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Drawing the Line: Exploring the After-work Recovery Process Using a Latent Profile Analysis

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by

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Abstract

Title: Drawing the Line: Exploring the After-work Recovery Process Using a Latent Profile Analysis

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The present study utilized a person-centered approach to examine the individual differences in the after-hours recovery process and begin to elucidate the differential influence of boundary management variables (i.e., segmentation preference, segmentation supplies, and boundary control), on variables that are important to the after-hours recovery process (i.e., after-hours work, recovery experiences, and recovery outcomes). Previous research has shown conflicting results regarding the negative influence of working during non-work hours on recovering from work, as well as inconsistencies concerning the boundary management variables that moderate this relationship. The person-centered analysis revealed that quantitatively distinct subpopulations or profiles, made up of different combinations of key boundary management variables do exist, and these profiles exhibit different levels of after-hours work, recovery experiences, and recovery outcomes. The current study provides initial support for the use of a person-centered approach to better understand the nuances in the after-hours recovery

process across subpopulations. Future directions for research as well as both theoretical and practical implications are discussed.

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Dedication

This dissertation is dedicated to my parents, whose support and guidance have entrenched every decision I make, and without whom I would have never succeeded in graduate school. “My parents never gave me any idea that I couldn’t do whatever I wanted to do or be whomever I wanted to be. They filled our house with love and fun and books and music unflagging in their efforts to love and support me” (excerpt adapted from Gilmore Girls).

And to my dog, Scooby, whose been by my side every step of the way and is a constant source of love and happiness.

Chapter 1: Introduction

Over the past few decades, the line between work life and non-work life has increasingly blurred. A fourth of working adults in the U.S. report they regularly bring work home and close to half report that they respond to work-related communications during personal time (American Psychological Association, APA, 2013; APA, 2015). The interconnectedness between work and non-work domains is constantly reinforced through communication technology advances and increasing work-from-home arrangements. According to the literature on work stress and recovering from work, this perpetual blurring between home and work life boundaries is thought to increase work-home interference and reduce recovery experiences off-the-job, which are essential for healthy and productive workers (Meijman & Mulder, 1998).

Experiences of psychological detachment from work and relaxation are key mechanisms, or types of recovery experiences, by which individuals recover from work stress. The effort-recovery model (Meijman & Mulder, 1998) states that when effort is expended in response to job demands, resources become depleted. We require periods of recovery to regain these resources. Without sufficient recovery from job demands overtime, chronic health issues arise and productivity declines (Meijman & Mulder, 1998). Thus, the after-hours recovery process is key in maintaining employee wellness. In line with this notion, research finds that employees who work after hours typically report reduced recovery experiences in

the evenings after work and increased strain (Barber & Santuzzi, 2015; Butts, Becker, & Boswell, 2015; Park & Jex, 2011; Schieman & Young, 2013).

According to boundary theory, (Ashforth, Kreiner, & Fugate, 2000; Nippert-Eng, 1996) individuals construct boundaries between different life domains (e.g., work and home) in order to organize and maintain responsibilities in multiple roles (e.g., employee and spouse.). High segmentation between work and home life refers to a high degree of separation which is achieved through more impermeable boundaries among the two life domains, while low segmentation (sometimes referred to as integration) refers to looser boundaries among the two domains. Boundaries between work and non-work domains of life are thought to be important because when we work for extended periods of time or have low segmentation between home and work life, we are less likely to psychologically detach from the demands of work and relax (Cropley, Dijk, & Stanley, 2006).

However, the negative influence of low segmentation between home and work life, specifically the impact of working during non-work hours on wellbeing, is not as straightforward as originally conceived. Research in this area has started to uncover that the degree to which after-hours work negatively influences recovery depends on boundary management variables such as *boundary control*, one's perceived control over the permeability of their work and non-work domains, *segmentation preference*, one's preferred degree of work-home separation, *and segmentation supplies,* one's perception of the degree to which their work environment encourages either a low or high work-home segmentation. For

example, those with a preference for low segmentation between home and work life can see positive effects of working after-hours on recovery experiences (Derks, van Mierlo, & Schmitz, 2014). Researchers posit that such individuals may feel the need to tend to work tasks during non-work hours in order to prevent ruminating thoughts about work when they actually are not working, which would reduce chances for recovery experiences such as psychological detachment from work (Derks et al., 2014). Such results are not in line with the effort-recovery model and instead suggest the integration of home and work life does not always have the same negative consequences for all individuals, (Derks et al., 2014; Mellner, 2015; Park, Fritz, & Jex, 2011; Park & Jex, 2011; Schieman & Young, 2013). This assumption also aligns with employee perceptions, as more than half of working Americans report after-hours work-related communication technology use is beneficial to their productivity (APA 2013; APA 2015).

Although these boundary management variables (i.e., boundary control, segmentation preference, and segmentation supplies) have shown to impact after-hours work tendencies and wellbeing outcomes, they have yet to be examined together. Examining them in unison will provide a more comprehensive picture regarding the after-hours work recovery process and the conditions under which after-hours work becomes detrimental to recovery and wellbeing. The present study aims to gain a deeper understanding of the influence of boundary management variables by identifying different groups of individuals that share characteristics (boundary control, segmentation preference, and segmentation supplies) to make up

a boundary management profile. Boundary management profiles have the potential to help us draw more nuanced conclusions regarding the after-hours recovery process, which the traditional variable-centered approaches that research in this area is typically consumed with would ignore. Not only can a profile approach improve our ability to predict key variables in the after-hours recovery process by capturing the differences in relationships across subpopulations, but it will also provide a more concise and meaningful way to examine and communicate how organizations can practically provide personalized support for a range of differing recovery needs among employees.

Researchers have rarely explored the influence of the interaction between boundary management variables on the after-work recovery process (Gadeyne et al., 2018; Kreiner, 2006). Likewise, only one previous study (Kossek et al., 2012) has examined the after-hours work/recovery process using a person-centered view (e.g., latent profile analysis, LPA), as opposed to a variable-centered view. The traditional variable-centered approach that has typically been used allows us to examine how variables such as after-hours working influences recovery experiences and strain across individuals, as well as how boundary management variables (e.g., segmentation preference *or* segmentation supplies) moderate these relationships separately, across individuals. Alternatively, a person-centered approach would allow us to examine how boundary management variables operate together, within groups (i.e., a boundary management profile made up of boundary

control, segmentation preference, *and* segmentation supplies) to influence outcomes of after-hours work such as recovery experiences and strain.

Utilizing a person-centered approach may help to better elucidate why after-hours work hinders recovery for some individuals yet promotes recovery for others because it can enable us to account for different subpopulations of individuals who score similarly on boundary management variables. For example, the degree to which one's segmentation preference aligns with the segmentation supplies of their organization may have a stronger influence than the preference or norm itself (Kreiner, 2006), and this may explain why the effort-recovery model seems to only be explanatory of the after-hours recovery process for some individuals. Likewise, the alignment between one's segmentation preference and segmentation supplies may not matter if an individual perceives low control over their home and work-life boundaries.

The present study aims to examine the relationship between boundary control, segmentation preference, and segmentation supplies through the lens of the effort-recovery model (Meijman & Mulder, 1998) and boundary management theory (Ashforth, Kreiner, & Fugate, 2000; Nippert-Eng, 1996) to achieve three main objectives. First, in order to begin to account for the conflicting results in the literature regarding the relationship between after-hours work and recovery, the present study utilizes a latent profile analysis to determine distinct boundary management profiles (determined by employee's perceived boundary control, segmentation preference, and segmentation supplies). Next, the present study will

examine how the latent boundary management profiles that emerge might differentially influence the after-hours recovery process, by determining if profiles exhibit different levels on antecedents (e.g., after-hours work), mechanisms, (e.g., recovery experiences) and outcomes (e.g., job-related strain, work-home conflict and enrichment) of the recovery process. Finally, the current study will determine if such boundary management profiles tell us more than the traditional raw scores on the boundary management variables would alone in predicting recovery outcomes. By determining the latent boundary management profiles that emerge and examining their differences on key recovery variables, the present study forms the necessary foundation for recovery researchers to utilize such profiles to better capture and understand the nuances of the after-hours recovery process.

Chapter 2: Literature Review

Researching work stress helps us to provide practical evidence-based recommendations that can help employees to cope with stress and recover from job strain. However as researchers have started to elucidate, the variables that influence the relationship between work stressors and strain, specifically the relationship between working during non-work hours and recovery, are moderated by individual differences (e.g., segmentation preference; Park et al., 2011). In other words, more individual-specific recommendations are necessary because whether or not an employee sees detrimental effects to their own recovery and strain from working during non-work hours can depend on individual and/or situational differences (Gabriel et al., 2015; Kreiner, 2006; Park et al., 2011).

In addition to individual differences, situational characteristics also play a key role in the after-hours work and recovery relationship. For example, the norms or supplies perceived at one's organization regarding segmentation of home and work life can influence recovery after-hours (Park et al., 2011). Likewise, the expectations one perceives concerning workplace expectations of work-related communications after-hours influences whether or not one partakes in work-related technology use after-hours (Butts et al., 2016). As such, it is necessary to examine situational characteristics along with individual differences as potential boundary conditions to the after-hours work and recovery relationship.

Thus, the degree to which an individual can successfully recover from job stress and reduce job strain is not only influenced by working during non-work

hours, but also by key boundary management variables such as an employee's segmentation preference, perceived segmentation supplies, and perceived boundary control (Kossek et al., 2012; Kreiner, 2006; Park et al., 2011). The following sections will outline the research on recovering from work after the workday and then introduce how the previously mentioned boundary management variables can help us to better understand the differences observed in the after-work recovery process for different employees.

Recovery from Work

Recovery from work is a process that allows for job strain to reduce and psychological resources (e.g., energy or vigor) to return to pre-stress levels. According to the effort-recovery model (Meijman & Mulder, 1998), effort is exerted throughout the workday in response to job demands and stressors. As effort is increased, allostatic load reactions are triggered which take a toll on psychological resources. These resources must be regained to avoid both short-term effects, such as eye strain or negative affective reactions, and long-term effects, such as chronic physical or mental health issues (Meijman & Mulder, 1998).

Thus, recovering from the demands of each workday is thought to be key in preventing chronic load reactions and maintaining employee energy and wellbeing. In fact, research shows that those who partake in more job-related activities in the evenings after work see reduced energy levels (Bakker, Demerouti, Oerlemans, & Sonnentag, 2013) and wellbeing (Sonnentag & Zijlstra, 2006), and that such activities result in employees coming to work the next morning less recovered and

more tired (Sonnentag, Mojza, Binnewies, & Scholl, 2008; ten Brummelhuis & Trougakos, 2014). As such, working during non-work hours is an important variable to examine when studying recovery because tending to work demands during personal time prevents individuals from successfully detaching from job demands and recovering from work before the next workday.

The literature on work recovery affirms that an effective way for employees to reduce job strain is to partake in recovery experiences (Sonnentag & Fritz, 2007; for a review see Sonnentag, Venz, & Casper, 2017). Recovery experiences refer to the psychological experiences associated with the recovery *process*, which ultimately result in a state of recovery. On the other hand, recovery *outcome* variables (e.g., affective well-being, fatigue, etc.) provide insight on a successful state of recovery, which the effort-recovery model ascertains to be a reduction in strain. Researching the recovery process through recovery experiences (e.g., psychological detachment, relaxation, etc.) elicited during non-work time periods (e.g., after-work activities, vacations, etc.) is important because these psychological experiences are fundamental in producing recovery outcomes (Sonnentag & Fritz, 2007; Sonnentag & Geurts, 2009).

Four dimensions of recovery experiences are thought to be conducive to recovering from job strain: psychological detachment from work, control, relaxation, and mastery (i.e., learning something new or challenging) (Sonnentag & Fritz, 2007). These recovery experiences are universal mechanisms by which individuals recover from work stress, regardless of the type of respite (e.g., work

break, between work shifts, vacations, etc.). Psychological detachment refers to employees mentally disengaging from the demands of the job. Psychological detachment has proven to be a key recovery experience, as it relates to reduced fatigue and better mood (Sonnentag & Bayer, 2005), reduced exhaustion (Sonnentag, Kutler, & Fritz, 2010), and reduced negative affect (Sonnentag et al., 2008). Psychological detachment recovery experiences are especially important to the after-hours recovery process because there is limited time available for individuals to successfully detach from job demands in the evening before having to clock in the next day.

Next, control refers to the experience of being able to freely choose how to spend recovery periods. Just as job control is a key variable in the stressor-strain relationship, control over leisure time or recovery experiences is crucial and has been found to be associated with positive reactions, sleep quality, and emotional exhaustion (Derks, Brummelhuis, Zecic, & Bakker, 2014; Sonnentag & Fritz, 2007). Control recovery experiences have shown to relate to a lower need for recovery (Siltaloppi et al., 2009) and are thus, likely highly related to the boundaries one sets between home and work, as well as the degree to which one partakes in work after-hours.

Relaxation recovery experiences refer to periods of decreased activation both mentally and physically. Such relaxation recovery experiences are important because of their focus on both the body and mind, and as such have the potential to influence both physical and psychological strain outcomes like fatigue and positive

affect, respectively (Fredrickson, 2000; Sonnentag, Binnewies, & Mojza, 2008; Stone, Kennedy-Moore, & Neale, 1995). Relaxation experiences during non-work time, similar to control experiences, influence need for recovery and thus likely influence how one manages the boundaries between work and home domains (Siltaloppi et al., 2009).

Finally, mastery refers to taking the time to learn a new or challenging skill. Mastery experiences allow individuals to build up personal resources (e.g., learning new skills, increasing self-efficacy, etc.) and thus have the potential to boost one's mood in response to achieving competence or proficiency in a challenging and rewarding task (Mojza, Lorenz, Sonnentag, & Binnewies, 2010; Sonnentag, Binnewies, & Mojza, 2008). Mastery experiences have shown to relate to increased vigor at work (de Bloom et al., 2015) and reduced need for recovery (Siltaloppi et al., 2009) and can help us to better understand how boundary management variables might influence the recovery process. These four recovery experiences are integral in reducing strain and are important variables to examine when studying the influence of after-hours work and boundary management variables on the work recovery process (Sonnentag et al., 2017).

In combination with recovery experiences, recovery outcomes such as reduced negative affective reactions, fatigue, work-home conflict, and emotional exhaustion, are key factors in promoting employee health and engagement overall (Sonnentag et al., 2017). The literature shows that participating in work-related technology-use or communications after work hours is associated with negative

emotional responses (e.g., anger, distress), physical and cognitive burnout, decreased sleep quality, and absenteeism (Barber & Santuzzi, 2015; Butts, Becker, & Boswell, 2015; Park & Jex, 2011; Schieman & Young, 2013). Moreover, research by Derks and Bakker (2014) shows that when employees use their phones for work after work hours, the impact of work-family conflict on burnout is stronger.

In addition to the four recovery experiences, the present study will examine three important recovery outcome variables: 1) job-related affective well-being (Van Katwyk et al., 2000), which captures affective reactions to work stressors, 2) work-home conflict (Carlson et al., 2000; Frone et al., 1992; Netemeyer, Boles, & McMurrian, 1996), which captures the degree of incompatibility perceived between one's home and work domains, and 3) work-family enrichment (Greenhaus & Powell, 2006; Carlson et al., 2006), which captures the extent to which participation in one role improves the quality of life in another role. In essence, capturing these outcome variables will allow us to begin to determine if boundary management profiles can explain differences across individuals regarding how working after hours positively or negatively influences the recovery process and stain outcomes, by examining whether profiles exhibit significantly different levels of recovery experiences and strain (i.e., reduced job-related affective wellbeing and work-family enrichment, increased work-to-family conflict).

After-hours Work and Recovery

In the context of working after work hours, the effort-recovery model suggests that attending to work demands during personal time results in limited

opportunities to engage in effective recovery experiences, which in turn hinders the ability to recover successfully. According to Sonnentag (2003) there are two types of categories that comprise the activities individuals typically partake in during the evenings after work hours: those activities requiring effort, such as job-related tasks or dealing with household responsibilities and those activities that allow for one to recover from lost resources, such as watching TV or hanging out with friends. Partaking in the latter set of activities promote recovery experiences (Sonnentag et al., 2017).

Sonnentag and Fritz (2007) explain that recovery experiences are necessary for individuals to regain the resources lost during the workday because they allow for a chance to get away from the demands that depleted their resources. As such, it is likely that individuals who engage in more after-hours work-related tasks will have reduced time and ability to engage in recovery experiences, and in turn, have reduced chances of cutting down on strain or promoting positive recovery outcomes (Derks et al., 2014). However, research on boundary management has proven this relationship is more complex, as after-hours work is not always detrimental to recovery for all individuals (Derks et al., 2014; Gadeyne et al., 2018; Kreiner, 2006)

Research has found that the negative impact of after-hours work on recovery experiences and work-to-home conflict can be exacerbated, mitigated, or reversed depending on one's segmentation preference or perceived organization's segmentation norms (Derks et al., 2014; Gadeyne et al., 2018; Kreiner, 2006; Park

et al., 2011). For example, research examining longer respites from work, such as vacations, shows that working during vacations negatively influences the health and wellbeing after vacation (de Bloom et al., 2012). Yet we also see that when individuals are satisfied with their respites or have control over how they spend their time during respites, the benefits of the respite increase (de Bloom et al., 2012; de Bloom et al., 2013). This suggests the relationship between working during respites, regardless of how short or long such respites are (i.e., vacation, break, etc.), is not as straightforward as a simple recommendation to avoid work tasks during respites from work. Instead, however, it seems the relationship is more complex and dependent upon individual preference and situational characteristics that moderate the negative influence of working during a respite on recovery.

