthy well-being during a crisis situation.

Technology has grown in accessibility to the point where even during a crisis event, much of the workforce may be expected to continue working from home. The findings of the current dissertation point to boundary work as a strategy for protecting one's well-being during this time. Boundary work was originally defined as the work done to enact one's desired level of segmentation/integration (Nippert-Eng, 1996b); however, in the abruptly full-time teleworking context, I am slightly altering this definition. Instead, I refer to boundary work as the actions done to strengthen the work/home boundary. Employees can engage in a variety of types of boundary work to bolster the spatial, temporal, and psychological dimensions that make up the work/home boundary (Allen et al., 2014) and thereby maintain a healthy level of separation between the work and home.

To revive the spatial component of the work/home boundary that weakens, if not entirely disappears, when moving work into the home, teleworkers can strive to work in a dedicated work area, ideally in a remote part of one's home. If the employee has the space, moving work into a separate home office could be beneficial for teleworkers. Teleworkers can work at set hours, thus maintaining the temporal component of the work/home boundary that also has been shown to weaken during full-time telework (ILO, 2021). Towards that end, teleworkers should take care to limit the cross-domain transitions they perform, which can lead to inflated work hours and a greater intermeshing of work and home. For example, teleworkers can limit how much of the workday they spend on house chores and can avoid responding to work emails after their set workday has ended. If living with other people, teleworkers should clearly communicate this expectation of spending work time exclusively on work with cohabitants to avoid cross-domain

interruptions. Finally, teleworkers can establish routines for the start and end of their workday. When the commute and other rites of passage become impossible, finding alternate activities to cue the exit from one role and entrance into the other can help teleworkers to assume the proper mindset for the domain at hand (Ashforth et al., 2000). With practice, entering and then fully exiting the work role, such that thoughts about work do not linger, can become effortless and automatic.

In addition to allowing time for recovery by keeping work from bleeding into leisure time, this boundary work should reduce the risk of inter-role conflict and the effort expended in transitioning between roles. Keeping work and home identities designated to separate times and places, albeit within the home, should help to avoid work-related rumination, and therefore well-being impairments, as well as facilitate psychological detachment towards enabling a full-time teleworker to flourish in their new work context.

Organizations and managers can support employees in their boundary work. Organizations with sufficient resources can grant full-time teleworkers a stipend for purchasing items that will facilitate having a separate workspace, such as an office chair, a desk, and even temporary walls. These items and other efforts by employers to improve employee working-from-home conditions were found to improve teleworkers' health and comfort in prior research conducted during COVID-19 (Larrea-Araujo et al., 2021; Matisane et al., 2021). While this strategy would cost the organization money in the short term, it could avoid the need to replace employees whose well-being is impaired to the point of quitting, a major problem seen after the pandemic (i.e., the Great Resignation). Organizational policies can also encourage a workforce that abides by regular working hours. At the managerial level, managers and supervisors can support a set workday by refraining from emailing their team at odd hours and can discourage

their team members from doing so. Managers can also hold short beginning-of-day or end-of-day wrap-up meetings with their team to help create a rite of passage for their employees that signals the beginning or end of the workday. With these strategies to help newly established full-time teleworkers separate work from home physically, temporally, and mentally, organizations and managers can protect the well-being of their employees to cultivate a teleworking workforce that avoids burnout and thrives.

6.7 Limitations

One limitation in this dissertation lies in the homogeneity of the sample. Some homogeneity is expected given the specific focus of the dissertation. A set of newly full-time teleworkers who were able to rapidly transition their jobs into their home is likely to comprise white-collar and knowledge workers. However, the current sample is also almost entirely childless (only two participants had children living in the home), which is likely the result of the onerous childcare and educational challenges that parents faced during COVID-19 stay-at-home orders, as well as reliance on my personal and professional network in recruitment via snowball sampling. The nature of a blurred work/home boundary is different for working parents compared to working non-parents, as parents tend to have more numerous and less flexible home demands. Roughly one fifth of the current sample did, however, report being primary caregivers, who may face a similarly high level of home demands.

Another difference between working parents and non-parents found in the teleworking literature is that working parents have reported substantial benefits from engaging in full-time working from home. Unlike in the current findings, prior qualitative studies of full-time teleworkers have found that mothers who chose to full-time telework loved the high level of integration that full-time telework enabled, largely because it facilitated their parenting

responsibilities (Tietze & Nadin, 2011). Thus, the current sample may have been unlikely to benefit from the advantages of high integration.

Level of work/home integration (both pre- and during-telework) was measured using the WFIBS (Desrochers et al., 2005), which was developed using a homogeneous sample. The sample contained parents to young children who were working in academia due to their propensity to work from home at least occasionally. Thus, in terms of relevance to the current dissertation, the scale benefits from being developed in a working-from-home context. However, the sample was uniform in terms of occupation (i.e., all university professors) and thus could fail to encapsulate a full range of factors contributing to work/home integration levels, especially given that after the onset of COVID-19, the current teleworking population represents a greater portion of the workforce than ever before (Jones, 2023). To my knowledge, though, at the time of survey delivery no scale of work/home integration existed that had been created using a heterogeneous sample of full-time teleworkers. One additional potential limitation of this scale is its focus on the family rather than the home domain more generally. Consequently, participants without children living in the home may answer the scale items in a manner inconsistent with their level of work/home integration more broadly.

The associations with daily well-being were examined at Level 2 due to the predictors being measured at Level 2, which is consistent with how Level 2 predictors are modeled in an MRSA approach (Nestler et al., 2019). Therefore, while within-person and daily variations of well-being were measured, between-person effects were reported. In order to capture Level 1 relationships between work/home integration and well-being, I would have had to measure daily variations in work/home integration. In designing this dissertation, I did not anticipate daily variations in work/home integration given structural limitations of having work in the home and

societal restrictions in physical movement during COVID-19 stay-at-home orders. However, it is possible that one's work/home boundary changes from day to day. For example, a teleworker may experience fluctuating degrees of interruptions from cohabitants, changes in work location within the home (e.g., in a communal living space one day and in one's personal bedroom another), and engagement in household chores during the workday. Therefore, future work could examine how such daily changes in the work/home interface covary with well-being at the end of the day. These explorations could investigate whether enduring (e.g., having a home office) versus day-level (e.g., experiencing more interruptions from family members that day) components of the work/home boundary play a larger role in determining a full-time teleworker's daily well-being.

Another limitation of this study relates to the number of models computed and Type I error. To test the indirect effects from the work/home boundary to well-being through work-related rumination in a MRSA context, I computed a total of 96 models (48 models corresponding to the change/similarity in integration from pre- to during-telework and 48 models corresponding to the disparity/agreement between preference for and actual level of integration while teleworking). From those 96 models, I found a total of 32 indirect effects. Because my analyses assumed a 5% Type I error, it is reasonable to then assume that one or two of those effects are false positives due to my specific sample and that the null hypothesis is actually true in the general population (Cohen et al., 2003).

Finally, methodological limitations in the current dissertation include the exclusive reliance on self-report and the potential for cross-sectional mediation bias. All constructs were measured using self-report measures, wherein participants completed questionnaires about their own psychological states. Reliance on self-report can lead to measurement error in the form of

self-report bias, which can skew individuals' results in a systematic way (Bauhoff, 2014). Cross-sectional mediation bias may be present in the current dissertation, given that the mediating and criterion variables were measured in the same survey each day. Using a cross-sectional analysis in testing an indirect effect can produce an estimate for the indirect effect that is biased and misleading (Maxwell & Cole, 2007). Therefore, future work on change in a crisis situation should aim to measure predictor, mediator, and criterion variables at different and multiple time points (see Maxwell & Cole, 2007).

7 Conclusion

This dissertation took advantage of the crisis context surrounding COVID-19 and examined how the abrupt, mandatory switch to full-time telework influenced employee well-being with respect to changes in the work/home boundary. Taking a boundary theory (Ashforth et al., 2000) lens to employees' new landscape of work was appropriate given that a switch to full-time telework alters the nature of the work/home boundary, which exists along physical, temporal, and psychological dimensions (Allen et al., 2014). I anticipated specifically that employees' level of work/home integration would be higher in teleworking than pre-teleworking circumstances, and that employees who experienced a greater change in work/home integration relative to before telework would experience the worst well-being. I did find support for an increase in work/home integration from pre- to during-telework, but I did not find support for an association between greater integration change and well-being. Instead, I found that continuing to maintain higher integration from pre- to during-telework correlated with worse well-being holistically through work-related rumination and lack of psychological detachment. Work-related rumination, as thoughts about work during off-job time, was found to be higher in those who maintained higher integration and served as a linking mechanism from higher integration to

impaired well-being. Additionally, I found that enacting higher integration than preferred and even high integration when preferred co-varied with worse well-being through work-related rumination and lack of psychological detachment.

The results of this dissertation demonstrate the utility of MRSA in analyzing how the relationship between two predictors predicts a criterion. The nuanced investigation by MRSA enabled me to identify combinations of facets of the work/home boundary that did associate with well-being (e.g., higher pre- and during-telework integration, preference for and enactment of higher integration, and higher integration than preferred) when the hypothesized combinations related to change were not supported. These results point to work/home segmentation as a potential means of protecting one's well-being when switching to full-time telework in a crisis, even for employees who prefer integration. Creating separation between the work and home domains through boundary work may help to cut off thoughts about work when engaging in leisure time and better allow teleworkers to recover. Therefore, this dissertation provides employees and organizations with some guidance in how employees may better handle future switches to working from home when faced with the next crisis event.

References

Allen, T. D., Cho, E., & Meier, L. L. (2014). Work–family boundary dynamics. *Annual Review of Organizational Psychology and Organizational Behavior*, *1*(1), 99-121.

Allen, T. D., Golden, T. D., & Shockley, K. M. (2015). How effective is telecommuting? Assessing the status of our scientific findings. *Psychological science in the public interest*, *16*(2), 40-68.

Allen, T. D., Merlo, K., Lawrence, R. C., Slutsky, J., & Gray, C. E. (2021). Boundary management and work-nonwork balance while working from home. *Applied Psychology*, *70*(1), 60-84.

Anderson, A. J., Kaplan, S. A., & Vega, R. P. (2015). The impact of telework on emotional experience: When, and for whom, does telework improve daily affective well-being?. *European Journal of Work and Organizational Psychology*, *24*(6), 882-897.

Andrade, C., & Petiz Lousã, E. (2021). Telework and work–family conflict during COVID-19 lockdown in Portugal: The influence of job-related factors. *Administrative Sciences*, *11*(3), 103.

Asparouhov, T., & Muthén, B. (2021). Bayesian estimation of single and multilevel models with latent variable interactions. *Structural Equation Modeling: A Multidisciplinary Journal*, *28*(2), 314-328.

Ashforth, B. E., Kreiner, G. E., & Fugate, M. (2000). All in a day's work: Boundaries and micro role transitions. *Academy of Management Review*, *25(3)*, 472-491.

Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work & stress*, *22*(3), 187-200.

Barber, L. K., & Jenkins, J. S. (2014). Creating technological boundaries to protect bedtime: Examining work–home boundary management, psychological detachment and sleep. *Stress and Health*, *30*(3), 259-264.

Bauhoff, S. (2014). Self-Report Bias in Estimating Cross-Sectional and Treatment Effects. In: Michalos, A.C. (eds) Encyclopedia of Quality of Life and Well-Being Research. Springer, Dordrecht.

Barrett, F.L., & Russell, J. A. (1998). Independence and bipolarity in the structure of current affect. *Journal of personality and social psychology*, *74*(4), 967.

Bennett, A. A., Gabriel, A. S., Calderwood, C., Dahling, J. J., & Trougakos, J. P. (2016). Better together? Examining profiles of employee recovery experiences. *Journal of Applied Psychology, 101*(12), 1635–1654. https://doi.org/10.1037/apl0000157.

Bundy, J., Pfarrer, M. D., Short, C. E., & Coombs, W. T. (2017). Crises and crisis management: Integration, interpretation, and research development. *Journal of management*, *43*(6), 1661-1692.

Cohen, J. (1992). A power primer. *Quantitative Methods in Psychology, 112*(1), 155-159.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). New York: Routledge.

Collins, A. M., Cartwright, S., & Hislop, D. (2013). Homeworking: Negotiating the psychological contract. *Human Resource Management Journal*, *23*(2), 211-225.

Charlton, E. (2021, May 7). Four things workers want implemented by their bosses post-pandemic. *World Economic Forum*. https://www.weforum.org/agenda/2021/05/employers-pandemic-covid-19-mental-health/

Cropley, M., Dijk, D. J., & Stanley, N. (2020). Job strain, work rumination, and sleep in school teachers. In *Work and Rest: A Topic for Work and Organizational Psychology* (pp. 181-196). Psychology Press.

Cropley, M., Michalianou, G., Pravettoni, G., & Millward, L. J. (2012). The relation of post-work ruminative thinking with eating behaviour. *Stress and Health*, *28*(1), 23-30. *doi*:10.1002/smi.1397

Cropley, M., & Zijlstra, F. R. H. (2011). Work and rumination. In J. Langan-Fox & C. L. Cooper (Eds.), *Handbook of stress in the occupations* (pp. 487-501). Northampton, MA: Edward Elgar Publishing.

Cropley, M., Michalianou, G., Pravettoni, G., & Millward, L. J. (2011). The relation of post-work ruminative thinking with eating behaviour. *Stress and Health*, *28*(1), 23-30.

Danner-Vlaardingerbroek, G., Kluwer, E. S., Van Steenbergen, E. F., & van der Lippe, T. (2013). Knock, knock, anybody home? Psychological availability as link between work and relationship. *Personal Relationships, 20*(1), 52-68.

Desrochers, S., Hilton, J. M., & Larwood, L. (2005). Preliminary validation of the work-family integration-blurring scale. *Journal of Family Issues, 26(4),* 442–466.

Doherty, W. J., Su, S., & Needle, R. (1989). Marital disruption and psychological well-being: A panel study. *Journal of Family Issues*, *10*(1), 72-85.

Eby, L. T., Mitchell, M., & Zimmerman, L. (2016). Work and family in times of crisis. In T. D. Allen & L. T. Eby (Eds.), *The Oxford handbook of work and family*. New York, NY: Oxford University Press. http://dx .doi.org/10.1093/oxfordhb/9780199337538.013.32

Eddleston, K. A., & Mulki, J. (2017). Toward understanding remote workers' management of work–family boundaries: The complexity of workplace embeddedness. *Group & Organization Management, 42*(3), 346-387.

Edwards, J. R., & Cable, D. M. (2009). The value of value congruence. *Journal of Applied Psychology, 94*(3), 654–677.

Fan, H., & Han, B. (2018). How Does Leader-Follower Fit or Misfit in Communication Style Matter for Work Outcomes?. *Social Behavior and Personality: an international journal*, *46*(7), 1083-1100.

Fisher, C. D., & To, M. L. (2012). Using experience sampling methodology in organizational behavior. *Journal of Organizational behavior*, *33*(7), 865-877.

Frone, M. R., & Tidwell, M. C. O. (2015). The meaning and measurement of work fatigue: Development and evaluation of the Three-Dimensional Work Fatigue Inventory (3D-WFI). *Journal of occupational health psychology*, *20*(3), 273.

Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: meta-analysis of psychological mediators and individual consequences. *Journal of applied psychology*, *92*(6), 1524.

Gallup (2020, February 19). Leading Teams Forward, Advised by Gallup Remote Work Trends. *Workplace*. https://www.gallup.com/workplace/329726/leading-teams-forward-advised-gallup-remote-work-trends.aspx

Gobal Workplace Analytics (2021). Work From Home Experience Survey Results. *Iometrics*. https://globalworkplaceanalytics.com/global-work-from-home-experience-survey

Golden, T. D., & Veiga, J. (2005). The impact of extent of telecommuting on job satisfaction: Resolving inconsistent findings. *Journal of Management, 31*, 301–31

Gourlay, L., Littlejohn, A., Oliver, M., & Potter, J. (2021). Lockdown literacies and semiotic assemblages: academic boundary work in the Covid-19 crisis. *Learning, Media and Technology*, *46*(4), 377-389.

Hahn, V. C., & Dormann, C. (2013). The role of partners and children for employees' psychological detachment from work and well-being. *Journal of Applied Psychology*, *98*(1), 26.

Harker Martin, B. and MacDonnell, R. (2012), Is telework effective for organizations? A meta-analysis of empirical research on perceptions of telework and organizational outcomes. *Management Research Review*, *35*(7), 602-616.

Harris, L. (2003). Home-based teleworking and the employment relationship: Managerial challenges and dilemmas. *Personnel review*.

Headrick, L., Newman, D. A., Park, Y. A., & Liang, Y. (2022). Recovery Experiences for Work and Health Outcomes: A Meta-Analysis and Recovery-Engagement-Exhaustion Model. *Journal of Business and Psychology*, 1-44.

Hernandez, Y. A. T. (2020). Remote workers during the COVID-19 lockdown: What are we missing and why is important. *Journal of Occupational and Environmental Medicine*, *62*(11), 669-672.

Heck, R. H., & Thomas, S. L. (2015). *An introduction to multilevel modeling techniques: MLM and SEM approaches using Mplus*. Routledge.

Hickman, A. (2019). *Workplace isolation occurring in remote workers* (Doctoral dissertation, Walden University).

Hobfoll, S. E. (1989). Conservation of resources. A new attempt at conceptualizing stress. *American Psychologist*, *44*(3), 513–524.

Hobfoll, S. E. (1991). Traumatic stress: A theory based on rapid loss of resources. *Anxiety Research*, *4*(3), 187-197.

ILO. 2021. Teleworking arrangements during the COVID-19 crisis and beyond. In *2nd Employment Working Group Meeting under the 2021 Italian Presidency of the G20, online, April 14–16*. Geneva: International Labour Organization (ILO).

Inceoglu, I., Thomas, G., Chu, C., Plans, D., & Gerbasi, A. (2018). Leadership behavior and employee well-being: An integrated review and a future research agenda. *The Leadership Quarterly*, *29*(1), 179-202.

Isaksson, K. (1990). A longitudinal study of the relationship between frequent job change and psychological well-being. *Journal of Occupational Psychology*, *63*(4), 297–308.

Isaksson, K. & Johansson, G. (2000). Adaptation to continued work and early retirement following downsizing: Long-term effects and gender differences. *Journal of Occupational and Organizational Psychology*, *73*(2), 241–256.