The current state of the literature in this area not only requires the clarification of the role of boundary management variables in the after-hours recovery process, but also calls for a more inclusive examination of after-hours work behaviors. To date, the research examining boundaries between work and home life and the after-hours recovery process has typically excluded work tasks that do not require the use of technology (e.g., teacher grading papers by hand, an architect working on drawings by hand, etc.). While there are benefits to understanding how the perverseness of technology influences after-hours working tendencies and work recovery, such studies also underrepresent the degree to which employees are partaking in work during non-work hours. This is especially problematic when one considers the limited published research in this area to begin

with. The lack of a comprehensive measure that captures all types of after-hours working in this research results in less representable conclusions to be drawn from the little research on this topic there is. One approach to address this gap in the literature on after-hours work and recovery would be to include tendencies to work on both technology *and* non-technology work tasks after work hours, as the current study aims to do.

Work and Home Boundary Management

Boundary theory focuses on the ways in which individuals create, maintain, and change the boundaries between different life domains (Ashforth et al., 2000). In the context of after-hours work we can think of work and home domains, which are made up of the responsibilities that subsume each domain, as having their own barriers or boundaries. Life domains with boundaries that are "thick" or impermeable are thought to be segmented or distinct from other life domains, while life domains with boundaries that are "thin" or permeable are more in line with the integration or melding of life domains (Ashforth et al., 2000; Kreiner et al., 2009). Individuals vary on the degree to which their home and work life boundaries are segmented or not (i.e., integrated).

As mentioned, according to the effort-recovery model, when employees work during non-work hours there is a reduced chance for them to partake in recovery experiences that reduce strain. Yet, existing literature suggests individuals differ in key boundary management variables (e.g., segmentation preference, segmentation supplies, boundary control) and that such differences result in differential influences of after-hours work on recovery experiences (Derks et al.,

2014), work-to-family conflict (Gadeyne et al., 2018), and emotional exhaustion (Piszczek, 2017). However, it is not yet clear how boundary management variables that have previously been shown to influence the after-hours recovery process (i.e., segmentation preferences, segmentation supplies perceived at their organization, and perceived control over boundaries) might interact with each other.

An important next step in this research is to determine if different constellations regarding perceived boundary control, segmentation preference, and perceived organizational segmentation supplies exist and if these constellations, rather than the boundary management variables themselves, are more influential to the after-hour recovery process. Considering the conflicting empirical findings regarding the positive or negative impact of working after-hours (Derks et al., 2014), and the many boundary management variables that moderate such impacts (Derks et al., 2014; Kossek et al., 2014; Kreiner, 2006; Park et al., 2011; Piszczek, 2017) it seems appropriate to adopt a person-centered approach to determine if profiles exist and can be used to clarify the influence of the boundary management variables in a concise manner.

Segmentation Preference

Individuals construct boundaries between work and home life and the permeability of such boundaries vary across individuals (Ashforth et al., 2000). Individual differences regarding how one prefers to manage work and home life boundaries can influence the permeability of the boundaries constructed (Kreiner, 2006; Nipper-Eng, 1996; Parks et al., 2011). Specifically, individuals differ on

segmentation preference, or their preference to integrate (i.e., low segmentation) or segment (i.e., high segmentation) work and home domains.

Those who prefer high segmentation see their work-life domain as exclusive from their home-life, while those who prefer low segmentation generally view the two domains as one in the same (Nippert-Eng, 1996). The foundational study conducted by Nippert-Eng (1996) suggests one's preference concerning boundary segmentation influences one's habits regarding breaks from work. Specifically, those who prefer high segmentation were more likely to carve out clear sections of time to tend to either work or home responsibilities. While those who prefer low segmentation were more likely to practice more flexibility concerning when and where they partake in work-related or home-related tasks.

This segmentation preference has proven to play a key role in influencing the permeability of one's work-home boundaries by dictating the strategies one uses to balance roles (Ashforth et al., 2000; Kreiner, 2006; Nippert-Eng, 1996). In other words, individuals who have a high segmentation preference are likely to follow practices that enable them to separate home and work domains, such as turning off email notifications after work hours. These individuals are less likely to allow for cross-role interruptions (Ashforth et al., 2000). Ashforth & colleagues (2000) set forth that those who prefer high segmentation between work and home domains have an easier time setting and maintaining boundaries. On the other hand, those with a low segmentation preference are more likely to take part in habits that integrate both domains, such as keeping their work phone nearby to tend to work

emails and phone calls during non-work hours. Such individuals have a harder time separating their home and work roles with boundaries and thus see more cross-role interruptions (Ashforth et al., 2000).

Segmentation preference has shown to influence both recovery experiences and strain indicators. Research conducted by Parks and Jex (2011) found individuals with a preference for high segmentation between work and home life were more likely to create boundaries regarding their technology use for work, which in turn predicted reduced instances of work-family interference. In line with these results, those with higher segmentation preferences reported more recovery experiences of psychological detachment from work (Parks et al., 2011). Another study conducted by Butts and colleagues (2006) found that segmentation preference played a key role in whether or not after-hours work communications results in work-home conflict. Specifically, those who preferred high segmentation saw more work-home conflict when compared to those who preferred low segmentation, and that the relationship between after-hours communications and work-home conflict was stronger for those with high segmentation preference (Butts et al., 2006).

However, the influence of segmentation preference on the relationship between after-hours work and recovery is made more complex when we consider additional boundary management variables at play. For example, research conducted by Kreiner (2006) showed the importance of preference, but only when matched with congruent segmentation supplies. Such findings suggest additional

variables other than simply segmentation preference, such as segmentation supplies at one's organization and the control one perceives over work and home boundaries (i.e., boundary control), may interact with segmentation preference in dictating the habits employees hold regarding how they manage home and work roles. In fact research conducted by Piszczek (2017) found the influence of segmentation preference on after-hours work tendencies, specifically the use of work-related technology after-hours, was moderated by boundary control.

Segmentation Supplies

Individual segmentation preferences are not the only boundary conditions likely related to the after-hours recovery process. Situational variables that capture the organizational environment that employees perceive also play a role in determining whether or not working off the clock is detrimental to recovery (Derks, van Mierlo & Schmitz, 2014; Kreiner, 2006; Park & Jex, 2011). Organizations differ in the degree to which their environments support either high or low work-life segmentation, just as individual's preferences for segmentation differ.

Researchers in this area have often utilized different names to capture the same or highly similar variables: workplace segmentation supplies and perceived organizational segmentation norms. Workplace segmentation supplies refers to the respondent's perception of whether or not their own workplace provides supplies in line with their individual preference to encourage either high or low segmentation (Kreiner, 2006). Perceived organizational segmentation norms, arguably the same construct as segmentation supplies, refers to how employees perceive their workplace in terms of the degree to which they encourage employees to segment or

integrate work and home life domains (Derks, van Mierlo & Schmitz, 2014; Park et al., 2011). Interestingly, the research conducted by Derks and colleagues (2014) utilized Kreiner's (2006) segmentation supplies scale to measure perceived organization segmentation norms, while research conducted by Park and colleagues (2011) adapted Kreiner's (2006) segmentation preference scale to match workplace norms related to segmenting work and home domains. In order to avoid confusion I will use the term segmentation supplies when referring to the situational variable that captures the degree to which one perceives their workplace to either promote high or low segmentation.

Research conducted by Park and colleagues (2011) found segmentation norms of an organization, referred to as segmentation supplies by Kreiner (2006), have the potential to influence employees' experiences outside of work relating to work-related tasks and communications. Specifically, high segmentation supplies (i.e., high organizational segmentation norms) were related to reduced work-related technology use during non-work hours, which in turn was related to increased psychological detachment experiences (Park et al., 2011). This finding is important because it provides evidence that promoting work-related tasks after-hours through segmentation supplies is likely to prevent or hinder recovery experiences, which is then likely to have negative influences on strain.

Moreover, employees who perceived low segmentation supplies at their organization experienced a smaller decrease in psychological detachment when they used their phones for work after-hours as compared to those who perceived

high segmentation supplies (Derks, van Mierlo, & Schmitz, 2014). This finding suggests that segmentation supplies perceived at one's organization partially determines whether or not after-hours work is detrimental to beneficial to work recovery. Yet, we don't truly understood how segmentation preference and segmentation supplies relate to each other and which of the two boundary management variables are more influential to the after-work recovery process.

Kreiner (2006) conducted a study to examine the relationship between these two boundary management variables utilizing polynomial regression and found that as perceived segmentation supplies at one's organization more closely matched one's segmentation preference, job satisfaction increased and stress reduced. However, the impact of such congruence (between segmentation supplies and segmentation preference) on strain variables proves quite complex. Specifically, Kreiner (2006) found that having neutral preferences regarding segmentation of work and home was actually more effective in reducing stress than when high or low segmentation preference is matched with congruent segmentation supplies. Moreover, segmentation supplies showed a stronger influence on work-family conflict while segmentation preference had a stronger impact on stress and job satisfaction (Kreiner, 2006)

Perhaps what such research is missing to better clarify the influence of segmentation preference and segmentation supplies on the after-hours work and recovery relationship is a variable that takes into account one's perceived control over both their work and home boundaries. The present study aims to take a similar

approach to Kreiner (2006) in examining the influence of such congruence on the after-work recovery process, specifically after-hours work tendencies, recovery experiences (e.g., psychological detachment) and recovery outcomes (e.g., job-affective wellbeing). Although, Kreiner (2006) utilized a polynomial regression analysis and the present study will utilize a latent profile analysis approach to offer a more parsimonious means of understanding and communicating the key boundary management variables at play during the after-hours recovery.

Thus, the present study will include perceived boundary control in addition to segmentation preference and segmentation supplies to 1) clarify the influence of mismatched segmentation preference and supplies on the after-hours recovery process and 2) develop comprehensive boundary management profiles that can be used as a meaningful way to understand the factors influencing different recovery needs across employee. Both boundary control and segmentation supplies can be thought of as key resources or situational factors that help employees maintain boundaries in a congruent manner to that of which they prefer. Thus, these three boundary management variables enable us to include individual characteristics with situational characteristics to capture a full picture of the variables influencing the after-hours recovery process.

Boundary Control

Boundary control has the potential to clarify the influence of segmentation preference and segmentation supplies on the recovery process because it captures employees' perceived ability to individually optimize the strategies they use to manage work and home roles and better serve their segmentation preference,

regardless of the segmentation supplies at their organization. In fact, research conducted by Piszczek (2017) has shown that individuals who perceived high boundary control and prefer low segmentation tended to use more work-related technology during non-work hours than individuals who perceived high boundary control, yet prefer high segmentation. Thus, boundary control enabled employees to manage their boundaries in line with their preference. Moreover, Piszczek's (2017) research found boundary control to relate to emotional exhaustion, which is a key component of burnout and indicator of strain (Maslach & Leiter, 2007). High boundary control is not only related to reduced negative recovery outcomes, but it has also been shown to relate to more work-to-family positive spillover (Straub, Beham, & Islam, 2019).

Additionally, boundary control is an important variable to capture because it takes into account the control one perceives over not just their work domain, but their home domain as well. This allows us to more inclusively examine the complex nature and nuances of the after-hours recovery process which involves influences from both work and home domains (Geurts, & Demerouti, 2003; Van Hoof et al., 2006). For example, one may perceive low boundary control if they are a caregiver to a terminally sick family member at home that in turn forces an employee to blend work and home roles, but one may also perceive low boundary control in response to high job demands that prevent an employee from segmenting their work role from their home role.

Regardless of the source of the boundary control or lack thereof, the ability to control the permeability of one's home and work life alone seems to be key, in combination with segmentation preference and segmentation supplies, in helping to explain individual differences in the after-hours recovery process (Kreiner, 2007; Piszczek, 2017). A study conducted by Ferguson and colleagues (2015) examined work boundary flexibility, arguably the same or a highly similar construct as perceived boundary control, which captures how easily an employee perceives they can switch between tasks in their work domain to tasks in their home domain. This research found that work boundary flexibility is enabled through supervisor and organizational segmentation support, which are arguably highly similar constructs to segmentation supplies/perceived segmentation norms (Ferguson, 2015). This finding suggests boundary control likely significantly interacts with segmentation supplies and thus, including both in our boundary management profiles is meaningful.

Previous research has found boundary control to relate to reduced psychological distress, work-to-family conflict and family-to-work conflict (Kossek et al., 2012). In fact, Kossek and colleagues (2012) were the first to utilize a latent profile analysis approach in examining boundary management. In their study, three variables were captured to make up such profiles: work/non-work interruption behaviors, work and family identity centrality, and boundary control. The profiles that were characterized by low boundary control showed more negative work and family outcomes overall, regardless of interruption behaviors

and identity centrality (Kossek et al., 2012). However, it is not clear how segmentation preference and segmentation supplies, two boundary management variables shown to significantly influence recovery, may interact with boundary control.

Kossek and colleagues' (2012) research highlights two important points in this literature, 1) boundary control is important to the recovery process by reducing negative wellbeing/recovery outcomes and 2) profile analyses may prove a useful method to help us to better understand the interaction between important variables than a strictly variable-centered approach. In fact, Gabriel and colleagues (2015) argue that simple regression analyses alone tend to ignore the possibility that heterogeneous subpopulations that respond in a similar pattern might play a role in shaping outcomes. Overall, examining perceived boundary control in conjunction with segmentation preference and segmentation supplies using a latent profile analysis approach can help to uncover ways in which these three variables uniquely combine in order to concisely explain differences regarding the impact of working during non-work hours on recovery.

Home Boundary Management Variables

A Person-Centered Approach to Boundary Management

In the present study, latent profile analysis (LPA; Marsh, Lüdtke, Trautwein, & Morin, 2009; Nylund-Gibson & Choi, 2018; Nylund, Asparouhov, & Muthen, 2007; Tein, Coxe, & Cham, 2013; Tofighi & Enders, 2008; Woo, Jebb, Tay, & Parrigon, 2018) will be used to determine the boundary management profiles that emerge based on the levels of segmentation preference, perceived

segmentation supplies of the organization, and perceived boundary control. Latent profile analyses have become increasingly popular in the social sciences because they allows us to extract and make sense of subpopulations of individuals who are widely similar in their responses to given psychological measures. For example, Gabriel and colleagues (2015) recently conducted a study that focused on uncovering subpopulations of emotional labor actors. In this study, the researchers examined the latent profiles that emerged based on the combination of the degree to which an individual partakes in both surface and deep acting. This approach allowed them to observe differences across the profiles that emerged, which enabled a more accurate and nuanced understanding of the influence of both types of emotional labor on outcome variables. Likewise, many areas of research in the social science have adopted this approach in order to better understand how a set of variables may operate together within heterogonous groups.

As discussed, the latent profile analysis has been used in the past to help account for subpopulations that exist in a given population. Variable-centered approaches fail to do so because they examine variables in a given population separately, and across individuals. Alternatively, the present study will account for ways in which an employee's levels on key boundary management variables work together within a subgroup of the population to influence the recovery process. For illustration purposes, Table 1 provides a hypothetical classification regarding the distinct high/low combinations of employee's segmentation preference, segmentation supplies, and perceived boundary control.

Table 1.

Hypothetical Classification of Boundary Management

High Boundary Control Profiles:

	Segmentation Supplies	
Segmentation Preference	Low	High
Low	• Low segmentation preference • Low segmentation supplies • High boundary control	• Low segmentation preference • High segmentation supplies • High boundary control
High	• High segmentation preference • Low segmentation supplies • High boundary control	• High segmentation preference • High segmentation supplies • High boundary control

Low Boundary Control Profiles:

	Segmentation Supplies	
Segmentation Preference	Low	High
Low	• Low segmentation preference • Low segmentation supplies • Low boundary control	• Low segmentation preference • High segmentation supplies • Low boundary control
High	• High segmentation preference • Low segmentation supplies • Low boundary control	• High segmentation preference • High segmentation supplies • Low boundary control

We can draw from conservation of resources theory (Hobfoll, 1989) to help explain why a misalignment of certain boundary management variables should increase stress and hinder recovery. The theory states that individuals strive to maintain resources that help them to meet job demands, and that when such

resources are lost or threatened, strain increases and individuals shift their focus to regaining or preserving resources (Hobfoll, 1989). Employees should perceive a threat or loss to their resources when segmentation preference is not aligned with segmentation supplies, thus hindering the recovery process. In such situations where segmentation supplies are not aligned with preference, employees likely do not feel they are provided the necessary resources to manage their boundaries the way they prefer and meet demands from home and work, which increases stress. Likewise, those who lack control over boundary permeability should perceive insufficient resources (whether home-based or work-based) that would allow them to effectively manage the demands between work and home domains according to their preference, which increases stress.

Thus, alignment between segmentation preference and supplies, or high boundary control in the absence of such alignment, should result in one perceiving the resources that enable them to manage work and home domains according to their preference. In turn, profiles with such features should see increased chances for recovery experiences to occur and strain to decrease. Those whose preference for segmentation of work and home life (or lack thereof) are either not aligned with their organization's segmentation supplies, or not met with high boundary control, should perceive a lack of resources. This lack of boundary management resources not only increases stress directly due to threatened resources that help one manage work demands (Hobfoll, 1989), but also because such a lack in resources makes

finding optimal times to recover effectively more difficult (Zijlstra, Cropley, & Rydstedt, 2014).

More specifically, those who prefer low segmentation but do not perceive low segmentation supplies at their organization likely feel adequate resources are not provided by their employer to support their preference to combine work and home life boundaries. Resources that might promote low segmentation between work and home boundaries include access to work platforms at home and flexible work hours. Such resources would be perceived in organizations with low segmentation supplies.

In instances where employees who prefer low segmentation do not perceive low segmentation supplies, they might be unable to tend to work after-hours. When these employees are unable to work whenever they please, there is an increased potential for unfinished work obligations which can cause ruminations about work and weaken the ability to psychologically detach from work during recovery periods and increase strain (Derks et al., 2014). This also increases the potential for unfinished tasks in the home domain, resulting in ruminations or interruptions regarding home obligations, not just work, during recovery periods.

Thus, those who prefer a low segmentation may require the resources that allow them to tend to work demands as they occur in order to effectively detach when they are not tending to work-related tasks in the evening. When employees who prefer low segmentation are not provided the resources to support low segmentation, after-hours working becomes more detrimental than for those who

perceive their organization to provide such segmentation supplies. Additionally, boundary control can be thought of as a resource that may buffer the negative influence of misalignment between one's segmentation preference and perceived organization segmentation supplies (Kreiner, 2006), a point I will return to later.

On the other hand, those who prefer high segmentation yet do not perceive high segmentation supplies at their organization will likely not have the family-friendly resources that allow them to successfully detach from work and tend to family obligations after-hours. Such resources for those who prefer high segmentation might include family-supportive supervisor behaviors and rules about not requiring work from employees after normal working hours. Organizations with high segmentation supplies should provide such resources.

Previous research has found family-supportive work environments to significantly reduce work-to-family and family-to-work interference (Lapierre et al., 2008). Thus, those organizations that provide resources for low segmentation make it more difficult for employees who would like to segment work and home life, due to increased work/home interference. As such, those who prefer high segmentation but perceive low segmentation supplies at their organization will have a more difficult time tending to home obligations due to work interruptions, and vice versa, which in turn would reduce recovery experiences and increase strain. Likewise, those who perceive low control over boundaries likely perceive a lack of resources regarding how to effectively maintain high segmentation between their life domains, increasing strain and reducing changes for recovery experiences.

The levels of one's segmentation supplies and perceived boundary control may interact with segmentation preference to determine when after-hours working reduces recovery. However, the relationship between boundary control and segmentation supplies has not yet been studied and requires further elucidation. Yet, Ferguson's (2015) research on boundary control and supervisor segmentation support suggests boundary control may not always ameliorate the negative influences of misaligned segmentation preference and supplies because it may itself be influenced by segmentation supplies in some situations. The profiles that emerge in my analysis will help to clarify the nature of the relationship between segmentation preference, segmentation supplies, and boundary control.

Hypothetical Relations between Boundary Management Variables

Examining the interaction of boundary management variables may help to elucidate the conflicting findings regarding when and for whom after-hours work is detrimental for recovery. Although latent profile analysis will provide us with a best estimation of the underlying boundary management profiles, I have a few conjectures about what profiles may emerge. For one, following the logic of Kreiner's (2006) polynomial regression, I posit that misaligned profiles, that is profiles where one's segmentation preference does not correspond with the segmentation supplies perceived at their organization, will show after-hours work to be more detrimental to the after-hours recovery process than aligned profiles.

However high boundary control may alleviate negative influences of misalignment between segmentation preference and segmentation supplies. Similarly, low boundary control may reduce the positive influences of aligned

segmentation preferences and segmentation supplies. Control is a key variable in the stress literature, specifically concerning control at your job (Karasek, 1979), control over recovery experiences (Sonnentag et al., 2017), and control over activities on vacation (de Bloom et al., 2012; 2013). Thus, I posit that perceived boundary control likely plays a key role in dictating whether or not a misaligned profile (i.e., segmentation preference does not match segmentation supplies) protects individual's from the negative impacts of after-hours work. Likewise, boundary control may influence whether or not an aligned profile sees increased recovery experiences and positive recovery outcomes.

Those whose segmentation preferences are aligned with their organization's segmentation supplies should perceive sufficient resources available to them in order to support their segmentation preference and manage their home and work domains in a manner consistent to such preference (Kreiner, 2006). For example those who prefer high segmentation and perceive high segmentation supplies at their organization can effectively tend to their home obligations and allow for successful psychological detachment from work, leading to reduced strain. Likewise, those who prefer low segmentation and perceive low segmentation supplies at their organization can integrate their work and home life which, for these individuals, allows them to partake in more effective recovery experiences when they are not working. In situations where segmentation preference is aligned with segmentation supplies, employees feel they have the sufficient work and home

resources necessary to fulfill their roles in both domains in such a way that is in line with their own preference (Kreiner, 2006).

However when there is a lack of boundary control, such alignment between segmentation preference and segmentation supplies may be less influential. Low boundary control may prevent employees from effectively utilizing their organization's segmentation supplies and from managing their boundaries according to their preference. On the other hand, a profile characterized by misalignment between segmentation preference and segmentation supplies may overcome the negative influence of such misalignment on the after-hours recovery process if met with high boundary control. Such boundary control enables the employee to manage their boundaries according to their preference regardless of the segmentation supplies at their organization (Piszczek, 2017).

Thus to summarize, it is likely that profiles with misaligned segmentation preference and supplies, when in combination with low boundary control, are likely worse off than those misaligned profiles that are met with high boundary control. In other words, high boundary control may overcome the negative influence of the mismatch (Kreiner, 2006). On the other hand, profiles that are characterized by aligned segmentation supplies and segmentation preference are likely better off when in combination with high control, and worse of when met with low control which may prevent individuals from utilizing segmentation supplies to meet their segmentation preference when managing boundaries. However, latent profile analysis is an inductive approach that will present us with a more clear

understanding of the ways in which these boundary management variables uniquely interact with each other to influence recovery.

Chapter 3: Hypothesis Development

At the core of recovery research is the premise that individuals need periods of rest to recover from job demands and cope with job stress. However, research shows that individuals vary greatly concerning their need for recovery (Siltaloppi et al., 2009; Sonnentag et al., 2017) and the variables that influence their recovery process (e.g., preference, situational characteristics, etc.) (Ashforth et al., 2000; Derks et al., 2014; Kreiner, 2006; Park et al., 2011). Thus, a person-centered approach will help us determine how different individual and situational characteristics, specifically with regard to boundary management, come together to explain the differences observed regarding the influence of after-hours work on work recovery and work strain. Previous research has outlined how latent profile analysis can reveal under what circumstances and why a certain theory may hold true (Wang & Hanges, 2011; Gabriel et al; 2015). Such an approach will not only allow us to better understand when and for whom the effort-recovery model explains the recovery process, but also to provide more clear and practical recommendations, under the control of employers, that can aide them in providing support for all of their employees' varying recovery needs.

In the present study, I will use a latent profile analysis approach to determine what different classifications emerge regarding the combination of different response patterns on three boundary management variables: work-home segmentation preference, segmentation supplies, and boundary control. Examining the boundary management profiles that emerge may help elucidate why after-hours

work is detrimental to the work recovery of some employees, yet beneficial to others. Thus, I propose the following research question:

> *Original Research Question:* What profiles will emerge based on individual's levels on boundary management variables: segmentation preference, segmentation supplies, and boundary control?

Upon further consideration, concerns about the potential high correlation between boundary control and the other two profile indicators (i.e., segmentation preference and segmentation supplies) resulting in less defined profiles caused me to reevaluate the boundary management profile indicators. In doing so, two new scales were developed to represent segmentation preference and segmentation supplies specifically in reference to home segmentation, as opposed to the existing segmentation supplies and preference scales which only capture work segmentation (see the Measures section for additional information on the two home segmentation scales). Thus, we will also examine the profiles that emerge based on five profile indicators: work segmentation preference, work segmentation supplies, home segmentation preference, home segmentation supplies, and boundary control.

> *Revised Research Question:* What profiles will emerge based on individual's levels on boundary management variables: work segmentation preference, work segmentation supplies, home segmentation preference, home segmentation supplies, and boundary control.

The boundary management profiles that emerge will be important because they have the potential to help us understand why differences in boundary management variables (i.e., work and home segmentation preferences, work and home segmentation supplies, and boundary control) will result in worse recovery outcomes. That is because such profiles are likely related to variables in the after-hours recovery process differently. For example, with regard to after-hours work tendencies those who prefer low segmentation in an organization with low segmentation supplies will likely find themselves working more after work hours than those who prefer high segmentation in an organization with high segmentation supplies. Moreover, those with a low boundary control or a mismatch between either work segmentation preference and work supplies or home segmentation preference and home supplies likely experience reduced recovery experiences and increased strain as they are not provided with the resources (i.e., supplies or control) to manage their boundaries the way they prefer to. Thus, I propose the following hypotheses concerning the differential levels on key variables in the after-hours recovery process that boundary management profiles will exhibit:

Hypothesis 1a: Boundary management profiles will exhibit different levels of after-hours work tendencies.

Hypothesis 1b: Boundary management profiles will exhibit different levels of recovery experiences (i.e., psychological detachment, relaxation, control, and mastery).

> *Hypothesis 1c:* Boundary management profiles will exhibit different levels of wellbeing outcomes (i.e., job-related affective well-being, work-to-family conflict, and work-family enrichment/family-work enrichment).

The present-study utilizes a person-centered approach in an effort to parsimoniously clarify the conditions currently outlined in the literature that potentially buffer the negative influence of after-hours working on both recovery and strain. This approach will allow us to better understand the complex interactions between individual preference and situational characteristics on the after-hours recovery process. However, in order to determine if such an approach contributes something meaningful to the literature as I posit it will, I will compare the variance explained in the boundary conditions (i.e., boundary management variables: work and home segmentation preference, work and home segmentation supplies, and boundary control) alone to that of the profile combinations of the three variables. As such, I propose the following hypothesis:

> *Hypothesis 2a:* Boundary management profiles will explain variance in after-hours work tendencies above and beyond the variance explained by the boundary management variables (i.e., work and home segmentation preferences, work and home segmentation supplies, and boundary control) that makeup the profiles explain alone.

Hypothesis 2b: Boundary management profiles will explain variance in recovery experiences (i.e., psychological detachment, relaxation, control, and mastery) above and beyond the variance explained by the boundary management variables (i.e., work and home segmentation preferences, work and home segmentation supplies, and boundary control) that makeup the profiles explain alone.

Hypothesis 2c: Boundary management profiles will explain variance in wellbeing outcomes (i.e., job-related affective well-being, work-to-family conflict, and work-family enrichment/family-work enrichment) above and beyond the variance explained by the boundary management variables (i.e., work and home segmentation preferences, work and home segmentation supplies, and boundary control) that makeup the profiles explain alone.

Chapter 4: Methods

Participants and Procedure

The present study recruited 432 employees working for various organizations in varying occupational sectors (e.g., education, engineering and public works, attorney, etc.). To be included, participants had to indicate they held a full-time job during regular working hours (i.e., day-time shift) and lived in the U.S. Those who did not meet this criteria were sent to the end of the survey. A total of 37 participants were removed based on this criteria. Those participants who met the criteria to participate were instructed to complete an online survey on Qualtrics, expected to take about 15-25 minutes to complete.

The study measures that make up the profile indicators (i.e., segmentation preference, segmentation supplies, and boundary control) were all presented in a randomized order in one block. The demographic items were placed in a separate block of questions. The remaining study measures were randomized in another block. This block of questions and the block of questions with the profile indicator measures were both randomized in terms of which block was presented first to participants (and the subsequent measures in each block were also randomized in terms of which measure was presented first). The demographic block was always presented last. After the survey, participants were directed to a Google Form separate from their survey responses to enter for a drawing to win one of fifty gift cards.

In order to entice individuals to participate in the survey, fifty $25.00 Amazon gift cards were used in a drawing. At the end of data collection, fifty

randomly selected participants were issued a gift card. Funds received from the Florida Tech Institutional Research Incentive grant were used to pay for these gift cards.

A few methods were utilized to recruit participants. First, emails were sent to registered lawyers, nurses, professional engineers, certified public accountants. The email recipients were asked to fill out my survey and share it with other eligible participants (i.e., utilizing the snowball sampling method). The email records were obtained through public records searches. Additionally, the survey was posted in private groups on Facebook where different types of employees based in the U.S. share information (e.g., public school teachers, cosmetology professionals, different schools' and colleges' alumni associations, etc.). Finally, word of mouth was used to ask others to participate in my survey. When friends, family, coworkers, or acquaintances agreed to take the survey, the survey link and criteria to participate were emailed to them. Again, these individuals were asked to share the survey with any eligible participants they could think of.

Of the 395 responses that met the initial criteria to be included, analyses to flag and remove careless responders or insufficient effort responders were conducted. First, the RE-CAPTCHA tool was utilized in the Qualtrics survey to flag any responses that are likely bots. Qualtrics suggests that any responses flagged with a RE-CAPTCHA value of .5 or lower should be flagged as bots and removed before data analysis. No responses exhibited a RE-CAPTCHA value of .5 or below (.7 was the lowest), suggesting high likelihood that no bots completed the

survey. I also included the Qualtrics repeat responder (i.e., ballot stuffing) feature that flags duplicate survey submissions if a participant tries to complete the same survey using the same browser and device. Four responses were flagged as duplicate submissions, three of which contained missing answers to the majority of the survey items. All four responses flagged as multiple submissions were removed before data analysis.

In order to capture any careless or insufficient effort responders that remained, I removed any response where the survey was completed in an especially short time-frame that would not allow for an individual to sufficiently read and respond to each question accurately. Thus, responses where the survey duration time was 200 or less seconds were removed. A total of 24 responses were removed based on this criteria. Finally, I included three attention check questions to ensure participants were responding with care and attention. Those who missed two or more attention checks were removed before data analysis. A total of 13 responses were removed based on this criteria.

The final sample size for data analysis included 354 participants. Of the 354 participants, 197 identified as female, 137 identified as male, one identified as non-binary, and 3 chose not to say or "other." The average age of participants was between 45 and 55. Missing data was replaced using the "mice" package in R. The mice package replaces missing values using multiple imputation. This approach address concerns of uncertainty in instances where data is missing and is thought to be more robust than the alternative method of replacing missing values with the

series mean because it takes into account within-person response patterns and adds error estimates (Li et al., 2016).

Measures

Segmentation Preference

To measure segmentation preference, Kreiner's (2006) 4-item measure rated on a 7-point Likert scale (1 = Strongly Disagree, 7 = Strongly Agree) that examines the degree to which employees prefer a workplace that helps separate work and home life was utilized. A sample item is, "I don't like to have to think about work when I'm at home." Higher scores represent a preference to segment work from home. The complete Work Segmentation Preference scale ($\alpha = .94$) can be found in Appendix A.

In addition to the existing segmentation preference scale by Kreiner (2006), we developed a scale to capture home segmentation preference that aligns to the existing segmentation preference items that reference work. An example item from the work segmentation preferences scale is, "I prefer to keep work-life at work", and an example item from the home segmentation preferences scale that aligns with it is, "I prefer to keep home matters at home." Higher scores represent perceptions that one's home environment encourages the segmentation of home from work. The complete Home Segmentation Preference scale ($\alpha = .87$) can be found in Appendix A.

Segmentation Supplies

Segmentation supplies was measured using Kreiner's (2006) 4-item measure rated on a 7-point Likert scale (1 = Strongly Disagree, 7 = Strongly Agree)

that assesses the segmentation norms employees perceived for people at their organization. A sample item is, “The people I work with prevent work issues from creeping into their home life.” Higher scores represent perceptions that one’s work environment encourages the segmentation (as opposed to integrating) of work from home. The complete Work Segmentation Supplies scale (α = .93) can be found in Appendix A.

Due to the lack of an existing measure that captures home segmentation supplies and home segmentation preference, two additional scales were developed. The items in these two new scales were created to be aligned with the existing segmentation supplies and preferences scales that reference work. An example item from the work segmentation supplies scale is, “My workplace lets people forget about work when they’re at home” and an example item from the home segmentation supplies scale that aligns with it is, “I am able to forget about home when I’m at work.” Higher scores represent a preference to segment, as opposed to integrate, home from work. The complete Home Segmentation Preference scale (α = .88) can be found in Appendix A.

Boundary Control

Boundary control was measured using the three-item scale from Kossek and colleagues (2012). A sample item is “I control whether I am able to keep my work and personal life separate.” Higher scores represent high perceived control over the construction and maintenance of one’s home and work life boundaries. The complete boundary control scale (α = .90) can be found in Appendix A.

After-hours Work Tendencies

Following methods used by Parks & Fritz (2011), I assessed the amount of working during non-work hours by asking respondents how often they used four specific types of work-related technology after-hours. However, in order to include any after-hours working that does not include technology use, an additional item to capture such work (e.g., "In the last week, during non-work hours I took part in work-related tasks that did not require the use of technology") was included. Participants were asked to report the degree to which they partook in after work hours work-related tasks and communications (e.g., smartphone use for work, PC/Laptop use for work, non-technology related work-tasks, etc.) over the last week, using a 7-point rating scale (1 = Not at all, 7 = Almost Always). Higher scores indicate higher tendencies of working during non-work hours. The complete After-hours Work scale ($\alpha = .79$) can be found in Appendix A.