Junker, N. M., Baumeister, R. F., Straub, K., & Greenhaus, J. H. (2021). When forgetting what happened at work matters: The role of affective rumination, problem-solving pondering, and self-control in work–family conflict and enrichment. *Journal of Applied Psychology*, *106*(11), 1750.

Johnson, D. P., & Whisman, M. A. (2013). Gender differences in rumination: A meta-analysis. *Personality and individual differences*, *55*(4), 367-374.

Kaduk, A., Genadek, K., Kelly, E. L., & Moen, P. (2019). Involuntary vs. voluntary flexible work: insights for scholars and stakeholders. *Community, Work & Family*, *22*(4), 412-442.

Kerman, K., Korunka, C., & Tement, S. (2022). Work and home boundary violations during the COVID-19 pandemic: The role of segmentation preferences and unfinished tasks. *Applied Psychology, 71*(3), 784-806.

Koh, C. W., Allen, T. D., & Zafar, N. (2013). Dissecting reasons for not telecommuting: Are non-users a homogenous group? *The Psychologist-Manager Journal, 16*, 243–360.

Kniffin, K. M., Narayanan, J., Anseel, F., Antonakis, J., Ashford, S. P., Bakker, A. B., . . . Vugt, M. V. (2020). COVID-19 and the workplace: Implications, issues, and insights for future research and action. *American Psychologist*. Advance online publication.

Knight, P. J., & Westbrook, J. (1999). Comparing employees in traditional job structures vs telecommuting jobs using Herzberg's hygienes & motivators. *Engineering Management Journal*, *11*(1), 15-20.

Kossek, E. E., Lautsch, B. A., & Eaton, S. C. (2006). Telecommuting, control, and boundary management: Correlates of policy use and practice, job control, and work–family effectiveness. *Journal of Vocational Behavior*, *68*(2), 347-367.

Kreiner, G. E. (2006). Consequences of work-home segmentation or integration: A person-environment fit perspective. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, *27*(4), 485-507.

LaPierre, L. M., Van Steenbergen, E. F., Peeters, M. C., & Kluwer, E. S. (2016). Juggling work and family responsibilities when involuntarily working more from home: A multiwave study of financial sales professionals. *Journal of Organizational Behavior*, *37*(6), 804-822.

Larrea-Araujo, C., Ayala-Granja, J., Vinueza-Cabezas, A., & Acosta-Vargas, P. (2021). Ergonomic risk factors of teleworking in ecuador during the COVID-19 pandemic: a cross-sectional study. *International Journal of Environmental research and public health*, *18*(10), 5063.

Mandeville, A., Manegold, J., Matthews, R., & Whitman, M. V. (2022). When all COVID breaks loose: Examining determinants of working parents' job performance during a crisis. *Applied Psychology, 71*, 765–783.

Matisāne, L., Paegle, L., Akūlova, L., & Vanadziņš, I. (2021). Challenges for workplace risk assessment in home offices—results from a qualitative descriptive study on working life during the first wave of the COVID-19 pandemic in Latvia. *International journal of environmental research and public health*, *18*(20), 10876.

Maxwell, S. E., & Cole, D. A. (2007). Bias in cross-sectional analyses of longitudinal mediation. *Psychological methods*, *12*(1), 23.

McAlpine, K. L., & Piszczek, M. M. (2023). Along for the ride through liminal space: A role transition and recovery perspective on the work-to-home commute. *Organizational Psychology Review*, *13*(2), 156-176.

Meijman, T. F., & Mulder, G. (1998). Psychological aspects of workload. In P. J. Drenth, H. Thierry, & C. J. de Wolff (Eds.), *Handbook of work and organizational psychology* (2nd ed., pp. 5–33). Hove, England: Erlbaum.

Minnen, M. E., Mitropoulos, T., Rosenblatt, A. K., & Calderwood, C. (2021). The incessant inbox: Evaluating the relevance of after-hours e-mail characteristics for work-related rumination and well-being. *Stress and Health*, *37*(2), 341-352.

Montanari, S. (2020). *Epidemiologists have been warning of a coronavirus outbreak for years and say that another pandemic will happen again*. Business Insider. Retrieved from: https://www. businessinsider.com/epidemiologists-on-chances-of-future-coronavirus-outbreak-2020-3

Munton, A, & West, M. (1995). Innovations and personal change: Patterns of adjustment to relocation. *Journal of Organizational Behavior, 16*(4), 363–375.

Muthén, L.K. & Muthén, B.O. (1998-2017). Mplus User's Guide. Eighth Edition. Los Angeles, CA: Muthén & Muthén.

Nestler, S., Humberg, S., & Schonbrodt, F. D. (2019). Response surface analysis with multilevel data: Illustration for the case of congruence hypotheses. *Psychological Methods, 24(3),* 291-308.

Nippert-Eng, C. E. (1996a). a. Calendars and keys: The classification of "home" and "work." *Sociological Forum*, 11: 563-582.

Nippert-Eng, C. E. (1996b). *Home and work: Negotiating boundaries through everyday life*. Chicago: University of Chicago Press.

Oakman, J., Kinsman, N., Stuckey, R., Graham, M., & Weale, V. (2020). A rapid review of mental and physical health effects of working at home: how do we optimise health?. *BMC Public Health*, *20*(1), 1-13.

Park, Y., Fritz, C., & Jex, S. M. (2011). Relationships between work-home segmentation and psychological detachment from work: the role of communication technology use at home. *Journal of occupational health psychology*, *16*(4), 457-467.

Parmar, R. (2021). *Navigating COVID-19's Lessons on Burnout*. Psychiatric Times. Retrieved from: https://www.psychiatrictimes.com/view/navigating-covid-19s-lessons-on-burnout.

Powell, G. N., & Greenhaus, J. H. (2010). Sex, gender, and the work-to-family interface: Exploring negative and positive interdependencies. *Academy of Management Journal*, *53*(3), 513-534.

Querstret, D. (2014). *Recovery From Work: The Link Between Work-Related Rumination, Fatigue and Sleep*. University of Surrey (United Kingdom).

Querstret, D., & Cropley, M. (2012). Exploring the relationship between work-related rumination, sleep quality, and work-related fatigue. *Journal of occupational health psychology*, *17*(3), 341.

Raghuram, S., Wiesenfeld, B., & Garud, R. (2003). Technology enabled work: The role of self-efficacy in determining telecommuter adjustment and structuring behavior. *Journal of Vocational Behavior*, *63*(2), 180-198.

Salas, E., Rosen, M. A., & King, H. (2007). Managing teams managing crises: principles of teamwork to improve patient safety in the emergency room and beyond. *Theoretical Issues in Ergonomics Science*, *8*(5), 381-394.

Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and psychological measurement*, *66*(4), 701-716.

Searing, L. (2020, September 6). *During pandemic, growth of U.S. adults with mental health issues jumps to 53 percent*. The Washington Post. https://www.washingtonpost.com/health/covid-worry-stress-mental-health/2020/09/04/609c0dc2-ee03-11ea-99a1-71343d03bc29_story.html

Secon, H. (2020). *An interactive map of the US cities and states still under lockdown — and those that are reopening*. Retrieved from: https://www.businessinsider.com/us-map-stay-at-home-orders-lockdowns-2020-3.

Shanock, L. R., Baran, B. E., Gentry, W. A., Pattison, S. C., & Heggestad, E. D. (2010). Polynomial regression with response surface analysis: A powerful approach for examining moderation and overcoming limitations of difference scores. *Journal of Business and Psychology, 25,* 543–554.

Sonnentag, S., & Fritz, C. (2015). Recovery from job stress: The stressor-detachment model as an integrative framework. *Journal of Organizational Behavior*, *36*(S1), S72-S103.

Sonnentag, S., & Fritz, C. (2007). The Recovery Experience Questionnaire: development and validation of a measure for assessing recuperation and unwinding from work. *Journal of occupational health psychology*, *12*(3), 204.

Sonnentag, S., Kuttler, I., & Fritz, C. (2010). Job stressors, emotional exhaustion, and need for recovery: A multi-source study on the benefits of psychological detachment. *Journal of Vocational Behavior, 76,* 355–365. doi:10.1016/j.jvb.2009.06.005

Suh, A., & Lee, J. (2017). Understanding teleworkers' technostress and its influence on job satisfaction. *Internet Research, 27(1),*140–59.

Tang, H., Ye, M., Zhou, Z. E., Gan, Z., & Ma, H. (2018). The Mediating Role of Boundary Creation around Work-Related ICT Use between Segmentation Preference and Psychological Detachment. *International Journal of Mental Health Promotion*, *20*(1), 27-40.

Tedone, A. M. (2022). Keeping Up With Work Email After Hours and Employee Wellbeing: Examining Relationships During and Prior to the COVID-19 Pandemic. *Occupational health science*, *6*(1), 51-72.

Tietze, S., & Nadin, S. (2011). The psychological contract and the transition from office-based to home-based work. *Human Resource Management Journal*, *21*(3), 318-334.

Tims, M., Bakker, A. B., & Derks, D. (2013). The impact of job crafting on job demands, job resources, and well-being. *Journal of occupational health psychology*, *18*(2), 230.

Vaziri, H., Casper, W. J., Wayne, J. H., & Matthews, R. A. (2020). Changes to the work–family interface during the COVID-19 pandemic: Examining predictors and implications using latent transition analysis. *Journal of Applied Psychology*, *105*(10), 1073.