Recovery Experiences

Recovery experiences during after-work hours were examined using the Recovery Experience Questionnaire (REQ, Sonnentag & Fritz, 2007). This measure assesses four dimensions of recovery experiences: psychological detachment ("I forgot about work"), relaxation ("I use the time to relax"), mastery ("I do things that challenge me"), and control ("I took care of things the way that I wanted to") on a 5-point scale (1 = strongly disagree; 5 = strongly agree). Four

items are used to assess each of the four dimensions. The complete Recovery Experiences scale (α = .87) can be found in Appendix A.

Job-related Affective Well-being

The Job-Related Affective Well-Being Scale (JAWS; Van Katwyk et al., 2000) was used to assess affective reactions work stressors. The measure consists of 20-items rated on a 5-point Likert scale (1 = Never, 5 = Extremely Often). Participants were asked to report how often they have felt a specific emotion over the last 30 days, while at work. Sample items include, "My job made me feel at ease," and "My job made me feel at anxious." The complete JAWS scale (α = .93) with full instructions for respondents can be found in Appendix A.

Work-to-Home Conflict

Work-home conflict, also referred to as work-family conflict, has been categorized into different dimensions by different researchers (Carlson et al., 2000; Kreiner, 2006; Netemeyer et al., 1996). Kreiner's (2006) study adapted the original measure of work-family conflict from Netemeyer and colleagues (1996) to include the dimensions of work-home conflict that are most relevant to the study of boundary management between work and home domains. Kreiner's (2006) adapted measure captures work-to-home conflict as opposed to home-to-work conflict because focusing on the influence of work on home lends itself to more practical recommendations through an understanding of workplace factors, under the control of employers, which influence employee strain. Thus, in the current study the same previously adapted five items that Kreiner (2006) developed from Netemeyer and

colleagues (1996) original measure, rated on a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree) was used. A sample item is, “The amount of time my job takes up makes it difficult to fulfill home responsibilities.” The full Work-to-Home Conflict measure (α = .93) can be found in Appendix A.

Work-family Enrichment

To assess work-family enrichment the shortened version of the Work-Family Enrichment Scale developed by Kacmar and colleagues (2014), adapted from Carlson and colleagues’ (2006) original version of the measure was used. The 6-item shortened scale is rated on a 5-point scale (1 = strongly disagree; 5 = strongly agree). A sample item is, “My involvement in my family helps me acquire skills and this helps me be a better worker.” Respondents are instructed to only select Strongly Agree if they agree with the *full* statement. The complete Work-Family Enrichment scale can be found in Appendix A and measures both work-to-family enrichment (α = .86) and family-to-work enrichment (α = .78).

Control Variables

Four demographic variables were captured due to their potential to relate to after-hours work tendencies, psychological detachment, and strain: gender, age, relationship status, and number of children (Kreiner, 2006; Parks & Fritz, 2011). The present study also measured any recent COVID-related work environment/norms change (e.g., recently asked to come back to office full-time again, recently switched to full hybrid work environment, etc.).

Chapter 5: Analysis

Following best practices outlined by Nylund, Asparouhov, and Muthén (2007), I utilized an inductive approach for the latent profile analysis by first specifying two latent profiles based on the profile indicator variables. Then for each additional solution tested, the number of profiles specified increased by one. According to the vast literature on latent profile analyses (Nylund-Gibson & Choi, 2018; Nylund, Asparouhov, & Muthen, 2007; Tein, Coxe, & Cham, 2013; Tofighi & Enders, 2008; Woo, Jebb, Tay, & Parrigon, 2018), there is no one clear agreed-upon statistical indicator or test that can be used to determine what the accurate number of classes or profiles that emerge are. However, research that utilizes latent profile analysis typically makes use of several fit indices such as entropy, log likelihood (LL), Akaike information criterion (AIC), Bayesian information criterion (BIC; recommended by Nylund et al., 2007), and entropy. The model that contains the most fit indices that fall within the desirable ranges is typically the one recommended to accept (Nylund et al., 2007).

As mentioned, the first model specified two latent profiles and each model after that specified one additional profile. The number of latent profiles specified increased by one until the model fit did not significantly improve when specifying another profile. This approach has been used often in latent profile analysis research (e.g., Foti et al., 2012; Gabriel et al., 2015; Morin et al., 2011; Woo & Allen, 2014). Moreover, as I increased latent profiles specified, I kept in mind the theoretical interpretation and parsimony of such a model.

Next, to examine if the boundary management profiles that emerge exhibit different levels on variables related to the after-hours recovery process, an analysis of variance (ANOVA) was conducted with profile membership as the grouping or factor variable. Previous research has found that conducting an ANOVA with profiles as the grouping variable, in comparison to the three step DCON procedure in MPlus which models auxiliary variables in relation to the profile solution, to yield largely similar results (Dahling et al., 2017; Gabriel et al., 2015). As such, I utilized a series of ANOVA's to examine the differences between profiles on the after-hours recovery variables of interest. This approach determined if the profiles are significantly different regarding levels of after-hours work tendencies, recovery experiences, and outcome variables (i.e., job-related affective wellbeing, work-to-family conflict, work-family/family-work enrichment), testing Hypotheses 1a-c

To examine Hypothesis 2a-c, a series of hierarchical regressions were conducted to examine whether the boundary management profiles explain incremental variance, above and beyond that of the boundary management variables (i.e., after-hours work tendencies, recovery experiences, and recovery outcomes) alone. In line with previous research (Dahling et al., 2017; Gabriel et al., 2015) I also conducted traditional, variable-centered regression analyses using the profile indicators to predict our variables of interest and compared these results to the results of the ANOVA's as an alternative way to provide support that a LPA approach helps us to capture effects that would otherwise be ignored. Such an approach has been used in past person-centered approaches (Dahling et al., 2017;

Gabriel et al., 2015) to explain how traditional variable-centered approaches may fall short.

Chapter 6: Results

The means, standard deviations, and alpha levels for all study variables can be found in Table 2. The correlations of all study variables can be found in Table 3. In order to account for the lack of items in the existing segmentation supplies and preference scales that tap into home-life as opposed to work-life, two additional scales were developed: home segmentation supplies and home segmentation preferences. To confirm these two new scales were tapping into different dimensions of segmentation supplies and preferences than the existing work segmentation supplies and preferences scales, a confirmatory factor analysis (CFA) was conducted.

Table 2

Descriptive Statistics for Study Variables

Variable	*alpha*	*M*	*SD*
Home Segmentation Supplies	0.88	3.35	1.00
Work Segmentation Supplies	0.93	2.83	1.26
Home Segmentation Preference	0.87	3.96	0.87
Work Segmentation Preference	0.94	4.18	0.98
Boundary Control	0.90	3.87	1.05
After-hours work	0.79	2.92	1.04
Recovery Experiences (RE)	0.87	3.60	0.64
RE-Psychological Detachment	0.84	2.82	1.07
RE-Recovery Relaxation	0.91	3.76	0.93
RE-Recovery Control	0.89	3.78	0.85
RE-Recovery Mastery	0.84	4.04	0.82
JAWS	0.93	3.38	0.68
Work-Home Conflict	0.93	2.96	1.24
Work Family Enrichment, Work to Family	0.86	3.43	1.01
Work Family Enrichment, Family to Work	0.78	3.76	0.86

Note. $N = 354$.

Table 3

Correlations between All Study Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Home Supply	-													
2. Work Supply	0.22***	-												
3. Home Pref.	0.33***	0.02	-											
4. Work Pref.	0.04	0.24***	0.34***	-										
5. Boundary C.	0.20***	0.52***	0.10	0.10	-									
6. AHW	-0.10*	-0.49***	0.05	-0.21***	-0.27***	-								
7. RE	0.24***	0.57***	0.10	0.12*	0.47***	-0.39***	-							
8. RE- PD	0.13*	0.67***	0.14**	0.3***	0.39***	-0.50***	0.76***	-						
9. RE- R	0.17***	0.43***	0.05	0.08	0.30***	-0.29***	0.76***	0.48***	-					
10. RE- C	0.15**	0.15**	-0.01	-0.13*	0.19***	-0.08	0.55***	0.18***	0.19***	-				
11. RE- M	0.22***	0.28***	0.09	0.02	0.39***	-0.15**	0.68***	0.32***	0.40***	0.23***	-			
12. JAWS	0.09	0.26***	-0.06	-0.3***	0.34***	-	0.30***	0.14**	0.21***	0.24***	0.24***	-		
13. WHC	-0.17**	-0.57***	0.07	0.05	-0.45***	0.42***	-0.5***	-0.49***	-0.40***	-0.16**	-0.32***	-0.37***	-	
14. WFE W-F	0.14**	0.19***	0.05	-0.24***	0.3***	0.03	0.27***	0.13*	0.19***	0.27***	0.16**	0.69***	-0.23***	-
15. WFE F-W	0.07	0.18***	0.05	0.04	0.23***	0.05	0.25***	0.10	0.22***	0.23***	0.15**	0.36***	-0.11*	0.44***
16. Jobs > 1	0.05	0.06	0.02	0.04	0.09	-0.06	0.12*	0.05	0.13*	0.06	0.08	0.09	-0.15**	0.09
17. Race	-0.06	0.10	-0.04	0.07	0.05	-0.02	0.02	0.09	0.03	-0.05	-0.03	-0.07	-0.06	-0.10
18. Gender	0.05	-0.01	0.13*	0.19***	-0.02	-0.13*	0.01	0.04	0.03	-0.07	-	-0.19***	0.09	-0.07
19. Age	0.03	0.07	0.09	-0.21***	0.07	0.03	0.09	0.07	0.03	0.05	0.10	0.29***	-0.13*	0.19***
20. Relationship	0.04	-0.02	0.10	-0.01	-0.07	-0.11*	0.04	0.08	-0.01	-0.04	0.08	-0.14**	-0.01	-0.16**
21. Dependents	-0.13*	-0.02	-0.11*	0.03	0.07	0.06	-0.10	-0.03	-0.09	-0.05	-0.11*	-0.02	-0.02	-0.01
22. Industry	-0.14**	0.05	-0.19***	-0.21***	0.01	0.07	0.02	-0.01	0.03	-	0.05	0.24***	-0.03	0.04
23. Hours	-0.02	-0.26***	0.09	-	-0.12*	0.19***	-0.19***	-0.22***	-0.1	-0.09	-0.08	-0.18***	0.24***	-0.15**
24. Tenure	-0.04	-0.06	0.03	-0.08	-	0.17**	-0.03	-0.07	0.03	-0.06	0.04	0.01	0.01	0.08
25. COVID	0.02	-0.01	-0.01	-0.06	-	-0.14*	0.06	-	0.07	-	0.11*	-0.01	-0.05	-0.01

Table 3 (continued for variables 15-25)

	15	16	17	18	19	20	21	22	23	24	25
15. WFE F-W	-										
16. Jobs > 1	0.04	-									
17. Race	0.06	-0.01	-								
18. Gender	0.01	-0.12*	0.10	-							
19. Age	-0.08	0.08	-0.10	-0.29***	-						
20. Relationship	-0.12*	-0.12*	0.15**	0.20***	-0.06	-					
21. Dependents	0.07	-0.01	0.05	0.08	-0.10	-0.19***	-				
22. Industry	-0.01	0.02	-0.02	-0.41***	0.38***	-0.15**	-0.06	-			
23. Hours	-0.09	0.03	0.03	-0.03	-0.03	-0.01	0.01	-0.04	-		
24. Tenure	-0.03	0.06	-0.06	-0.16**	0.44***	-0.18***	0.13*	0.29***	0.08	-	
25. COVID	-0.04	0.01	-0.05	0.08	-0.03	0.03	-0.12*	-0.02	0.02	0.04	-

Note. N = 354. * denotes correlation significant at the .05 level, ** denotes correlation significant at the .01 level, *** denotes correlation significant at the .001 level. Boundary C. = Boundary Control Pref. = Preferences, AHW = After-hours work, RE = Recovery Experiences (overall), RE- PD = Recovery Experiences of Psychological Detachment RE- R = Recovery Experiences of Relaxation, RE- C = Recovery Experiences of Control, RE- M = Recovery Experiences of Mastery, WHC = work-home conflict, WFE W-F = Work Family Enrichment, Work to Family; WFE F-W = Work Family Enrichment, Family to Work.

The CFA was conducted in R using the "lavaan" package. The 4-factor model where home segmentation supplies, home segmentation preferences, work segmentation supplies, and work segmentation preferences were each a distinct factor was compared to a 2-factor model where home and work segmentation supplies were one factor and home and work segmentation preferences were the second factor and a single factor model where all four scales were loading onto one global factor. The CFA showed the best fitting model was the 4-factor model, CFI = .978, RMSEA = .051, χ^2 = 189.94, $p < .001$. Table 4 reports model statistics for all three models. The results of the CFA confirm the four scales each tap into unique dimensions of boundary management factors. As such, we will examine all four, as well as boundary control, as indicators that make up boundary management profiles.

Table 4

Confirmatory Factor Analysis of Work-Home Supplies and Preferences Scales

	Model	χ^2	*df*	*p*	χ^2 difference (*df*)	CFI	RMSEA
1	4-factor (oblique) correlated model	189.94	98	.001	—	.978	.051
2	2-factor (oblique) correlated model	2407.95	103	.001	2218.0 (5)*	.449	.251
3	Single-factor model	3116.43	104	.001	2926.5 (6)*	.280	.286

Note. $N = 354$. * = significant at $p < .001$. RMSEA=root mean square error of approximation. These are the results of the χ^2 difference tests between the 4-factor correlated model and both the 2-factor correlated (factor 1: home and work supplies; factor 2: home and work preferences) and single-factor models.

Profile Analysis

The latent profile analysis was conducted in R using the "tidyLPA" package. I began by specifying a model with 5 indicators: work segmentation supplies, work segmentation preferences, home segmentation supplies, home segmentation preferences, and boundary control. I started with a model estimating 2 profiles and continued to add an additional profile one at a time until the model fit statistics showed little to no improvement with the addition of another profile to the model. The BIC, AIC, and entropy were examined to compare the models. According to best practice, the best fitting model would have the lowest BIC and AIC levels and show entropy at or above .80 (Nylund et al., 2007; Spurk et al., 2020). Additionally, the percent of the sample that made up a given profile were examined. Previous research has recommended profiles should not be accepted if they make up less than 1% of the sample (Lubke & Neale, 2006; Spurk et al., 2020)

After comparing the models' fit statistics it was determined that the model specifying four profiles appeared to fit best because the AIC and BIC levels began to increase when more than four profiles were specified (see Table 5 for the fit statistics of the models estimated). After examining the profile means on the five indicator variables and plotting the profiles to examine the spread on the indicators for each profile visually, we found that work segmentation supplies, work segmentation preferences, and boundary control measures did show a clear definition between profiles. However, both the home segmentation supplies and home segmentation preferences measures did not exhibit a clear pattern of differing levels for different profiles. See Figure 1 for the plots of the four profile solution

based on the five indicators and Appendix B for a table that reports the mean levels of home segmentation supplies and preferences for each profile. Figure 1 reveals that while work segmentation supplies, work segmentation preference, and boundary control do show distinct separation between profiles, the same is not seen for home segmentation preference and supplies.

While the confirmatory factor analysis results for the home segmentation supplies and preferences scales did suggest the items were tapping into two new dimensions with regards to segmentation (i.e., in addition to the previously defined work segmentation supplies and preference), such dimensions do not seem to produce latent groups that are defined by different response patterns on home segmentation supplies and preferences. Thus, we decided to run an additional latent profile analysis examining only the three boundary management variables previously defined and examined in the literature: work segmentation supplies, work segmentation preferences, and boundary control. Again, I started by estimating a model with two profiles and increased the model by one additional profile at a time.

After comparing fit statistics for the eight models specified, the five-profile solution was determined as the best fitting model. While in comparison with the five-profile solution, the six-profile solution and the seven-profile solution did show a lower AIC, the BIC value increased for the six-profile solution and the entropy value dropped to below .80 for both. Moreover, after visually examining the different profile solutions, (see the plot in Figure 2), and given concerns about

parsimony, the five- profile solution was the best solution. Table 6 provides the model fit statistics for the different solutions, with the final solution bolded, and Figure 2 provides the plots of the four profile solution.

Table 5

Fit Statistics for Profile Solutions with All Five Profile Indicators

Number of Profiles	AIC	BIC	Entropy
2	4872.815	4934.724	0.914
3	4786.679	4871.803	0.884
4	**4740.666**	**4849.006**	**0.862**
5	4744.155	4875.711	0.835
6	4691.613	4846.385	0.827
7	4670.878	4848.866	0.801
8	4654.440	4855.643	0.809

Note. AIC = Akaike information criteria; BIC =Bayesian information criteria.

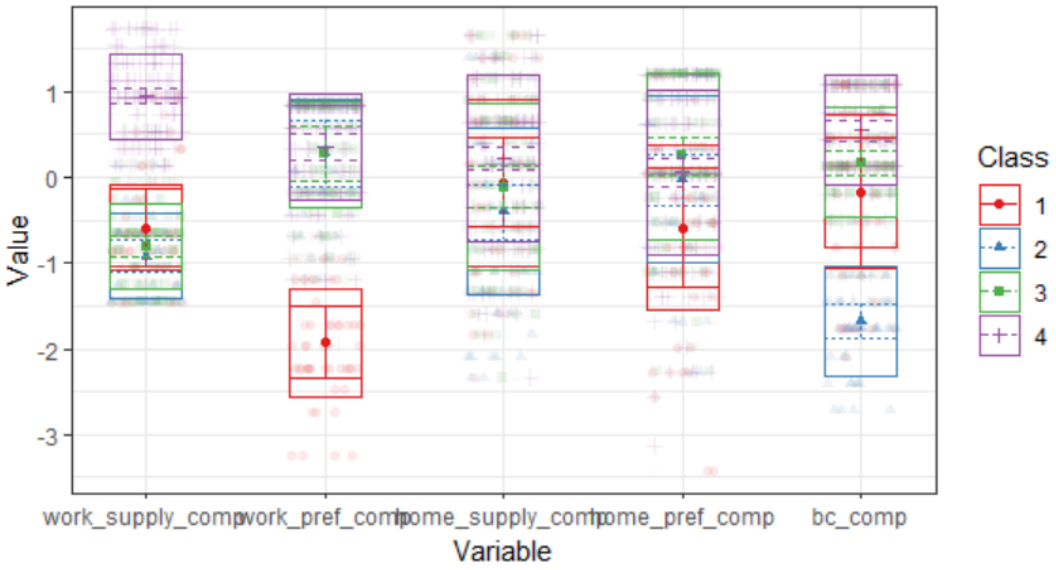


Figure 1

Plot of Profile Indicator Distribution for Five Indicator 4-Profile Solution

Table 6

Fit Statistics for Profile Solutions with Original Three Profile Indicators

Number of Profiles	AIC	BIC	Entropy
2	2969.610	3008.303	0.916
3	2862.063	2916.233	0.903
4	2850.108	2919.755	0.863
5	**2810.664**	**2895.789**	**0.880**
6	2796.747	2897.349	0.826
7	2734.746	2850.825	0.878
8	2733.785	2865.341	0.868

Note. AIC = Akaike information criteria; BIC =Bayesian information criteria. Final profile solution is bolded.

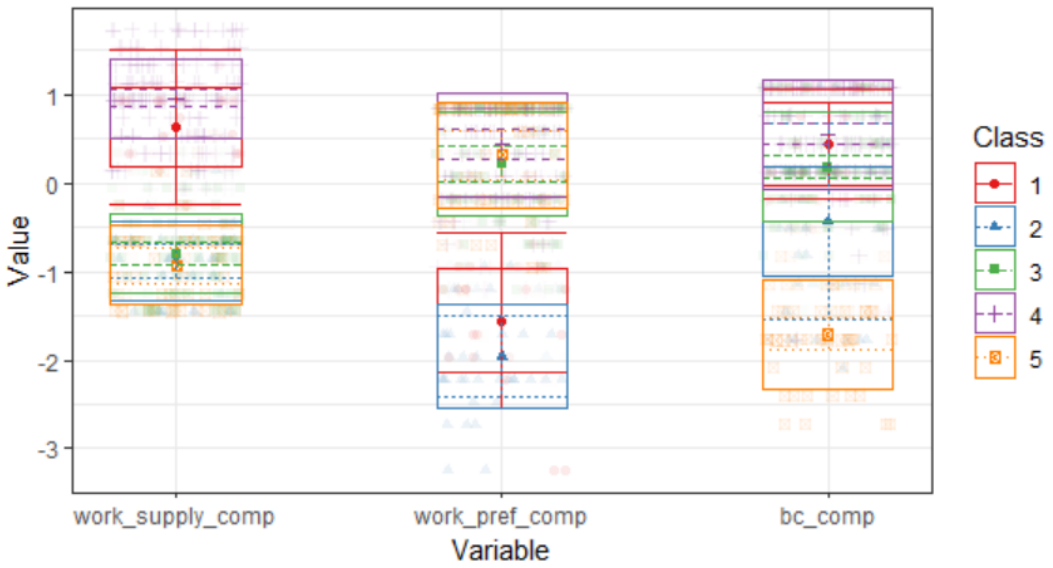


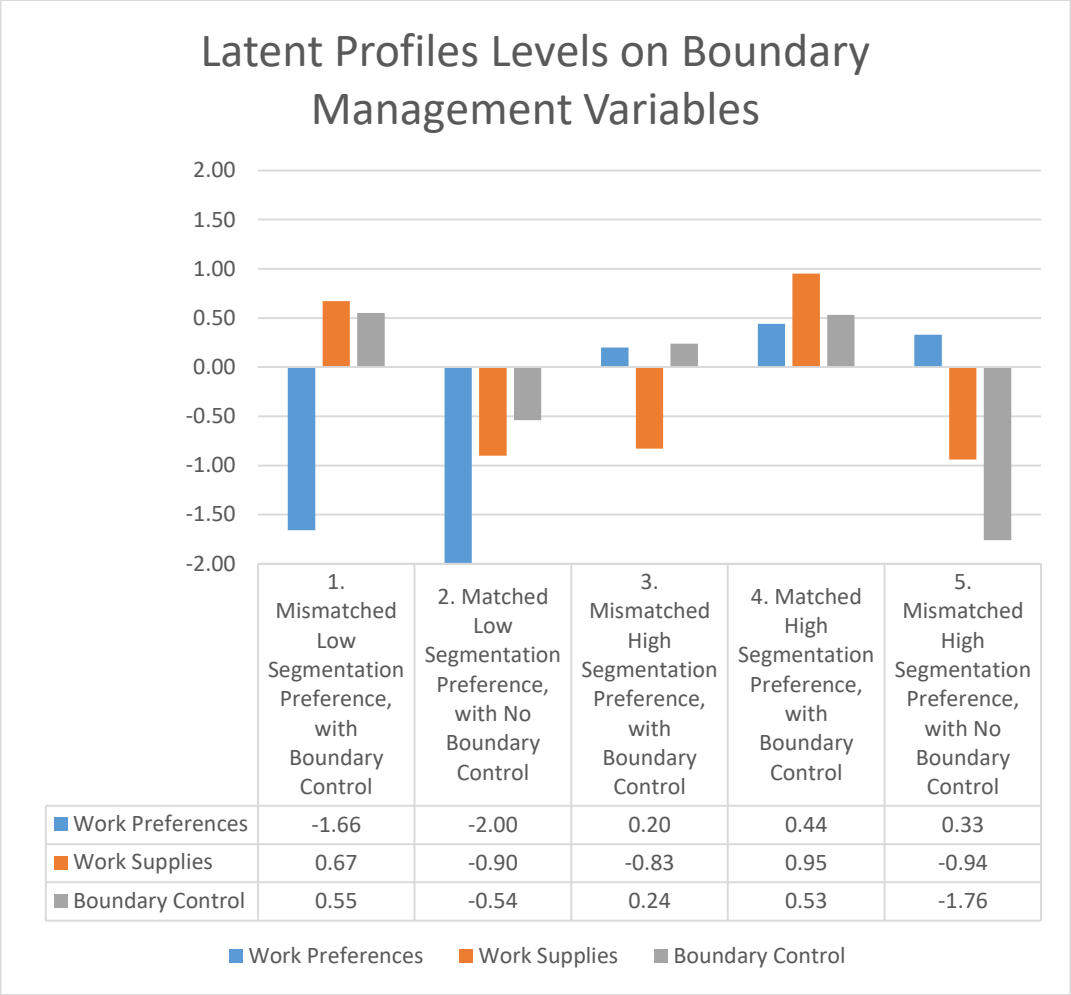
Figure 2

Plot of Profile Indicator Distribution for Three Indicator 5-Profile Solution

The mean levels on the profile indicators for each profile is reported in Figure 3 and Table 7. The number of participants classified in each of the five profiles is reported in Table 8. The first profile is characterized by high boundary

control with a mismatch between segmentation preferences and segmentation supplies, specifically when segmentation preference is low. This profile will be referred to as the *mismatch low segmentation preference with boundary control profile* and was made up of 5% of the sample. The second profile that emerged is characterized by low boundary control with a match between segmentation preferences and supplies, specifically when segmentation preference is low. This profile will be referred to as *the matched low segmentation preference with little boundary control profile* and was the second most common profile (26%). The third profile is characterized by high boundary control with a mismatch between segmentation preferences and supplies, specifically when segmentation preference is high. This profile is referred to as the *mismatched high segmentation preference with boundary control profile* and was the most common profile (44%).

The fourth profile is characterized by high boundary control with a match between segmentation preference and segmentation supplies, specifically when preference was high. This profile is referred to as *the matched high segmentation preference with boundary control profile* and was made up of 11% of the sample. Finally, the fifth profile is characterized by little boundary control with a mismatch between segmentation preferences and segmentation supplies, specifically when segmentation preferences is high. This profile is referred to *as the mismatched high segmentation with little boundary control* and was made up of 14% of the sample.



	1. Mismatched Low Segmentation Preference, with Boundary Control	2. Matched Low Segmentation Preference, with No Boundary Control	3. Mismatched High Segmentation Preference, with Boundary Control	4. Matched High Segmentation Preference, with Boundary Control	5. Mismatched High Segmentation Preference, with No Boundary Control
Work Preferences	-1.66	-2.00	0.20	0.44	0.33
Work Supplies	0.67	-0.90	-0.83	0.95	-0.94
Boundary Control	0.55	-0.54	0.24	0.53	-1.76

Figure 3

Mean Indicator Levels for Final 5-Profile Solution

Table 7

Latent Profile Levels on Boundary Management Variables- Unstandardized

Profile	Work Preferences *M (SD)*	Work Supplies *M (SD)*	Boundary Control *M (SD)*
1	2.56 (0.69)	3.67 (0.45)	4.44 (0.46)
2	2.22 (0.58)	1.70 (0.49)	3.30 (1.03)
3	4.38 (0.65)	1.78 (0.52)	4.12 (0.52)
4	4.61 (0.48)	4.02 (0.58)	4.43 (0.63)
5	4.50 (0.60)	1.65 (0.56)	2.02 (0.50)

Note. Profile 1 = Mismatched Low Segmentation Preference, with Boundary Control, Profile 2 = Matched Low Segmentation Preference, with No Boundary Control, Profile 3 = Mismatched High Segmentation Preference, with Boundary Control, Profile 4 = Matched High Segmentation Preference, with Boundary Control, Profile 5 = Mismatched High Segmentation Preference, with No Boundary Control

Table 8

Counts for Profiles

Profile	Count	Percentage
1	18	5%
2	37	10%
3	91	26%
4	155	44%
5	53	15%

Note. N = 354. Results based on the final 5-profile solution using three indicators (i.e., work segmentation supplies, work segmentation preference, and boundary control).

The five-profile solution based on the three profile indicators (i.e., work segmentation preference, work segmentation supplies, and boundary control) was retained and utilized for the following analyses in order to test the hypotheses and determine if boundary management profiles 1) exhibit different levels on variables related to the after-hours recovery process (i.e., after-hours work, recovery

experiences, job-related affective wellbeing, work-home conflict, and work-family enrichment) and 2) explain additional variance in these variables than the indicators that makeup the profiles would explain alone.

Results: Hypotheses 1a-c

In order to determine if the boundary management profiles exhibit significantly different levels of after-hours recovery process variables (i.e., after-hours work, recovery experiences, and recovery outcomes) an analysis of variance (ANOVA) was conducted for each variable where the most likely class was utilized as the grouping variable. First, to test Hypothesis 1a, a one-way ANOVA was conducted to determine if profile membership explains significant differences in after-hours working. The analysis showed the effect of profile membership on after-hours work was significant (F (4, 349) = 23.050, $p < .001$). Thus, hypotheses 1a was confirmed. A post-hoc Tukey test revealed that profile four (i.e., *matched high segmentation preference, with boundary control*) was significantly lower on levels of after-hours work compared to profiles two, three, and five ($p < .001$). Moreover, the post-hoc test revealed that profile one was significantly lower on levels of after-hours work than profile two ($p = .023$).

To test Hypothesis 1b, another one-way ANOVA was conducted to examine if profile membership drives significantly different levels of recovery experiences. The analysis showed that profile membership had a significant association with recovery experiences (F (4, 349) = 35.230, $p < .001$). Moreover, when recovery experiences were examined as four dimensions instead of a single recovery experience factor, profile membership still had a significant relationship

with each recovery experiences dimension: psychological detachment (F (4, 349) = 53.420, $p < .001$), relaxation (F (4, 349) = 13.495, $p < .001$), mastery (F (4, 349) = 12.671, $p < .001$) and control (F (4, 349) = 4.026, $p = .003$). Thus, hypotheses 1b was confirmed. Figure 4 provides the average levels of the after-hours work and the recovery experiences variables for each profile and Figure 5 provides the average levels of recovery experiences by dimension for each profile. Additionally, Table 9 reports the unstandardized mean levels on after-hours work and recovery experiences (i.e., overall and dimension level). A post-hoc Tukey test revealed that profile four was significantly higher on levels of general recovery experiences compared to profiles two, three, and five ($p < .001$). Moreover, the post-hoc test revealed that profile one was significantly higher on levels general recovery experiences than profiles two ($p = .048$) and five ($p < .001$).

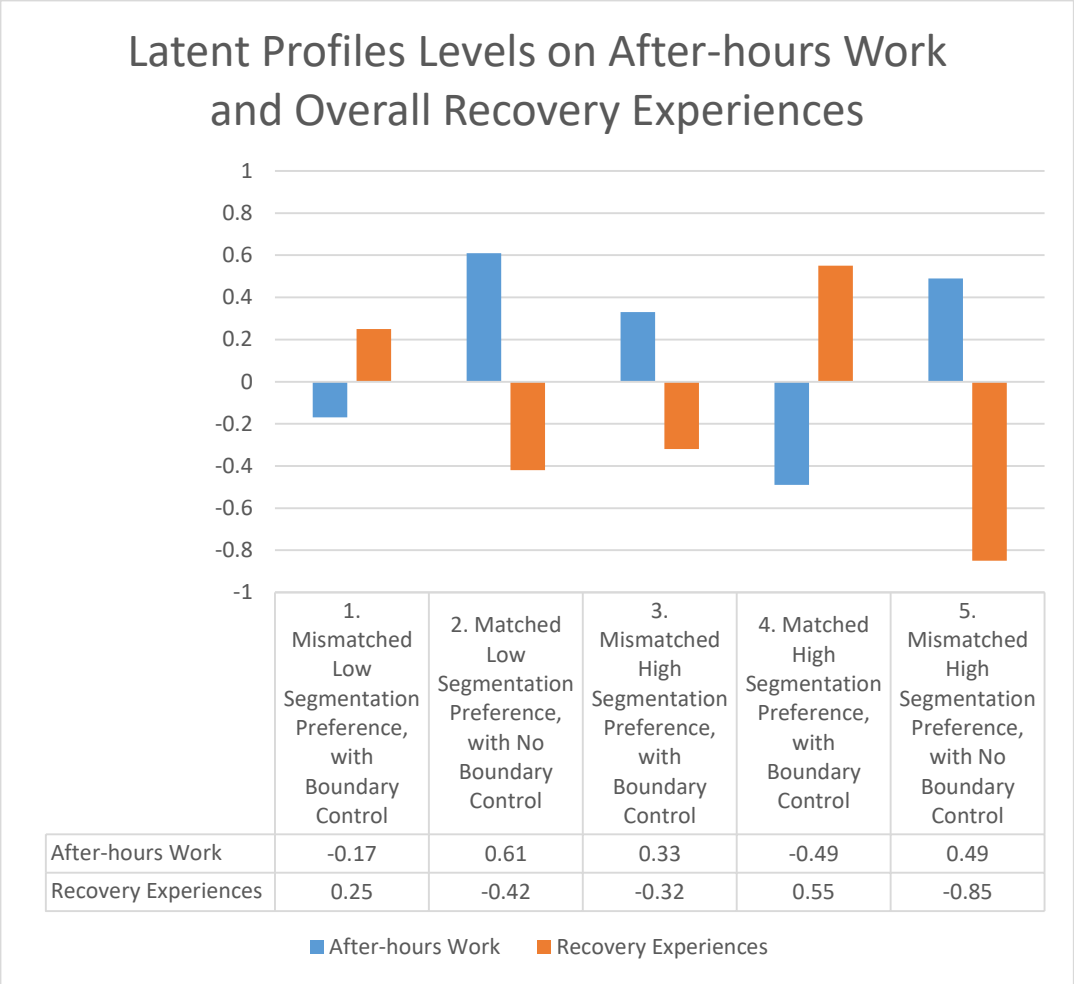
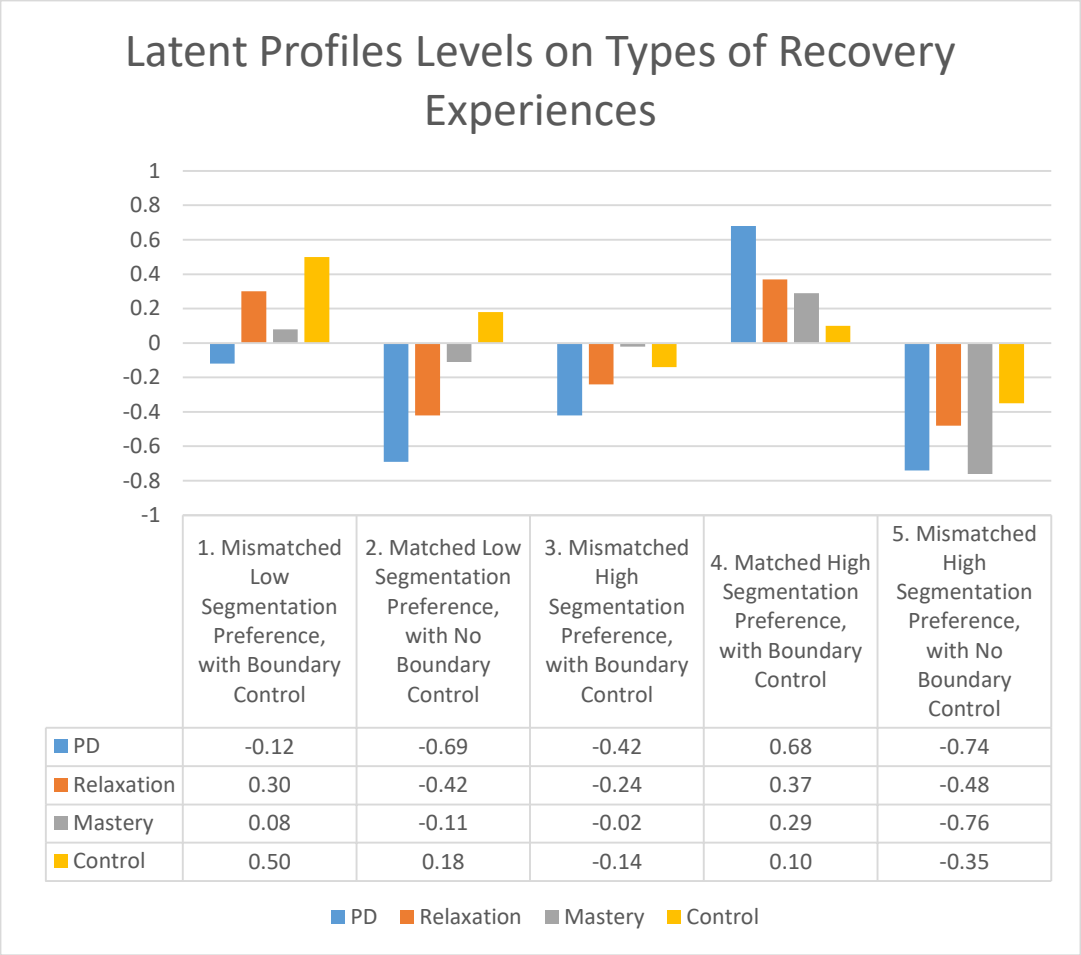