Watson, D., & Clark, L. A. (1994). The PANAS-X: Manual for the positive and negative affect schedule-expanded form. Ames: The University of Iowa.

Wepfer, A. G., Allen, T. D., Brauchli, R., Jenny, G. J., & Bauer, G. F. (2018). Work-life boundaries and well-being: Does work-to-life integration impair well-being through lack of recovery?. *Journal of Business and Psychology*, *33*(6), 727-740.

Williams, K. J., Suls, J., Alliger, G. M., Learner, S. M., & Wan, C. K. (1991). Multiple role juggling and daily mood states in working mothers: an experience sampling study. *Journal of Applied Psychology*, *76*(5), 664.

Zerubavel, E. (1991). *The fine line: Making distinctions in everyday life*. New York: Free Press.

Zhao, J., Settles, B. H., & Sheng, X. (2011). Family-to-work conflict: Gender, equity and workplace policies. *Journal of Comparative Family Studies*, *42*(5), 723-738.

Žiedelis, A., Lazauskaitė-Zabielskė, J., & Urbanavičiūtė, I. (2021). Reconciling home and work during lockdown: the role of organisational segmentation supplies for psychological detachment and work-home conflict. *Psichologija, 64*, 86-93.

Tables

Table 1

Participant inclusion criteria for the current dissertation and reasoning behind each criterion

Inclusion Criterion	Reason
1. Is at least 18 years old	To ensure participant is of age to consent
2. Works and resides in the U.S.	For ease of participant compensation and to avoid confounding differences in country-level COVID-19 and organizational policies
3. Works full-time (at least 32 hours per week) in a paid employment position	To obtain a sample of exclusively full-time teleworkers, whose work/home boundary may fundamentally differ from employees teleworking part-time
4. Primarily worked outside the home Monday – Friday prior to the COVID-19 outbreak	To obtain a sample of teleworkers who did not voluntarily telework
5. Currently works exclusively from home because of the COVID-19 outbreak	To obtain a sample of teleworkers whose way of work changed in response to a crisis event

Table 2

Descriptive Statistics and Inter-Correlations of Study Variables

	M	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13
Focal Variables															
1. Pre-telework integration	2.630	1.095	(.715)	.456**	.277*	.288**	.339**	-.170	.267*	.261*	-.106	-.190	.097	-.065	-.006
2. During-telework integration	3.436	1.295		(.847)	.150	.467**	.561**	-.420**	.317**	.322**	-.101	-.076	.156	.120	.026
3. Integration preference	1.960	1.064			(.910)	-.067	.193	-.297**	.038	-.038	.095	.053	-.001	-.053	.294**
4. Affective rumination	2.802	1.033				(.933)	.530**	-.416**	.569**	.533**	-.248*	-.304**	.410**	.059	-.008
5. Problem-solving pondering	2.821	.904				.500**	(.838)	-.464**	.256*	.361**	.019	-.013	.291**	-.056	.094
6. Psychological detachment	4.125	1.017				-.402**	-.419**	(.910)	-.247*	-.210	.233*	.091	-.273*	.046	-.195
7. Physical fatigue	2.530	.829				.444**	.205**	-.214**	(.925)	.667**	-.243*	-.303**	.305**	.074	.130
8. Negative affect	1.812	.519				.475**	.287**	-.239**	.568**	(.885)	-.258*	-.231*	.201	-.014	-.015
9. Positive affect	2.403	.536				-.271**	-.003	.258**	-.277**	-.352**	(.822)	.677**	-.157	-.038	.027
10. Vigor	2.007	.518				-.261**	-.038	.140**	-.327**	-.268**	.622**	(.633)	-.053	-.090	.059
Control Variables															
11. Hindrance stressors	2.559	.848				.348**	.234**	-.246**	.266**	.205**	-.190**	-.112*	(.817)	-.025	.076
12. Sex	.630	.484												--	.045
13. Marital status	.260	.439													--

Note. $N = 81$, with $n = 405$ day-level observations. Day-level correlations are below the diagonal, while person-level correlations are above the diagonal. Estimates of α are in parentheses.
* $p < .05$. ** $p < .01$.

Table 3

Polynomial Regression Results: Pre- and During-Telework Integration as Predictors of Well-Being

	Physical Fatigue			Negative Affect			Positive Affect			Vigor		
	Est.	*P. SD*	*C.I.*	Est.	*P. SD*	*C.I.*	Est.	*P. SD*	*C.I.*	Est.	*P. SD*	*C.I.*
Intercept	1.733*	.351	[1.134, 2.337]	1.657*	.242	[1.080, 2.073]	2.548*	.267	[2.136, 3.167]	2.169*	.242	[1.650, 2.595]
Statistical Controls												
Sex	.170	.189	[-.264, 2.337]	-.035	.130	[-.236, .247]	-.033	.126	[-.278, .209]	-.105	.131	[-.376, .171]
Marital status	.217	.173	[-.107, .581]	-.026	.122	[-.081, .249]	.036	.128	[-.205, .325]	.094	.117	[-.109, .295]
Hindrance stressors	.236*	.110	[.021, .419]	.082	.077	[-.087, .167]	-.056	.082	[-.222, .094]	-.030	.080	[-.179, .125]
Focal Variables												
Pre-telework integration	.110	.114	[-.087, .322]	.040	.067	[-.087, .167]	-.066	.067	[-.192, .083]	-.107	.083	[-.249, .068]
During-telework integration	.136	.082	[-.021, .305]	.110*	.052	[.013, .221]	-.011	.058	[-.103, .124]	.019	.056	[-.093, .130]
Pre-telework integration^2	-.046	.071	[-.186, .109]	-.017	.046	[-.102, .070]	.002	.055	[-.100, .101]	-.044	.048	[-.136, .050]
Pre- x During-telework integration	.038	.092	[-.146, .186]	.057	.059	[-.071, .185]	.032	.063	[-.079, .149]	.066	.063	[-.072, .166]
During-telework integration^2	.046	.053	[-.037, .168]	-.024	.037	[-.098, .052]	-.014	.037	[-.076, .072]	-.025	.037	[-.082, .061]
Surface Parameters												
Congruence slope	.257*	.099	[.045, .477]	.157*	.067	[.015, .293]	-.083	.074	[-.192, .075]	-.081	.072	[-.236, .075]
Congruence curvature	.052	.081	[-.134, .198]	.014	.043	[-.074, .102]	.019	.053	[-.078, .119]	.008	.057	[-.134, .111]

Incongruence slope	-.031	.173	[-.307, .310]	-.070	.100	[-.275, .112]	-.056	.101	[-.261, .136]	-.131	.122	[-.304, .135]
Incongruence curvature	-.017	.169	[-.338, .237]	-.109	.113	[-.341, .102]	-.057	.126	[-.292, .194]	-.115	.115	[-.333, .096]

Note. $N = 81$ participants, with $n = 405$ daily survey observations. Predictor variables were grand-mean centered, with the exception of the statistical controls.

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

Table 4

Polynomial Regression Results: Pre- and During-Telework Integration as Predictors of Work-Related Rumination

	Affective Rumination			Problem-Solving Pondering			Psychological Detachment		
	Est.	*P. SD*	*C.I.*	Est.	*P. SD*	*C.I.*	Est.	*P. SD*	*C.I.*
Intercept	1.533*	.407	[.493, 2.224]	2.631*	.351	[1.861, 3.214]	4.418*	.438	[3.726, 5.280]
Statistical Controls									
Sex	-.090	.209	[-.535, .303]	-.212	.194	[-.511, .204]	.235	.202	[-.186, .653]
Marital status	.419*	.129	[.151, .692]	.173	.180	[-.198, .515]	-.446	.207	[-.867, .031]
Hindrance stressors	.098*	.226	[-.257, .591]	.163	.112	[-.043, .391]	-.140	.137	[-.383, .133]
Focal Variables									
Pre-telework integration	.016	.120	[-.246, .237]	.087	.103	[-.138, .263]	-.033	.109	[-.224, .205]
During-telework integration	.318*	.089	[.149, .499]	.383*	.077	[.250, .535]	-.361*	.093	[-.516, -.155]
Pre-telework integration^2	.004	.077	[-.153, .146]	-.086	.065	[-.210, .040]	.136	.088	[-.046, .297]
Pre- x During-telework integration	.065	.102	[-.159, .269]	.073	.087	[-.109, .246]	.020	.105	[-.162, .210]
During-telework integration^2	.073	.063	[-.061, .207]	-.045	.055	[-.166, .067]	-.094	.060	[-.184, .052]
Surface Parameters									
Congruence slope	.337*	.116	[.093, .561]	.473*	.100	[.273, .665]	-.398*	.120	[-.582, -.120]
Congruence curvature	.138	.073	[-.015, .274]	-.064	.063	[-.186, .061]	.047	.086	[-.115, .230]

Incongruence slope	-.308	.177	[-.670, .018]	-.305*	.151	[-.608, -.031]	.330	.163	[-.001, .644]
Incongruence curvature	.006	.193	[-.415, .362]	-.211	.165	[-.570, .098]	.021	.206	[-.380, .370]

Note. $N = 81$ participants, with $n = 405$ daily survey observations. Predictor variables were grand-mean centered, with the exception of the statistical controls.