Figure 4

Latent Profile Levels on After-hours work and Recovery Experiences



	1. Mismatched Low Segmentation Preference, with Boundary Control	2. Matched Low Segmentation Preference, with No Boundary Control	3. Mismatched High Segmentation Preference, with Boundary Control	4. Matched High Segmentation Preference, with Boundary Control	5. Mismatched High Segmentation Preference, with No Boundary Control
PD	-0.12	-0.69	-0.42	0.68	-0.74
Relaxation	0.30	-0.42	-0.24	0.37	-0.48
Mastery	0.08	-0.11	-0.02	0.29	-0.76
Control	0.50	0.18	-0.14	0.10	-0.35

Figure 5

Latent Profile Levels on Types of Recovery Experiences
Note. PD= psychological detachment recovery experiences

Table 9

Latent Profile Levels on After-hours work and Recovery Experiences (overall and dimension level)- Unstandardized

Profile	After-hours Work *M (SD)*	Recovery Experience (RE) *M (SD)*	RE: PD *M (SD)*	RE: Relaxation *M (SD)*	RE: Control *M (SD)*	RE: Mastery *M (SD)*
1	2.75 (1.09)	3.76 (0.46)	2.69 (0.75)	4.04 (0.71)	4.21 (0.48)	4.11 (0.55)
2	3.55 (0.88)	3.34 (0.47)	2.09 (0.71)	3.37 (0.89)	3.93 (0.81)	3.95 (0.69)
3	3.27 (0.86)	3.40 (0.54)	2.38 (0.82)	3.54 (0.93)	3.67 (0.93)	4.02 (0.77)
4	2.42 (0.99)	3.95 (0.56)	3.55 (0.93)	4.11 (0.83)	3.87 (0.75)	4.28 (0.74)
5	3.43 (0.83)	3.06 (0.54)	2.04 (0.71)	3.31 (0.91)	3.48 (1.00)	3.42 (0.97)

Note. Profile 1 = Mismatched Low Segmentation Preference, with Boundary Control, Profile 2 = Matched Low Segmentation Preference, with No Boundary Control, Profile 3 = Mismatched High Segmentation Preference, with Boundary Control, Profile 4 = Matched High Segmentation Preference, with Boundary Control, Profile 5 = Mismatched High Segmentation Preference, with No Boundary Control

To test Hypothesis 1c I examined if profile membership drives significantly different levels of recovery outcomes by conducting a series of one-way ANOVA's. First, work-home conflict was examined. The analysis showed that the effect of profile membership on levels of work-home conflict was significant (F (4, 349) = 38.734, $p < .001$). A post-hoc Tukey test revealed that profile five was significantly higher on levels of work-home conflict compared to profiles one and four ($p < .001$), as well as two ($p = .001$), and three ($p = .002$).

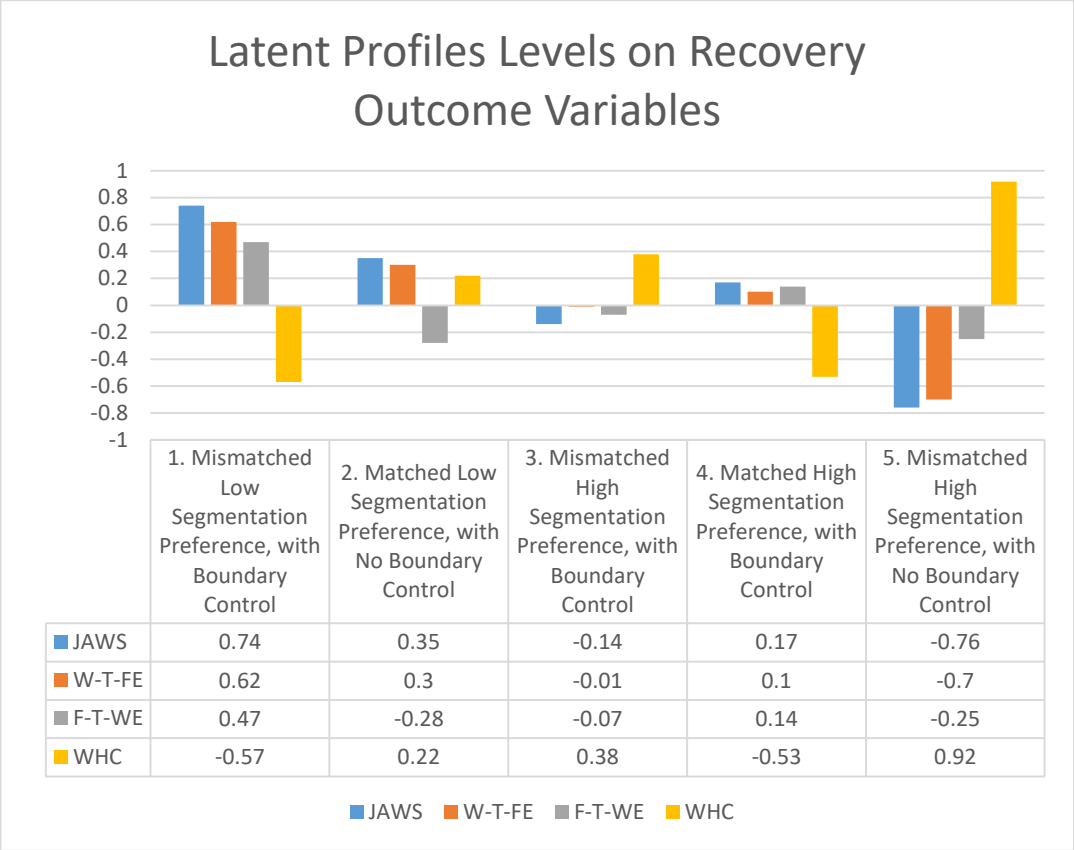
Next, I examined the effect of profile membership on job-related affective wellbeing (JAWS) and the analysis showed that the effect was significant (F (4,

349) = 14.731, $p < .001$). A post-hoc Tukey test revealed that profile five was significantly lower on levels of job-related affective wellbeing compared to profiles one, two, four ($p < .001$), and three ($p = .001$).

Finally, I examined if profile membership explained differences in work-family enrichment. Two one-way ANOVA's were conducted in order to determine the effect of profile membership on both work-to-family enrichment and family-to-work enrichment. The analysis revealed that profile membership did have a significant effect on work-family enrichment in both directions, that is work-to-family, (F (4, 349) = 10.362, $p < .001$), and family-to-work (F (4, 349) = 3.593, $p = .007$). Thus, hypotheses 1c was fully supported. A post-hoc Tukey test revealed that profile five was significantly lower on levels of work-to-family enrichment compared to profiles one, two, three, and four ($p < .001$). Post-hoc tests did not reveal any significant differences at or below the .01 significance level between profiles on levels of family-to-work enrichment. Figure 6 provides the mean levels of the outcome variables for each profile and Table 10 provides the unstandardized values of these variables for each profile.

The complete results on all the ANOVA's can be found in Appendix C. Additional information on the post-hoc tests can be found in Appendix D. Together, the results of these analyses suggest that profile five, *the mismatched high segmentation preference with little boundary control profile,* seems to fare the worse in terms of recovery outcomes. This is in line with what one might expect, as there is a misalignment between segmentation preference and supplies, with a lack

of boundary control making the management of work and home life during recovery periods more difficult than for those subgroups with alignment between segmentation supplies or preference, or those with boundary control.



	1. Mismatched Low Segmentation Preference, with Boundary Control	2. Matched Low Segmentation Preference, with No Boundary Control	3. Mismatched High Segmentation Preference, with Boundary Control	4. Matched High Segmentation Preference, with Boundary Control	5. Mismatched High Segmentation Preference, with No Boundary Control
JAWS	0.74	0.35	-0.14	0.17	-0.76
W-T-FE	0.62	0.3	-0.01	0.1	-0.7
F-T-WE	0.47	-0.28	-0.07	0.14	-0.25
WHC	-0.57	0.22	0.38	-0.53	0.92

Figure 6

Latent Profile Levels on After-hours work and Recovery Outcome Variables
Note. JAWS = Job-related affective wellbeing, W-T-FE = Work-to-family enrichment, F-T-WE = Family-to-work enrichment, and WHC = Work-home conflict

Table 10

Latent Profile Levels on After-hours work and Recovery Outcomes-Unstandardized

Profile	JAWS	WHC	WTF	FTW
1	3.89 (0.40)	2.26 (1.07)	4.06 (0.73)	4.17 (0.55)
2	3.62 (0.51)	3.23 (0.91)	3.73 (0.85)	3.52 (0.97)
3	3.29 (0.68)	3.43 (1.12)	3.41 (0.90)	3.70 (0.91)
4	3.50 (0.66)	2.31 (1.05)	3.53 (1.00)	3.89 (0.77)
5	2.87 (0.63)	4.09 (0.90)	2.72 (1.09)	3.55 (0.90)

Note. Profile 1 = Mismatched Low Segmentation Preference, with Boundary Control, Profile 2 = Matched Low Segmentation Preference, with No Boundary Control, Profile 3 = Mismatched High Segmentation Preference, with Boundary Control, Profile 4 = Matched High Segmentation Preference, with Boundary Control, Profile 5 = Mismatched High Segmentation Preference, with No Boundary Control

Results: Hypotheses 2a-c

To test hypotheses 2a-c, a series of hierarchal regressions were conducted for each of the variables of interest where the boundary management variables (i.e., profile indicators) were entered in the first step. For the next step, the profiles made up of the boundary management variables were transformed into dummy variables using an effect coding system where profile 1 was used as the reference. The four effect coded variables represented the effects of profile 2, 3, 4, and 5 in comparison to the effects of the grand mean, respectively, and were added in the second step of the regression.

The results of the hierarchical regression analyses are reported in Tables 11-16. For after-hours work, the profiles did not explain a significant amount of variance above and beyond that explained by the boundary management variables that makeup the profiles did alone, providing no support for hypothesis 2a. Similarly, the results of the hierarchical regression analysis for recovery experiences revealed that profiles did not explain incremental variance above that of the profile indicators alone, providing no support for hypothesis 2b. Finally profile membership did not explain incremental variance above that of the profile indicator variables in any of the outcome variables (i.e., job-related affective wellbeing, work-home conflict, and work-family enrichment), providing no support for hypothesis 2c.

Although we did not provide support that the boundary management profiles explain incremental variance above that of the boundary management variables alone, previous studies (Dahling et al., 2017; Gabriel et al., 2015) examining the importance of latent profile analysis in understanding a given phenomenon have used alternative methods to provide such support that the profiles do in fact provide value. For example, Gabriel and colleagues (2015) simply compared the latent profile analysis results (i.e., analysis of variances with the mostly likely profile as the grouping variable) to a traditional variable-centered multiple regression analysis (where profile indicators and the interactions between them are predictors) to see if the analyses resulted in different conclusions. I took a similar approach to determine how the boundary management profiles might lead

us to different conclusions to that of a traditional, variable-centered regression approach

Table 11

Hierarchal Regression Results for After-hours Work

Block and Variables	R^2	ΔR^2	*b*	*t*
Block 1: Boundary Management Variables	.247	-		
Segmentation Supplies			-.374	-8.119**
Segmentation Preference			-.105	-2.075*
Boundary Control			.020	-0.382
Block 2: Profile Membership	.249	.002		
Segmentation Supplies			-.355	-3.934**
Segmentation Preference			-.120	-1.397
Boundary Control			.027	.343
Profile 2			.001	.007
Profile 3			-.018	-.123
Profile 4			-.057	-.322
Profile 5			.167	.840

Note. $N = 354$. ** $p < .001$. * $p = .05$

Table 12

Hierarchal Regression Results for Recovery Experiences

Block and Variables	R^2	ΔR^2	*b*	*t*
Block 1: Boundary Management	.368	-		
Variables				
Segmentation Supplies			.233	9.010**
Segmentation Preference			-.011	-0.370
Boundary Control			.137	4.550**
Block 2: Profile Membership	.373	.005		
Segmentation Supplies			.279	5.522**
Segmentation Preference			-.012	-.241
Boundary Control			.142	3.252**
Profile 2			.110	1.010
Profile 3			.060	.744
Profile 4			-.055	-.556
Profile 5			.056	.506

Note. $N = 354$. ** $p < .001$. * $p = .001$

Table 13

Hierarchal Regression Results for Job-related Affective Wellbeing

Block and Variables	R^2	ΔR^2	*b*	*t*
Block 1: Boundary Management	.258	-		
Variables				
Segmentation Supplies			.119	3.963**
Segmentation Preference			-.262	-7.945**
Boundary Control			.167	4.780**
Block 2: Profile Membership	.266	.009		
Segmentation Supplies			.179	3.059*
Segmentation Preference			-.333	-5.980**
Boundary Control			.171	3.386*
Profile 2			-.073	-.579
Profile 3			.160	1.717
Profile 4			-.005	-.042
Profile 5			.162	1.256

Note. $N = 354$. ** $p < .001$. * $p = .05$

Table 14

Hierarchal Regression Results for Work-home Conflict

Block and Variables	R^2	ΔR^2	*b*	*t*
Block 1: Boundary Management	.387	-		
Variables				
Segmentation Supplies			-.500	-10.097**
Segmentation Preference			.239	4.397**
Boundary Control			-.234	-4.066**
Block 2: Profile Membership	.392	.005		
Segmentation Supplies			-.498	-5.155**
Segmentation Preference			.346	3.758**
Boundary Control			-.198	-2.382*
Profile 2			.158	.761
Profile 3			-.182	-1.181
Profile 4			-.210	-1.109
Profile 5			-.046	-.215

Note. $N = 354$. ** $p < .001$. * $p = .05$

Table 15

Hierarchal Regression Results for Work to Family Enrichment

Block and Variables	R^2	ΔR^2	*b*	*t*
Block 1: Boundary Management	.170	-		
Variables				
Segmentation Supplies			.096	2.028*
Segmentation Preference			-.301	-5.802**
Boundary Control			.253	4.607**
Block 2: Profile Membership	.176	.006		
Segmentation Supplies			0.202	2.195*
Segmentation Preference			-0.348	-3.963**
Boundary Control			0.224	2.816*
Profile 2			-0.003	-0.013
Profile 3			0.231	1.570
Profile 4			-0.093	-0.515
Profile 5			0.081	0.399

Note. $N = 354$. ** $p < .001$. * $p = .05$

Table 16

Hierarchal Regression Results for Family to Work Enrichment

Block and Variables	R^2	ΔR^2	*b*	*t*
Block 1: Boundary Management Variables	.058	-		
Segmentation Supplies			0.057	1.353
Segmentation Preference			0.001	0.016
Boundary Control			0.150	3.045*
Block 2: Profile Membership	.072	.014		
Segmentation Supplies			0.065	0.787
Segmentation Preference			0.017	0.211
Boundary Control			0.231	3.251*
Profile 2			-0.079	-0.443
Profile 3			-0.129	-0.977
Profile 4			-0.167	-1.03
Profile 5			0.207	1.139

Note. $N = 354$. ** $p < .001$. * $p = .05$

To provide support that the person-centered approach used in the current study does provide value, the regression analyses for the boundary management variables and their interaction terms predicting variables in the after-hours recovery process should yield different results as compared to our analyses of latent profiles' influence on variables in the after-hours recovery process. Thus I compared the ANOVA results, where profile membership was entered as the grouping variable, with the results of a regression analysis, where the outcome variables were regressed on the profile indicators, as well as the interaction between the indicators (Gabriel et al., 2015).