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

Table 5a

Daily Work-Related Rumination and Psychological Detachment as Predictors of Daily Well-Being: Within-Person Relationships

	Physical Fatigue			Negative Affect			Positive Affect			Vigor		
	Est.	*P. SD*	*C.I.*	Est.	*P. SD*	*C.I.*	Est.	*P. SD*	*C.I.*	Est.	*P. SD*	*C.I.*
Statistical Controls												
Hindrance stressors (Affective rumination)	.104	.057	[-.000, .215]	.040	.036	[-.041, .098]	-.133*	.050	[-.245, -.047]	-.128*	.049	[-.223, -.047]
Hindrance stressors (Problem-solving pondering)	.155*	.066	[.020, .268]	.092*	.037	[.014, .147]	-.197*	.050	[-.305, -.104]	-.167*	.048	[-.266, -.090]
Hindrance stressors (Psychological detachment)	.140*	.054	[.333, .454]	.056	.035	[-.020, .121]	-.145*	.046	[-.237, -.057]	-.129*	.047	[-.234, -.062]
Focal Variables												
Affective rumination	.137*	.036	[.086, .218]	.139*	.024	[.103, .199]	-.157*	.033	[-.206, -.082]	-.107*	.033	[-.153, -.034]
Problem-solving pondering	.065	.047	[-.029, .153]	.042	.030	[-.004, .108]	-.014	.039	[-.067, .076]	-.029	.038	[-.097, .050]
Psychological detachment	-.071*	.034	[-.126, -.001]	-.097*	.022	[-.133, -.049]	.125*	.028	[.083, .191]	.095*	.030	[.040, .151]

Note. $N = 81$ participants, with $n = 405$ daily survey observations. Models were computed separately, with a single focal predictor and single criterion per model. The statistical control included was hindrance stressors, and the value corresponding to each model (labeled based on which focal predictors was included) is listed.

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

Table 5b

Daily Work-Related Rumination and Psychological Detachment as Predictors of Daily Well-Being: Between-Person Relationships

	Physical Fatigue			Negative Affect			Positive Affect			Vigor		
	Est.	*P. SD*	*C.I.*	Est.	*P. SD*	*C.I.*	Est.	*P. SD*	*C.I.*	Est.	*P. SD*	*C.I.*
Intercept (Affective rumination)	.773*	.345	[.175, 1.467]	1.042*	.232	[.521, 1.377]	2.805*	.282	[2.229, 3.298]	2.310*	.253	[1.836, 2.815]
Intercept (Problem-solving pondering)	1.266*	.408	[.408, 1.978]	.991*	.274	[.448, 1.466]	2.558*	.325	[.174, .377]	.205*	.049	[.141, .342]
Intercept (Psychological detachment)	2.280*	.681	[.889, 3.690]	1.990*	.430	[1.215, 2.751]	2.119*	.497	[1.344, 3.138]	1.840*	.492	[1.016, 2.757]
Statistical Controls												
Hindrance stressors (Affective rumination)	.096	.130	[-.123, .340]	-.016	.080	[-.167, .167]	-.032	.091	[-.200, .149]	.074	.086	[-.098, .238]
Sex (Affective rumination)	.080	.177	[-.275, .434]	-.048	.101	[-.216, .163]	-.035	.121	[-.243, .196]	-.072	.125	[-.286, .181]
Marital status (Affective rumination)	.215	.169	[-.078, .534]	.005	.118	[-.266, .235]	.060	.141	[-.255, .319]	.031	.116	[-.171, .271]
Hindrance stressors (Problem-solving pondering)	.264*	.122	[.020, .499]	.065	.082	[-.080, .255]	-.096	.089	[-.268, .080]	-.010	.085	[-.172, .169]
Sex (Problem-solving pondering)	.138	.174	[-.176, .495]	.016	.109	[-.184, .235]	-.040	.122	[-.258, .170]	-.098	.131	[-.332, .177]
Marital status (Problem-solving pondering)	.155	.216	[-.242, .582]	-.054	.130	[-.327, .197]	.072	.143	[-.268, .080]	.053	.124	[-.148, .302]
Hindrance stressors (Psychological detachment)	.293	.138	[-.003, .552]	.105	.081	[-.049, .282]	-.055	.088	[-.213, .106]	.011	.088	[-.160, .174]
Sex (Psychological detachment)	.166	.198	[-.206, .529]	.007	.115	[-.199, .252]	-.058	.120	[-.271, .178]	-.094	.130	[-.337, .150]

Marital status (Psychological detachment)	.090	.187	[-.003, .552]	-.071	.139	[-.351, .220]	.102	.145	[-.218, .377]	.081	.126	[-.155, .328]
Focal Variables												
Affective rumination	.514*	.108	[.293, .695]	.297*	.068	[.174, .437]	-.107	.075	[-.244, .031]	-.158*	.073	[-.294, -.021]
Problem-solving pondering	.172	.125	[-.032, .434]	.216*	.074	[.069, .348]	.047	.080	[-.114, .176]	.032	.086	[-.129, .248]
Psychological detachment	-.137	.123	[-.389, .114]	-.121	.081	[-.257, .059]	.100	.089	[-.070, .270]	.049	.087	[-.087, .243]

Note. $N = 81$ participants, with $n = 405$ daily survey observations. Models were computed separately, with a single focal predictor and single criterion per model. For the intercept and statistical controls, the value corresponding to each model (labeled based on which focal predictors was included) is listed.

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

Table 6

Indirect Effect Coefficients for Hypothesized Model: Pre- and During-Telework Integration as Predictors of Well-Being through Work-Related Rumination

		Physical Fatigue		Negative Affect		Positive Affect		Vigor	
IV	Mediator	Est.	95% C.I.	Est.	95% C.I.	Est.	95% C.I.	Est.	95% C.I.
Congruence Slope	Affective Rumination	.592*	[.250, 1.053]	.381*	[.170, .672]	-.239*	[-.508, -.040]	-.294*	[-.573, -.096]
	Problem-Solving Pondering	.458*	[.198, .820]	.218*	[.029, .460]	.109	[-.099, .347]	.024	[-.200, .244]
	Psychological Detachment	-.088	[-.354, .128]	-.061	[-.231, .104]	.195*	[.037, .444]	.091	[-.058, .282]
Congruence Curvature	Affective Rumination	.741*	[.108, 1.539]	.511*	[.072, 1.054]	-.282*	[-.709, -.022]	-.316*	[-.764, -.041]
	Problem-Solving Pondering	-.025	[-.564, .459]	-.029	[-.536, .462]	-.001	[-.190, .170]	.001	[-.152, .189]
	Psychological Detachment	-.077	[-.417, .106]	-.060	[-.283, .086]	.095	[-.113, .383]	.038	[-.071, .234]
Incongruence Slope	Affective Rumination	-.618*	[-1.124, -.276]	-.406*	[-.709, -.181]	.251*	[.054, .519]	.297*	[.090, .572]
	Problem-Solving Pondering	-.148	[-.524, .174]	-.264*	[-.532, -.059]	-.099	[-.343, .125]	.015	[-.220, .259]
	Psychological Detachment	.100	[-.151, .419]	.081	[-.084, .289]	-.205*	[-.469, -.020]	-.098	[-.316, .073]
Incongruence Curvature	Affective Rumination	.236	[-.935, 1.478]	-.205†	[-.809, .368]	.150†	[-.257, .628]	-.082	[-.692, .500]
	Problem-Solving Pondering	-.050	[-.316, .134]	-.067	[-.315, .147]	-.002	[-.110, .070]	.003	[-.079, .110]
	Psychological Detachment	-.085	[-.437, .111]	-.068	[-.309, .097]	.103	[-.105, .402]	.047	[-.072, .270]

Note. $N = 81$ participants, with $n = 405$ daily survey observations. Predictor variables were grand-mean centered.
†Model computed without statistical controls to achieve convergence

Table 7

Polynomial Regression Results: Preferred and Current† Integration as Predictors of Well-Being

	Physical Fatigue			Negative Affect			Positive Affect			Vigor		
	Est.	*P. SD*	*C.I.*	Est.	*P. SD*	*C.I.*	Est.	*P. SD*	*C.I.*	Est.	*P. SD*	*C.I.*
Intercept	1.443*	.337	[.845, 2.018]	1.572*	.243	[.990, 1.968]	2.556*	.260	[2.135, 3.148]	2.164*	.237	[1.602, 2.584]
Statistical Controls												
Sex	.223	.196	[-.187, .599]	-.040	.134	[-.263, .216]	-.039	.130	[-.299, .206]	-.132	.136	[-.385, .152]
Marital status	.173	.205	[-.186, .589]	.023	.133	[-.274, .248]	.067	.137	[-.234, .332]	.152	.138	[-.081, .384]
Hindrance stressors	.306*	.115	[.072, .511]	.071	.077	[-.092, .223]	-.106	.085	[-.274, .071]	-.075	.081	[-.212, .091]
Focal Variables												
Integration preference	.036	.134	[-.219, .316]	-.120	.080	[-.290, .028]	-.064	.080	[-.223, .108]	-.106	.092	[-.267, .085]
During-telework integration	.140*	.072	[.012, .285]	.123*	.046	[.038, .214]	-.025	.049	[-.107, .084]	-.028	.049	[-.119, .071]
Integration preference^2	.016	.085	[-.132, .192]	.085	.054	[-.024, .189]	.070	.057	[-.049, .210]	.094	.059	[-.007, .221]
Preference x During-telework integration	-.131	.080	[-.288, .026]	-.045	.051	[-.152, .065]	.017	.052	[-.063, .137]	.043	.054	[-.062, .149]
During-telework integration^2	.087	.047	[-.007, .172]	.001	.032	[-.072, .056]	-.013	.034	[-.072, .065]	-.027	.033	[-.088, .039]
Surface Parameters												
Congruence slope	.181	.135	[-.068, .483]	-.003	.092	[-.202, .183]	-.091	.095	[-.237, .086]	-.130	.093	[-.321, .068]
Congruence curvature	-.014	.107	[-.275, .166]	.043	.052	[-.056, .142]	.080	.061	[-.024, .205]	.117	.074	[-.066, .245]

Incongruence slope	-.110	.168	[-.413, .192]	-.254*	.093	[-.434, -.078]	-.041	.093	[-.236, .142]	-.079	.114	[-.293, .133]
Incongruence curvature	.233	.143	[-.046, .521]	.129	.100	[-.108, .314]	.038	.105	[-.158, .249]	.025	.098	[-.160, .208]

Note. $N = 81$ participants, with $n = 405$ daily survey observations. Predictor variables were grand-mean centered, with the exception of the statistical controls.

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

†During-telework level of integration

Table 8

Polynomial Regression Results: Preferred and Current† Integration as Predictors of Work-Related Rumination

	Affective Rumination			Problem-Solving Pondering			Psychological Detachment		
	Est.	*P. SD*	*C.I.*	Est.	*P. SD*	*C.I.*	Est.	*P. SD*	*C.I.*
Intercept	1.269*	.390	[.392, 1.964]	2.219*	.348	[1.493, 2.850]	4.679*	.441	[3.870, 5.643]
Statistical Controls									
Sex	.200	.228	[-.195, .643]	-.115	.199	[-.456, .287]	.173	.213	[-.254, .588]
Marital status	-.096	.219	[-.551, .281]	.078	.190	[-.330, .422]	-.237	.228	[-.752, .206]
Hindrance stressors	.471*	.120	[.212, .692]	.211*	.106	[.001, .411]	-.228	.148	[-.492, .067]
Focal Variables									
Integration preference	-.078	.132	[-.351, .165]	-.004	.115	[-.243, .218]	-.286*	.134	[-.556, .000]
During-telework integration	.305*	.075	[.158, .449]	.338*	.066	[.214, .467]	-.268*	.081	[-.418, -.101]
Integration preference^2	.053	.090	[-.130, .226]	.145	.078	[-.015, .299]	.038	.095	[-.159, .272]
Preference x During-telework integration	-.197*	.084	[-.372, -.033]	-.159*	.073	[-.303, -.012]	-.023	.086	[-.156, .193]
During-telework integration^2	.129*	.052	[.009, .233]	-.007	.046	[-.115, .087]	-.070	.057	[-.168, .057]
Surface Parameters									
Congruence slope	.218	.151	[-.091, .532]	.326*	.132	[.051, .593]	-.563*	.160	[-.829, -.268]
Congruence curvature	-.016	.086	[-.189, .152]	-.024	.074	[-.172, .120]	-.035	.104	[-.231, .163]

Incongruence slope	-.402*	.152	[-.722, -.113]	-.357*	.132	[-.620, -.091]	-.025	.153	[-.349, .284]
Incongruence curvature	.370*	.165	[.010, .678]	.286	.144	[-.032, .541]	-.012	.174	[-.377, .346]

Note. $N = 81$ participants, with $n = 405$ daily survey observations. Predictor variables were grand-mean centered, with the exception of the statistical controls.

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

†During-telework level of integration

Table 9

Indirect Effect Coefficients for Research Question 2 Model: Preferred and Current[†] Integration as Predictors of Well-Being through Work-Related Rumination

		Physical Fatigue		Negative Affect		Positive Affect		Vigor	
IV	Mediator	Est.	95% C.I.	Est.	95% C.I.	Est.	95% C.I.	Est.	95% C.I.
Congruence Slope	Affective Rumination	.678*	[.310, 1.144]	.510*‡	[.260, .839]	-.274*	[-.574, -.054]	-.325*	[-.636, -.123]
	Problem-Solving Pondering	.566*	[.245, 1.005]	.279*	[.036, .585]	.121	[-.124, .412]	.000	[-.265, .273]
	Psychological Detachment	-.138	[-.472, .123]	-.104	[-.320, .070]	.246*	[.053, .517]	.093	[-.084, .323]
Congruence Curvature	Affective Rumination	.745*	[.320, 1.321]	.544*	[.218, .952]	-.286*	[-.630, -.039]	-.331	[-.694, -.080]
	Problem-Solving Pondering	.340	[-.080, .935]	.429*	[.131, .871]	.034	[-.273, .365]	-.066	[-.423, .231]
	Psychological Detachment	-.023	[-.523, .384]	-.027	[-.357, .249]	.064	[-.334, .524]	.018	[-.195, .321]
Incongruence Slope	Affective Rumination	-.555*	[-.986, -.243]	-.368*	[-.666, -.150]	.220*	[.040, .473]	.279*	[.084, .544]
	Problem-Solving Pondering	-.141	[-.575, .242]	-.291*	[-.589, -.052]	-.124	[-.426, .145]	-.003	[-.278, .270]
	Psychological Detachment	.048	[-.055, .245]	.046	[-.031, .192]	-.070	[-.261, .046]	-.035	[-.186, .034]
Incongruence Curvature	Affective Rumination	-.082	[-.404, .249]	-.048	[-.283, .156]	.031	[-.084, .184]	.034	[-.102, .192]
	Problem-Solving Pondering	.008	[-.149, .190]	.015	[-.144, .184]	.001	[-.047, .071]	-.001	[-.071, .053]
	Psychological Detachment	-.009	[-.478, .403]	-.004	[-.341, .320]	.028	[-.371, .481]	.008	[-.217, .286]

Note. $N = 81$ participants, with $n = 405$ daily survey observations.

[†]During-telework level of integration

[‡]Model computed without statistical controls to achieve convergence

Figures

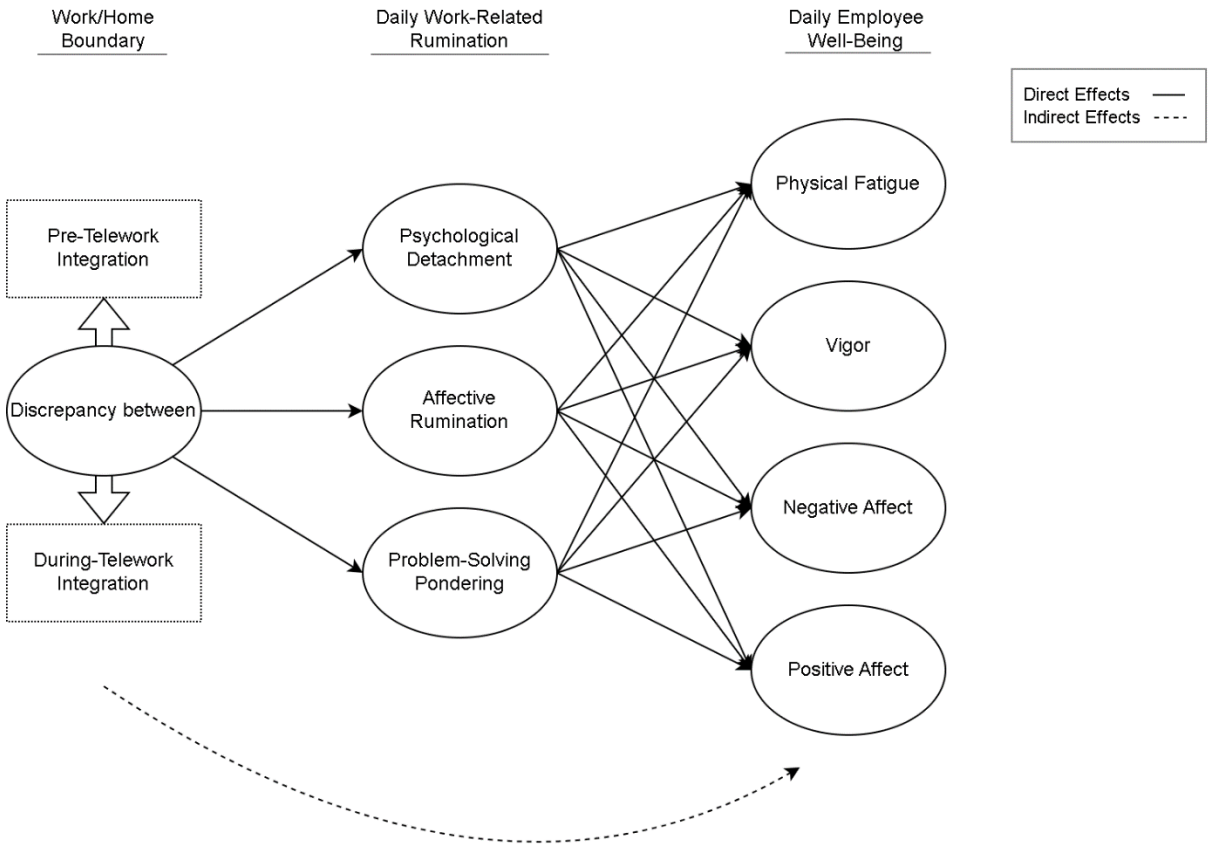

Figure 1. The model corresponding to the association between change in integration from pre- to during-telework and well-being through work-related rumination and lack of psychological detachment