These additional analyses used to provide evidence of the value of an LPA approach were first conducted for after-hours work and recovery experiences, to determine if the two different approaches (i.e., person vs. variable) yield different results, and thus conclusions, regarding the influence of the boundary management variables on these variables. First, the results for after-hours work were compared. The results of the regression analyses with the boundary management variables and their interaction terms are reported in Table 17. The results show that segmentation preference ($\beta = -.175$, $p = .006$) and segmentation supplies ($\beta = -.397$, $p < .001$) significantly predict after-hours work. However, boundary control, the interactions between segmentation preference and segmentation supplies, between segmentation preference and boundary control, between segmentation supplies and boundary control, and the interaction between all three did not significantly relate to after-hours work.

On the other hand, the ANOVA did show support that the boundary management profiles explain significant differences in after-hours work ($F = 24.524$, $p < .001$). Specifically, the LPA results allowed us to uncover that boundary control does work together with segmentation supplies and preference in influencing after-hours work. For example, the post-hoc tests from the ANOVA showed that profile four, *matched high segmentation preference with boundary control,* showed significantly less after-hours work than two of the profiles both characterized by little boundary control (i.e., profiles two and five) as well as the

mismatched high segmentation, with boundary control profile (profile three; see Appendix D for post-hoc test results).

This result suggests that had we utilized a variable-centered approach instead of a person-centered approach we would have concluded that boundary control does not influence after-hours work and that the effects of boundary control do not depend on segmentation supplies and preferences. However, we see that for some subpopulations, the influence of segmentation supplies and preferences on after-hours work is dependent on levels of boundary control. For example, when we look at those profiles characterized by high segmentation preference, aligned profiles (i.e., matched segmentation supplies and preferences) that are met with boundary control, see significantly less after-hours work. Such results suggest boundary control, in combination with an alignment between one's segmentation preference and supplies, is more influential than the alignment alone. Thus, there is support for the use of latent profile analysis, specifically in helping us to understand individual differences in the after-hours recovery process that a variable-centered approach would otherwise ignore.

Table 17

Regression Results predicting After-hours Work

Predictor	*b*	*t*	*p*	R^2	Std. Error of Estimate
Overall Model				.258	.904
(Intercept)	2.870	49.204	.000		
Segmentation Preference (SP)	-.175	-2.750	.006		
Segmentation Supplies (SS)	-.397	-8.134	.000		
Boundary Control (BC)	.024	.375	.708		
SS * BC	.070	1.500	.135		
SP * BC	.059	.894	.372		
SS * SP	-.046	-.879	.380		
SS * SP * BC	.078	1.446	.149		

Note. N = 354.

Next, the variable-centered and person-centered results for recovery experiences were compared. The results of this regression analyses predicting overall recovery experiences is reported in Table 18. The results show that segmentation supplies ($\beta = .219$, $p < .001$) and boundary control ($\beta = .134$, $p < .001$) significantly predict recovery experiences, while segmentation preference did not. Moreover, there were no significant interactions, suggesting the influence of segmentation preference does not depend on segmentation supplies or boundary control.

On the other hand, the ANOVA did show that boundary management profiles explain significant differences in recovery experiences ($F = 24.524$, $p < .001$). The two approaches result in different conclusions because the regression

results suggest that as segmentation supplies is reduced, so are recovery experiences. Thus, with a variable-centered approach we might have concluded that low segmentation supplies (i.e., that is work environments that support the blending of work and home domains as opposed to segmenting) is detrimental to recovery experiences. However when we examine subpopulations we find that low segmentation supplies is not as detrimental to recovery experiences for some groups. Specifically, boundary control has the potential to buffer or reduce the negative influence of segmentation supplies on recovery experiences. For example, profiles three and five are both characterized by low segmentation supplies and a misalignment between preference and supplies (i.e., high segmentation preference) yet, profile three, with boundary control, shows significantly more recovery experiences (although still below the average) than profile five which does not have boundary control (see Figure 4 for an illustration of profiles' differing levels of overall recovery experiences).

Moreover, the LPA results allows us to uncover that segmentation preference does matter, a finding that would not have been concluded using the regression results, because in profiles where segmentation preference is not aligned with supplies, specifically in combination with the absence of boundary control (profile five, *mismatched high segmentation preference with no boundary control*), we see significantly less recovery experiences than profiles one, three, and four (See Appendix D for ANOVA post-hoc test results). Such results suggest

segmentation preference, and specifically whether it is aligned with segmentation supplies do influence recovery experiences.

Table 18

Regression Results predicting Recovery Experiences

Predictor	*b*	*t*	*p*	R^2	Std. Error of Estimate
Overall Model				.381	.506
(Intercept)	3.577	109.595	.000		
Segmentation Preference (SP)	-.001	-.039	.969		
Segmentation Supplies (SS)	.219	8.021	.000		
Boundary Control (BC)	.134	3.786	.000		
SS * BC	.004	.142	.887		
SP * BC	.025	.665	.506		
SS * SP	.054	1.846	.066		
SS * SP * BC	.026	.872	.384		

Note. N = 354.

The supplemental analyses used to provide evidence of the value of an LPA approach were again conducted for two of the recovery outcomes examined in this study: work-home conflict and job-related affective wellbeing. I chose to exclude work-family enrichment from these analyses as the results of the first step in the hierarchical regression for the work-family enrichment variables suggested the boundary management variables had little predictive power (see Tables 15 and 16). The regression analysis predicting work-home conflict showed that segmentation preference ($\beta = .196$, $p = .005$), segmentation supplies ($\beta = -.502$, $p < .001$), boundary control ($\beta = -.230$, $p = .001$), all significantly related to work-home

conflict. See Table 19 for the complete results of this regression analysis. However, the interactions between segmentation preference and segmentation supplies, between segmentation preference and boundary control, between segmentation supplies and boundary control, and the interaction between all three did not significantly relate to work-home conflict. Similar to the results for after-hours work and recovery experiences, this regression analysis suggest that the three boundary management variables do not interact to significantly predict work-home conflict.

However, the ANOVA did show that boundary management profiles explain significant differences in work-home conflict ($F = 24.524$, $p < .001$). The results of the LPA allowed us to uncover that when segmentation supplies and preference are not aligned, subpopulations with high boundary control are able overcome the negative influence of mismatch supplies and preference on work-home conflict. These results suggest there are specific groups where a misalignment between segmentation preference and supplies is not detrimental to work-home conflict, specifically because of the influence of boundary control on such misalignment (e.g., profile 1, the *mismatch low segmentation preference with boundary control profile*). These results provide further support for the use of latent profile analysis in helping us to understand individual differences in the after-hours recovery process.

Table 19

Regression Results predicting Work-home Conflict

Predictor	*b*	*t*	*p*	R^2	Std. Error of Estimate
Overall Model				.389	.975
(Intercept)	2.961	47.058	.000	47.058	.000
Segmentation Preference (SP)	.196	2.853	.005		
Segmentation Supplies (SS)	-.502	-9.536	.000		
Boundary Control (BC)	-.230	-3.375	.001		
SS * BC	-.005	-.102	.919		
SP * BC	.081	1.127	.260		
SS * SP	-.062	-1.099	.273		
SS * SP * BC	.050	.858	.391		

Note. N = 354.

Finally, the regression analysis predicting job-related affective wellbeing showed that segmentation preference (β = -.230, $p < .001$), segmentation supplies (β = .113, $p < .001$), and boundary control (β = .160, $p < .001$), all significantly related to job-related affective wellbeing. However, no significant interactions emerged. The results of this regression analysis can be found in Table 20. On the other hand, the ANOVA did show that boundary management profiles explain significant differences in job-related affective wellbeing ($F = 24.524$, $p < .001$).

Table 20

Regression Results predicting Job-related Affective Wellbeing

Predictor	*b*	*t*	*p*	R^2	Std. Error of Estimate
Overall Model				.265	.590
(Intercept)	3.382	88.769	.000	88.769	.000
Segmentation Preference (SP)	-.230	-5.535	.000		
Segmentation Supplies (SS)	.113	3.549	.000		
Boundary Control (BC)	.160	3.878	.000		
SS * BC	-.013	-.412	.680		
SP * BC	.009	.217	.829		
SS * SP	.043	1.252	.211		
SS * SP * BC	-.016	-.451	.652		

Note. N = 354.

Thus, had we utilized a variable-centered approach instead of our profiles, we would have concluded that segmentation supplies, segmentation preference, and boundary control do not interact to influence job-related affective wellbeing. However, the LPA allowed us to uncover that when segmentation supplies and preference are not aligned, subpopulations with high boundary control are able overcome the negative influence of mismatch supplies and preference on job-related affective wellbeing. For example, the post-hoc tests from the ANOVA revealed that profile 5, *the mismatched high segmentation preference with no boundary control profile*, saw significantly less job-related affective wellbeing than the *mismatched high segmentation preference with boundary control profile* (i.e., profile 3). These results suggest there are specific groups where a misalignment

between segmentation preference and supplies is not detrimental to job-related affective wellbeing, specifically because of the influence of boundary control. In other words, for certain subpopulations the three boundary management variables do depend on each other to influence recovery outcomes, a conclusion otherwise covered up by a traditional variable-centered approach.

Exploratory Analyses

In order to better understand the after-hours recovery process, previous research has examined how after-hours work is related to recovery outcomes, through the mediating mechanism of recovery experiences (Derks et al., 2014). However, studies show inconclusive results regarding the degree to which working during non-work hours is detrimental to recovery experiences and outcomes (e.g., Derks et al., 2014). In the present study, boundary management profiles did show significant differences on after-hours work, recovery experiences, and recovery outcomes. These results suggest that subpopulations of individuals may respond differently to working after-hours, resulting in potentially different relationships between after-hours work, recovery experiences, and recovery outcomes across boundary management profiles. In order to explore this idea that profile membership moderates the mediated relationship where after-hours work influences recovery outcomes (i.e., job-related affective well-being and work-to-family conflict) through recovery experiences, exploratory analyses were conducted.

The exploratory analyses were conducted in SPSS using the Hayes (2017) PROCESS macro to test a mediated moderation model (i.e., model 59), where

profile membership moderate the indirect paths between after-hours work and recovery experiences (i.e., first stage mediation, path A) and between recovery experiences and recovery outcomes (i.e., second stage mediation, path B), as well as the direct path between after-hours work and recovery outcomes. Two analyses were conducted: one predicting job-related affective well-being and one predicting work-home conflict. The predictor variables were mean centered for analysis.

In the first analysis, job-related affective wellbeing was entered as the dependent variable. The moderator, profile membership, was entered as a multi-categorical variable using an effect coding system. In this method, profile one is used as a referent, but given this profile was the one with the smallest sample size I determined it was sufficient to be used. This multi-categorical coding method compares each group's mean with the average of all the group means to determine if there are conditional indirect and/or direct effects. This analysis revealed that there was no significant moderation of the first or second stage mediation. However, there was a significant interaction for profile 5, suggesting a significantly different direct relationship between after-hours work and job-related affective well-being (b = -.199, p = .04) when compared to the average of all profiles. These results suggest while the direct effect is conditional to profile membership, the indirect effect of recovery experiences is not conditional to profile membership.

Given the lack of support for conditional indirect effects, I decided to trim the model and conduct an analysis where profile membership moderates only the direct path between after-hours work and job-related affective well-being (i.e.,

PROCESS model 5). This regression portion of this analysis (see Table 21 for the results of this analysis and Figure 7 for the interaction plot of this relationship for each profile) revealed that the direct effect of after-hours work on job-related affective well-being was moderated by profile membership, such that the effect of after-hours work on job-related affective well-being was significantly different (i.e., lower) from the average for profile five, with this simple slope being negative and non-significant (see Table 22 for the results of the conditional direct effects). However, for the remaining profiles the relationship between after-hours work and job-related affective well-being was not significantly different from the average. Moreover, the results of the conditional direct effects in PROCESS show that only profiles two and four exhibit a significant effect of after-hours work on job-related affective wellbeing (see Table 22 for the results of the conditional direct effects of after-hours work on job-related affective wellbeing). Together these results suggest that the direct relationship between after-hours work and job-related affective wellbeing is positive and significant for profiles two and four, although this relationship is negative but non-significant for profile five.

Table 21

Regression Results from Conditional Direct Effects of After-hours work on JAWS

	Recovery Experiences (M)				*Job-related Affective Wellbeing (Y)*			
Predictor	*b*	SE	*t*	*p*	*b*	SE	*t*	*p*
(Intercept)	3.603	.031	112.70	.000	2.536	0.225	11.262	0.000
After-hours work	-.242	.030	-8.044	.000	0.114	0.046	2.489	0.013
Recovery					0.254	0.063	4.050	0.000
Profile 2					0.086	0.108	0.796	0.427
Profile 3					-0.145	0.072	-2.027	0.043
Profile 4					0.020	0.068	0.294	0.769
Profile 5					-0.393	0.092	-4.263	0.000
Profile 2 * Ahw					0.127	0.101	1.256	0.210
Profile 3 * Ahw					-0.008	0.074	-0.111	0.912
Profile 4 * Ahw					-0.001	0.060	-0.016	0.987
Profile 5 * Ahw					-0.218	0.092	-2.378	0.018
	R^2 = .155, F = 64.70, p < .001				R^2 = .211, F = 9.17, p < .001			

Note. SE = Standard Error of Estimate. The moderator was entered into the PROCESS model using effect coding, where profile 1 is used as a referent and thus no regression output is provided for this profile.

Table 22

Conditional Direct Effects of After-hours work on Job-related Affective Wellbeing

	Conditional Direct Effects					
	Effect	SE	t	P	LLCI	ULCI
Profile 1	.2134	.1362	1.566	.118	-.0546	.4815
Profile 2	.2405	.1166	2.065	.040	.0114	.4700
Profile 3	.1054	.0754	1.399	.163	-.0429	.2538
Profile 4	.1127	.0506	2.219	.027	-.0128	.2126
Profile 5	-.1040	.1035	-1.005	.316	-.3007	.0996

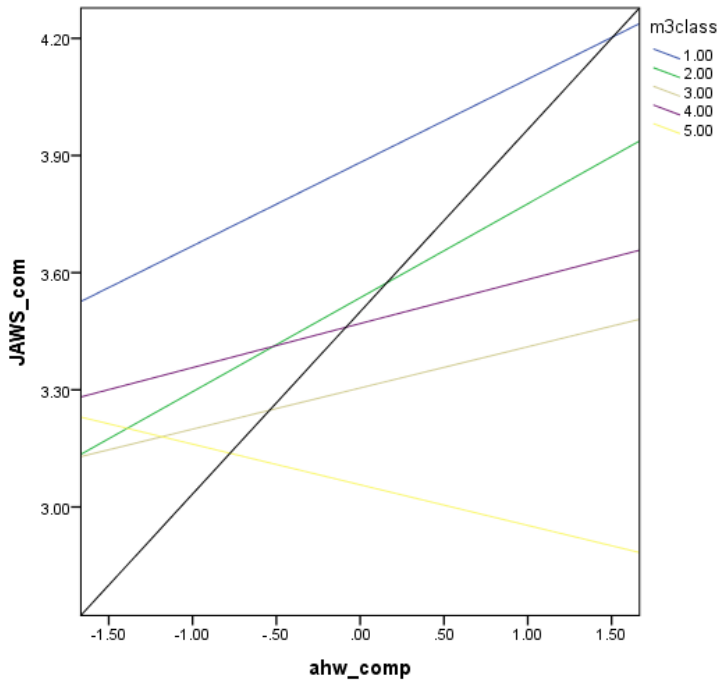


Figure 7

Latent Profile Levels on After-hours work and Recovery Experiences

Next, a similar analysis was conducted where work-home conflict was entered as the dependent variable. Similar to the previous analyses, the moderator (i.e., profile membership) was entered as a multi-categorical variable using an effect coding system. This analysis revealed that there were no significant moderation of either indirect relationship (i.e., after-hours work to recovery experiences and recovery experiences to work-home conflict), nor was there a significant interaction of profile membership on the direct relationship between after-hours work and work-home conflict (see Table 23 for the PROCESS results of the regression analyses predicting job-related affective wellbeing). There was a significant index of moderated mediation for group two (b = -.0812, 95% CI: [-.2046, -.0054]), suggesting that the indirect effect for profile two was stronger than was observed in the average sample, but this indirect effect was nonsignificant. Thus, although there were signifcant differences between the average indirect effect and the indirect effect for profile two, the indirect effect for profile two itself was not significant b = .0002, 95% CI: [-.0730, .0523]). The results of this analysis suggest the influence of after-hours work on work-home conflict, as mediated through recovery experiences, is not conditional to boundary management profiles.