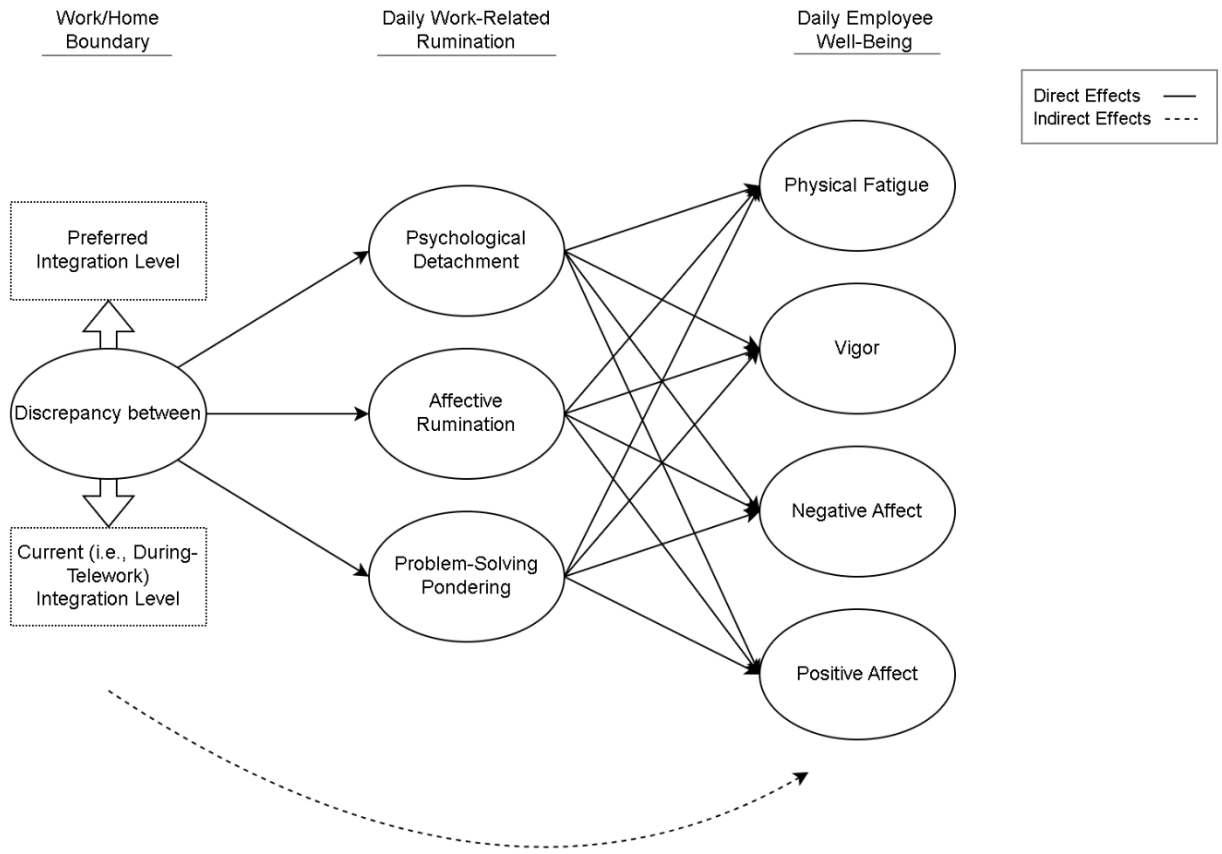

Figure 2. The model corresponding to the relationship from discrepancy between preferred and enacted integration and well-being through work-related rumination and lack of psychological detachment

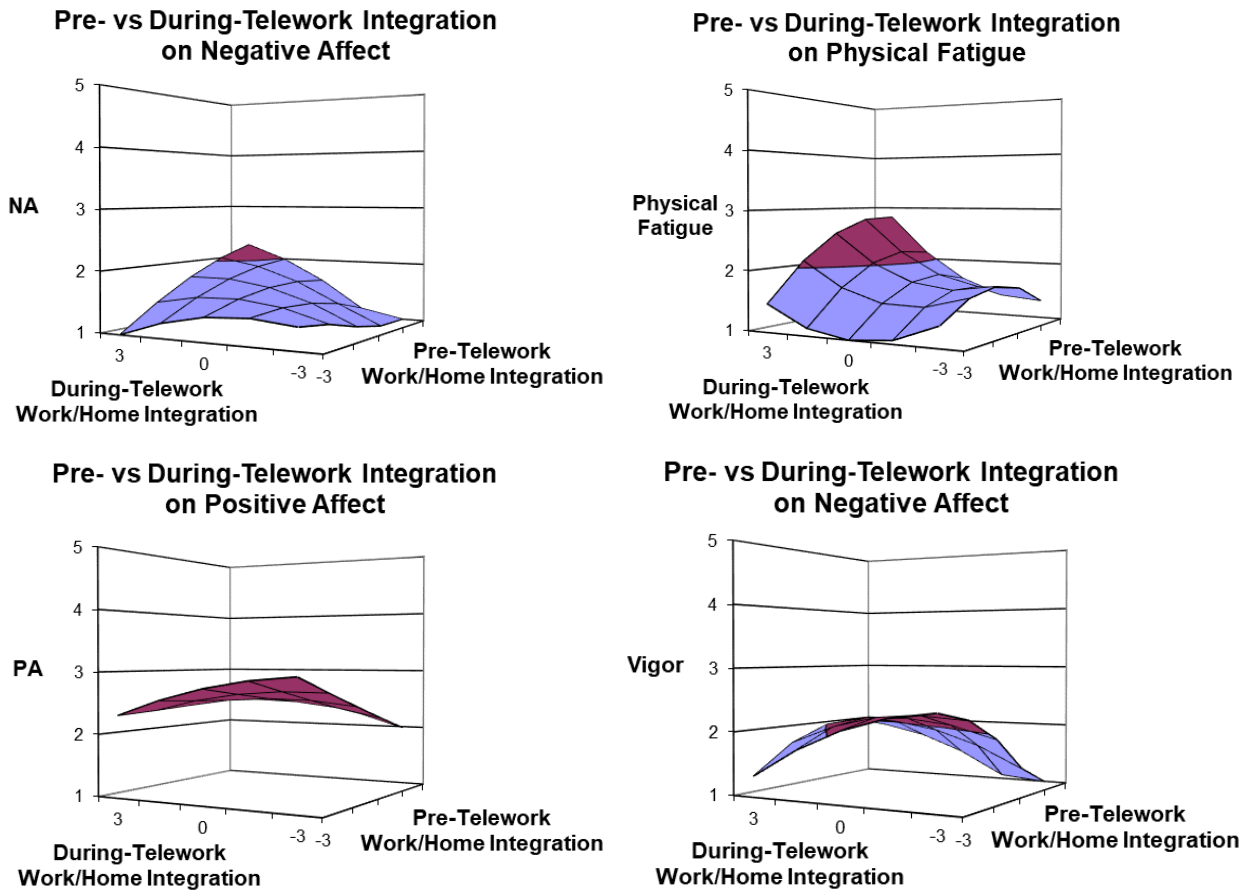

Figure 3. Response surfaces with pre- and during-telework work/home integration as predictors of well-being.

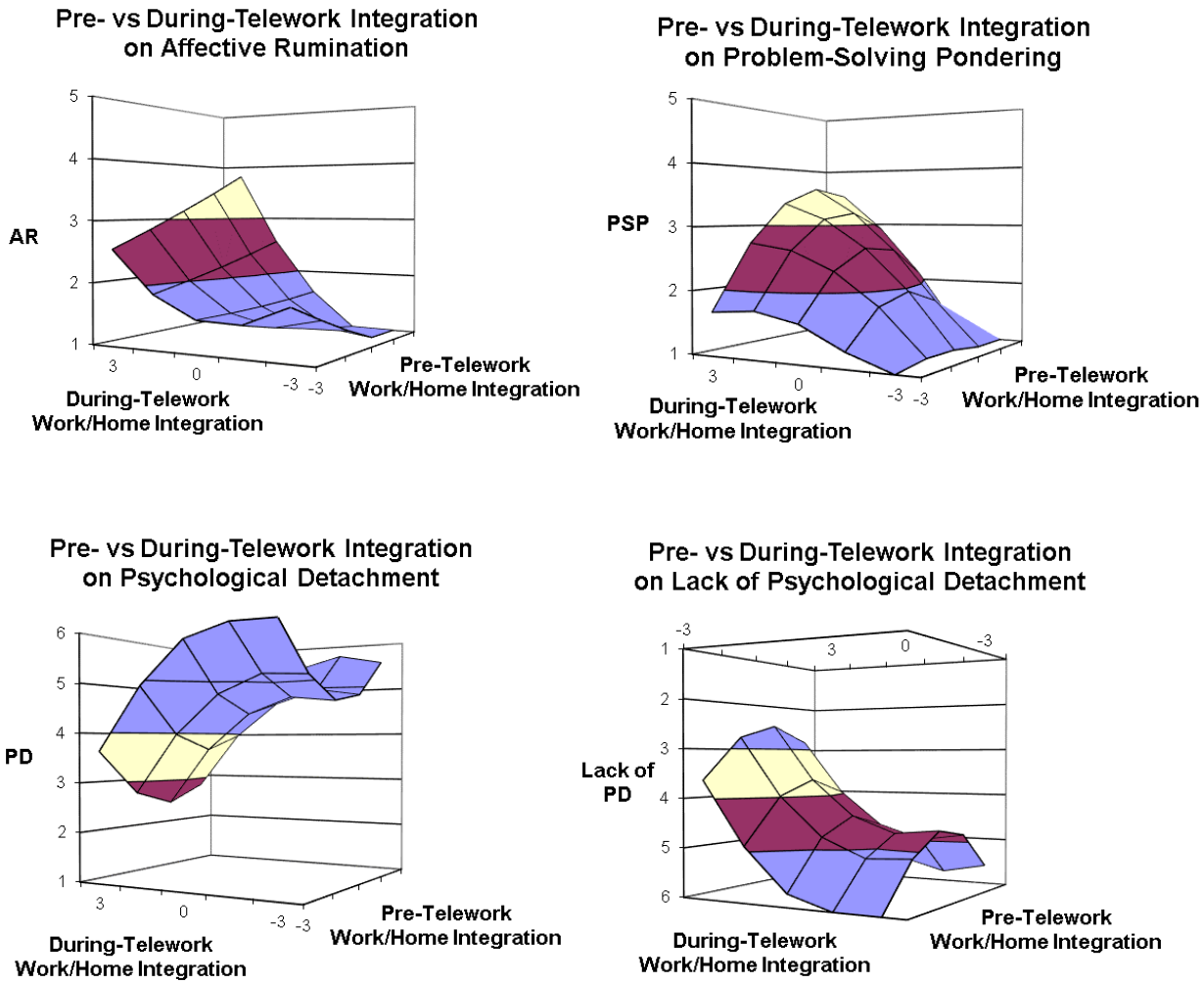

Figure 4. Response surfaces with pre- and during-telework work/home integration as predictors of work-related rumination

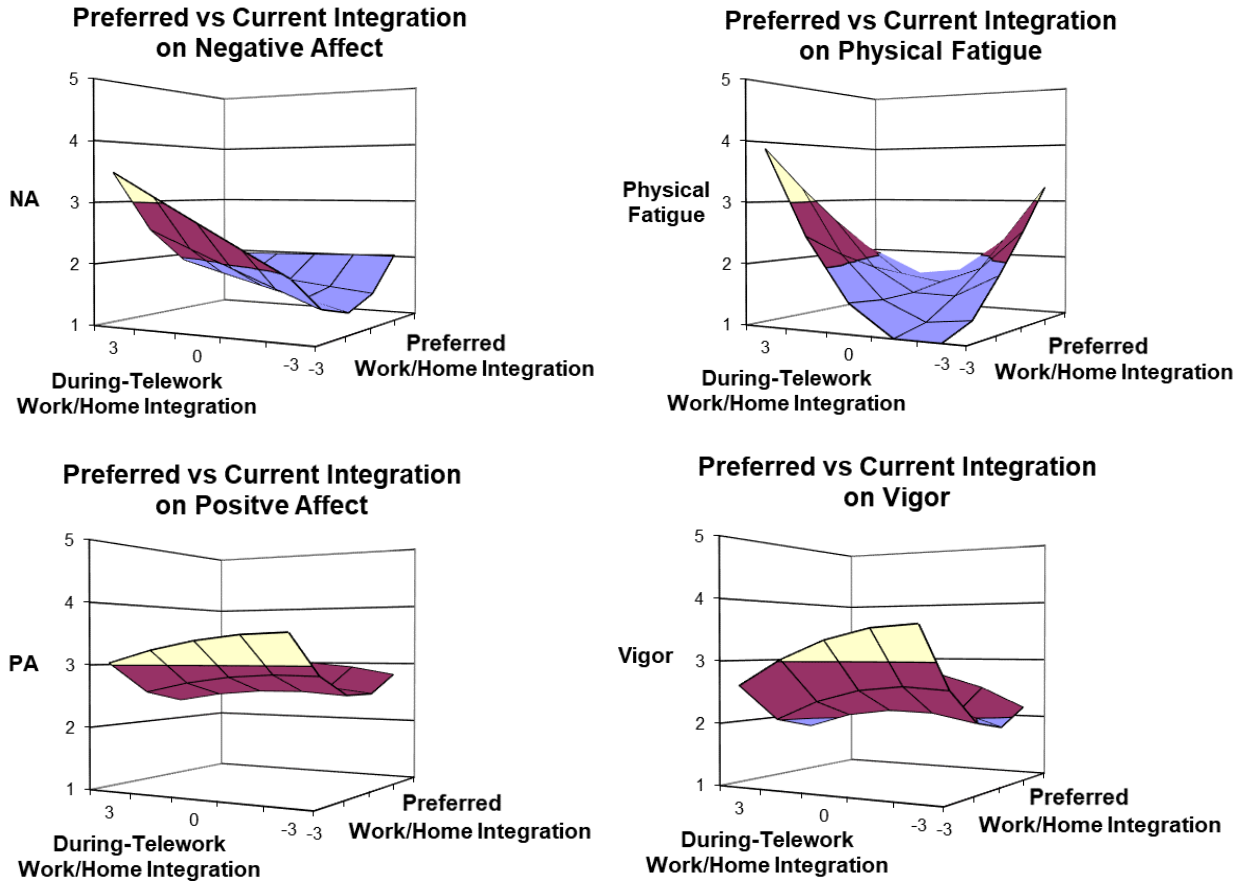

Figure 5. Response surfaces with preferred and enacted during-telework work/home integration as predictors of well-being

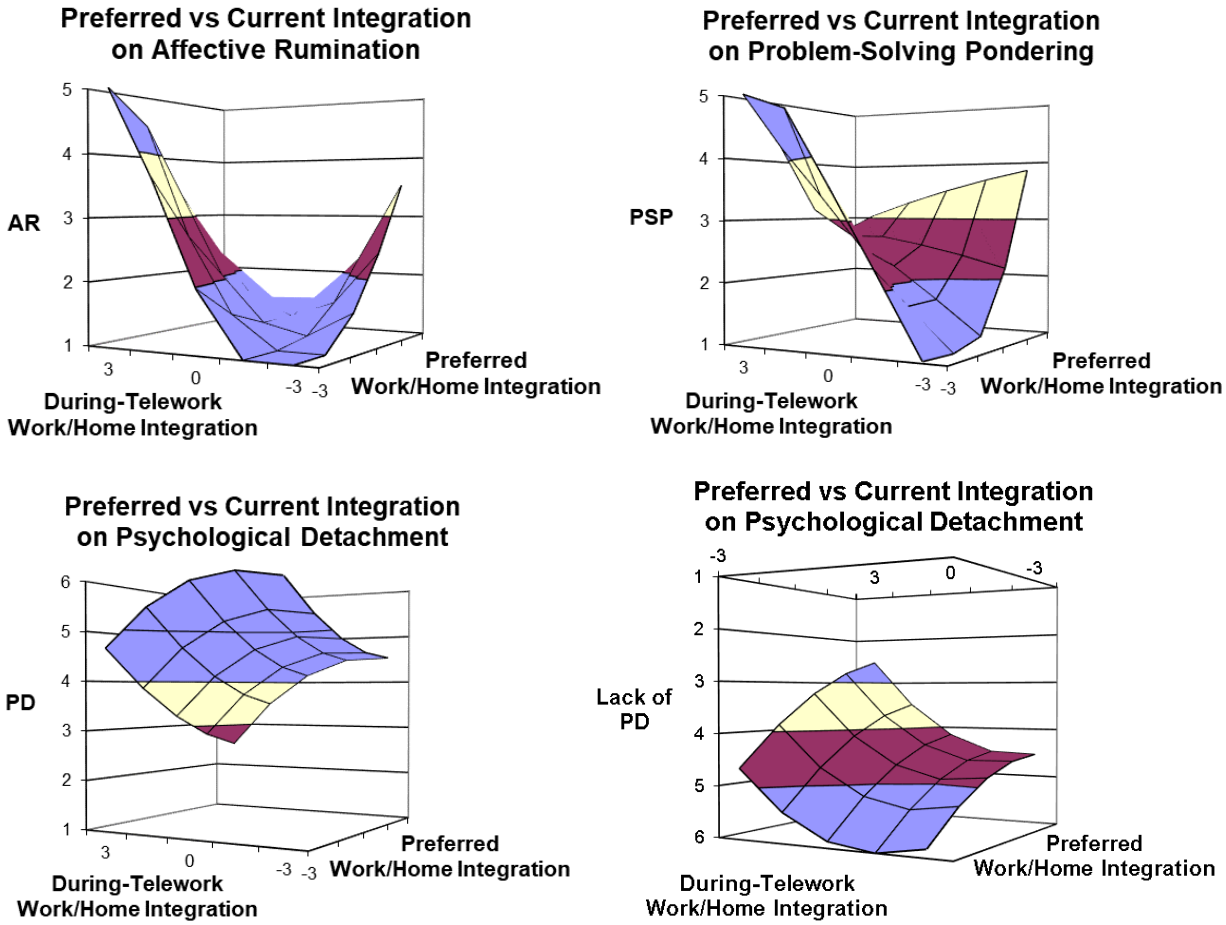

Figure 6. Response surfaces with preferred and enacted during-telework work/home integration as predictors of work-related rumination