Table 23

Regression Results from Conditional Direct Effects of After-hours work on Work-Home Conflict

	Recovery Experiences *(M)*				Work-home Conflict *(Y)*			
Predictor	*b*	SE	*t*	*p*	*b*	SE	*t*	*p*
(Intercept)	-0.085	.040	-2.10	.037	3.002	0.081	37.075	.000
Ahw	-0.118	.039	-3.05	.003	0.157	0.073	2.141	.033
RE					-0.588	0.145	-4.048	.000
Profile 2	-0.173	.093	-1.87	.063	0.120	0.185	0.648	.517
Profile 3	-0.091	.061	-1.47	.141	0.201	0.120	1.673	.095
Profile 4	0.366	.055	6.68	.000	-0.429	0.110	-3.899	.000
Profile 5	0.329	.077	4.25	.000	0.666	0.169	3.955	.000
Profile 2 * Ahw	0.104	.087	1.20	.232	0.003	0.160	0.018	.986
Profile 3 * Ahw	0.041	.063	0.64	.522	0.057	0.118	0.482	.630
Profile 4 * Ahw	-0.015	.051	-.289	.773	0.141	0.097	1.456	.146
Profile 5 * Ahw	-0.135	.079	-1.72	.087	-0.059	0.154	-0.378	.706
Profile 2 * RE					0.571	0.300	1.901	.058
Profile 3 * RE					-0.166	0.207	-0.801	.434
Profile 4 * RE					0.253	0..182	1.391	.165
Profile 5 * RE					-0.101	.252	-0.399	.690
	$R^2 = .327$, F = 18.57, $p < .001$				$R^2 = .413$, F = 17.00, $p < .001$			

Note. RE = Recovery Experiences, Ahw = After-hours Work. SE = Standard Error of Estimate. The moderator was entered into the PROCESS model using effect coding, where profile 1 is used as a referent and thus no regression output is provided for this profile.

Chapter 7: Discussion

The purpose of the present study was to take a person-centered approach to help to better understand the individual differences at play in the after-hours recovery process. The current study examined how three prominent boundary management variables, which have each shown to moderate the after-hours recovery process separately, interact together to drive differences in the recovery process specifically by understanding how the variables come together to create latent profiles within the population. Latent profile analyses have often been utilized in the past to clarify the conditions that are necessary for a given theory to be valid, by identifying subpopulations that differ on a given set of variables or profile indicators (Gabriel et al., 2015; Wang & Hanges, 2011).

In the current study, the effort-recovery model which posits that periods away from work are necessary to reduce job strain, does not always hold true as we see individuals who take work home with them are able to recover from job strain depending on different levels of their segmentation preference, segmentation supplies, or boundary control. Thus, examining the subpopulations of individuals who score similarly on such variables can help us to explain when and why the after-hours recovery process may differ across individuals.

Initially, I conducted the LPA using five indicators, including the newly developed home boundary management scales: home segmentation preference and home segmentation supplies. In this analysis, a four-profile solution fit the data best. Surprisingly, the two home segmentation constructs did not show substantial

differentiation across the four profiles. This suggests that while home segmentation preference and supplies do tap into different latent constructs than the existing work segmentation preference and supplies measures, they do not exhibit different subpopulations based on quantitatively different response patterns to such constructs.

Thus, there does not seem to be subgroups of individuals that share characteristics in regards to their levels of home segmentation preference and segmentation supplies. Due to the limited latent definition concerning the two profile indicators: home boundary management supplies and home boundary management preferences, I retained a profile structure based off of three indicators instead: work boundary management supplies, work boundary management preferences, and boundary control.

The latent profile analysis for the three indicators revealed a 5-profile solution best fit the data. This solution was largely similar to the originally hypothetical classification originally posited, as there were profiles characterized by either a match or mismatch between work segmentation supplies and segmentation preferences, along with either high or low boundary control. The majority of the sample belonged to either profile 2 or 3 (the *mismatched high segmentation preference with boundary control* and the *matched high segmentation preference with boundary control*, respectively).

Profile membership was found to have a significant effect on all study variables of interest (i.e., after-hours work, recovery experiences, job-related

affective well-being, work-to-family conflict, and work-family enrichment/family-work enrichment). These results are important as they provide evidence that boundary management profiles, or heterogeneous groups in the population made up of individuals who respond differently to segmentation preference, segmentation supplies, and boundary control, exhibit different levels on key recovery variables.

Specifically, the results showed that profile four, *the matched high segmentation preference with boundary control* group, showed significantly less after-hours work and significantly more recovery experiences compared to three other profiles. These results suggest the importance of boundary control, because the profiles characterized by alignment between segmentation preferences and supplies without boundary control did not see the same levels of reduced after-hours work and increased recovery experiences.

Moreover, profile five, *the mismatched high segmentation preference with no boundary control profile*, was significantly worse on recovery outcomes (i.e., work-home conflict and JAWS) than all other profiles. These results highlight the importance of a need for either boundary control or alignment between segmentation preferences and supplies because profiles with such characterizations do not see the same significant increase in work-home conflict and reduction job-related affective wellbeing. The results from hypotheses 1a-1c provide support that boundary management profiles relate differently to key variables in after-hours recovery process and can help us to understand the nuances between individuals.

Additionally, these results suggest profile five, *the mismatched high*

segmentation preference with no boundary control profile, as the least optimal group in terms of recovery experiences and outcomes. However, no single profile could be chosen as the most optimal group. Specifically, profile four, *the matched high segmentation preference with boundary control,* is highest on recovery experiences and lowest on after-hours work (i.e., the most optimal group for after-hours work and recovery experiences) but surprisingly profile one, *the mismatched low segmentation preference with boundary control profile,* is highest on job-related affective wellbeing and work-family enrichment, while also lowest on work-home conflict (i.e., the optimal group for recovery outcomes). These results point towards a potential moderated mediation where profiles exhibit different relationships regarding the way after-hours work either positively or negatively influences recovery experiences and outcomes. Future research is necessary to not only confirm the profile structure in the current study, but to examine such mediated moderation using an appropriate study design which lends itself towards assumptions of causality.

The results of the current study also reveal the importance of a person-centered approach in understanding nuances in the recovery process, which a traditional variable-centered approach would not allow. Specifically, a traditional regression analysis suggested that the effects of boundary control on after-hours work, recovery experiences, and outcomes was not dependent on segmentation supplies and preferences. However, the current study revealed that the profiles, each of which exhibit different levels of segmentation supplies, segmentation

preference, and boundary control, have a significant relationship with after-hours work, recovery experiences, and outcomes. These results suggest the three boundary management variables do in fact come together to influence the recovery process.

For example, the results of the LPA analysis suggest that boundary control, in combination with an alignment between one's segmentation preference and supplies (e.g., profile 4), results in significantly less after-hours work than when there is alignment without boundary control (e.g. profile two). Also, boundary control seems to help buffer the negative effects of low segmentation supplies on after-hours work as can be seen when we compare after-hours work levels for profiles characterized by low segmentation supplies (i.e., two, three, and five; see Figure 4). Here we can see that the profile characterized with boundary control sees less after-hours work than the other two low segmentation supplies profiles, although the post-hoc test did not suggest these differences were signifcant.

Additionally, concerning recovery experiences, the person-centered analyses revealed that boundary control has the potential to buffer or reduce the negative influence of low segmentation supplies on recovery experiences (e.g., compare profiles three and five on Figure 4), a finding that the variable-centered approach did not suggest. Moreover, the variable-centered approach would have resulted in conclusions that segmentation preference does not influence recovery experiences, however the results of the LPA reveal there are differences across

profiles on recovery experiences when segmentation preference does not align with supplies.

Finally, concerning both work-home conflict and job-related affective wellbeing we were able to uncover that there are specific groups where a misalignment between segmentation preference and supplies is not detrimental to job-related affective wellbeing (as results of the research conducted by Kreiner, 2006 suggests), specifically because of the influence of boundary control. On the other hand, a variable-centered approach ignores the subpopulations' differing combinations between segmentation preference, supplies, and boundary control and their combined influence on recovery outcomes (see Tables 19 and 20 which show no interactions between the boundary management variables).

Together these results suggest that for certain subpopulations, there is evidence of an interaction between segmentation supplies, segmentation preference, and boundary control when predicting variables important to recovery. For example, profile 1, a *mismatched profile with boundary control*, shows reduced after-hours work and increased recovery experiences, while the opposite pattern is found for profile 5, *the mismatched profile without boundary control* (i.e., the least optimal profile; see Figure 5). Moreover, profile 1, a *mismatched profile with boundary control,* shows increased job-related affective wellbeing and reduced work-home conflict compared with the mismatched profile without boundary control (i.e., profile 5; see Figure 6). Such results suggest that for some subpopulations, the influence of the misalignment between segmentation

preference and supplies on recovery variables is dependent on boundary control. Together, the results of the current study provide initial insight into how using a person-centered method allows us to uncover effects present for subpopulations that would have otherwise been covered up using traditional variable-centered methods.

Additionally, exploratory analyses were conducted to determine if profile membership moderates the after-hours recovery process. The results from these analyses suggest that individuals in profile five see detrimental effects from working after-hours on job-related affective wellbeing, when compared the average of all profiles. This result is to be expected, as this profile is characterized by a mismatch on work segmentation supplies and preference, in combination with little boundary control. Moreover, the ANOVA previously revealed that profile five showed significantly lower levels of job-related affective wellbeing compared to all other profiles (see Appendix D for the ANOVA post-hoc test results).

On the other hand, all other boundary management profiles seem to avoid the negative influence of after-hours work on job-related affective wellbeing (see Figure 7 for a depiction of the regression line representing the after-hours work and JAWS relationship for each profile). However, it is important to note that only profiles two and four showed a significant direct effect of after-hours on job-related affective wellbeing. These findings still underscore the importance of boundary management profiles as they help us to uncover when and for whom after-hours work is significantly related to job-related affective wellbeing.

Limitations and Future Research Directions

The present study comes with a few limitations. For one, a slightly larger sample size might have been useful in more accurately detecting all subpopulations. While numerous studies on latent profile analysis have confirmed that a sample size of 350 is appropriate (Spurk et al., 2020**;** Wurpts & Geiser, 2014), a sample size of 500 is preferred as it more reliably performs well (Nylund et al., 2007; Wurpts & Geiser, 2014). Another limitation of the present study is that I did not conduct a second study to confirm the latent profile structure that emerged. Future research is necessary to confirm the same profile structure emerges in a new, preferably larger, sample.

Moreover once profile structure is confirmed with a new sample, future longitudinal research could be used to determine if individuals are likely to transition to different profiles. Dissonance theory, which sets forth that individuals are confronted with uncomfortable feelings of dissonance when exposed to stimuli or information that is inconsistent with their own thoughts or beliefs (Festinger, 1957), explains why an individual is likely to change boundary management profiles overtime. Individuals strive to reduce dissonance by changing one's dissonant thoughts or beliefs, adding consonant cognitions, or reducing the importance of one's dissonant cognitions (Festinger, 1957).

In an effort to reduce dissonance and increase potential organizational resources that support their segmentation preference, employees may slowly adapt their preference for work and home life segmentation in accordance with the segmentation supplies perceived at their organization (Harmon-Jones & Mills,

2019). This in turn, would remove the threat to resources due to misalignment of segmentation preferences and supplies and thus result in a boundary management profile that is more conducive to recovery and reduced strain, regardless of boundary control. Future research should examine whether or not individuals are likely to transition profiles using a latent transition analysis.

Another limitation of the current study is we were unable to truly examine the after-hours recovery process through the lens of the effort-recovery model because the current study design did not lend itself to determining whether or not profiles moderate the relationship between after-hours work on recovery outcomes, through the mediator of recovery experiences. Such analyses in future research would help us to better understand how after-hours work differentially influence the recovery process for specific subpopulations. Future research should utilize a study design with temporal precedence between the after-hours work and the recovery experiences and outcomes variables in order to truly capture the after-hours recovery process and reduce concerns of common method bias.

While in the present study we were able to conduct supplemental analysis of this nature, we did not utilize a study design that lends itself towards predicting effects because of the lack of temporal precedence when collecting the data. However, the present study provides the necessary initial support for the use of boundary management profiles in future studies, as profiles significantly influenced key variables in the after-hours recovery process (i.e., after-hours work, recovery experiences, job-related affective well-being, work-to-family conflict, and work-

family enrichment/family-work enrichment). As such, important next steps for researchers are to confirm the current profile structure and examine the role profile membership plays in moderating the negative influence of after-hours work on both recovery experiences and outcomes.

Implications

The present study helps us to understand what conditions, specifically concerning boundary management, support the recovery process and importantly, how these conditions may differ across subpopulations. One theoretical contribution of the present study is that the results provide support for the idea that quantitatively distinct subpopulations exist regarding individual response patterns to work segmentation preference, work segmentation supplies, and boundary control. The results suggest there are five subpopulations characterized by either an alignment or misalignment between segmentation preference and supplies. In addition to segmentation preference and supplies alignment, subpopulations are met with either high or low boundary control. Those subpopulations that exhibit aligned segmentation preferences and supplies are met with either high boundary (e.g., profile four, *matched high segmentation preference with boundary control*) or low boundary control (profile two, *matched low segmentation preference with little boundary control*). Additionally, those subpopulations that exhibit misaligned segmentation preferences and supplies are met with either high boundary control (profile one, *mismatched low segmentation preference with boundary control*, and profile three, *mismatched high segmentation preference with boundary control*) or

low boundary control (profile five, *mismatched high segmentation preference with little boundary control).*

Moreover, the present study provides support that these distinct subpopulations experience different levels of after-hours work, recovery experiences, and recovery outcomes. This finding is especially important because it provides insight into the potentially different influence of the boundary management variables on the after-hours recovery process. Specifically, profiles were related to different levels of after-hours work, suggesting that different combinations or response patterns on segmentation preference, segmentation supplies, and boundary control result in different habits concerning working during non-work hours. Similarly, the results provide evidence that the ability to partake in recovery experiences differs in response to one's boundary management profile. In terms of recovery outcomes, the boundary management profiles showed to significantly relate to differences in job-related affective wellbeing, work-home conflict, and work-family enrichment. These results suggest that specific heterogeneous groups in the population experience different levels of wellbeing and strain, likely in response to differing after-hours work and recovery experiences.

Although the present study failed to find the subpopulations or boundary management profiles that emerged to explain incremental variance over that of the boundary management variables (i.e., the profile indicators), previous studies (Dahling et al., 2017; Gabriel et al., 2015) have used methods other than hierarchical regression to determine profiles are in fact helping us to understand the

variables in a way the traditional variable-centered approach would not. As such, since we see profile membership driving significant differences in important recovery variables that are effectively covered up when not using a person-centered approach, the results of the present study does have important theoretical implications.

Together, the results regarding profiles differing levels of recovery variables helps us to better understand when the effort-recovery model holds true. For example, the effort-recovery model suggests segmenting home and work domains should result in increased recovery experiences and outcomes, and that organizations should encourage high segmentation (Meijman & Mulder, 1998). However, the present study allows us to uncover subgroups where the negative influence of low segmentation supplies on recovery experiences and outcomes can be buffered (i.e., for those profiles with low segmentation supplies but high boundary control), alternative to what the effort-recovery theory would suggest.

Thus, another theoretical contribution of the current study is the clarification of the role of segmentation supplies in the recovery process by providing insight into when the negative influence of low segmentation supplies on recovery outcomes can be buffered. For example, when low segmentation supplies is met with high boundary control (i.e., profile 3) we see significantly less work-home conflict and significantly more job-related affective wellbeing than profile 5, *the mismatched high segmentation* (i.e., low segmentation supplies) *with no boundary control profile* (See Appendix D for post-hoc test results).

Thus, in terms of practical implications the results of this study provide preliminary support that low segmentation supplies, as well as a mismatch between segmentation supplies and preferences, do not always have the same detrimental influence on recovery. Boundary control, specifically, can play a role in buffering the negative influence of either low segmentation supplies, or a misalignment between segmentation supplies and preferences on recovery variables.

Thus, organizations may want to design work conditions in such a way that encourages the boundary management profiles that produce optimal recovery outcomes. For example, the current study shows evidence that the subpopulation characterized by high boundary control and high segmentation supplies, even when met with low segmentation preference (i.e., profile 1) result in the best results for recovery outcomes. Additionally, the profile characterized by high boundary control, high segmentation supplies, and high segmentation preferences (i.e., profile 4) fares best in terms of after-hours work and recovery experiences.

On the other hand, organizations may also choose to avoid encouraging conditions that might foster the least optimal group for all recovery variables (i.e., after-hours work, recovery experiences, recovery outcomes), the profile characterized by a combination of high segmentation preference, low segmentation supplies, and low boundary control. Future research should begin to examine how organizations can influence boundary control, as boundary control seems to pull from both work and home domains and may be a helpful means for employers to buffer the negative influence of low segmentation, if promoting high segmentation

supplies is not an option for an organization (e.g., organizations where employees must be on-call for emergencies).

The results of the current study also help us to better understand the influence of misalignment between one's segmentation preference and supplies. Previous research has utilized a person-environment fit perspective as an alternative to the effort-recovery model in explaining how segmentation supplies and preference influence recovery (Kreiner, 2006). This research posits that a misalignment between segmentation preference and supplies results in negative wellbeing and strain outcomes. In the present study, the person-centered approach allows us to explore ways to overcome a misalignment between segmentation preferences and supplies, or misfit between person and environment. For example, when low segmentation preference is not met with low segmentation supplies, boundary control seems to play a role in determining whether or not the effects will be detrimental. For example, profile 1, *mismatched low segmentation preference with boundary control*, fares much better in terms of recovery experiences and outcomes than profile 2, *the matched low segmentation preference with no boundary control*. These results provide preliminary evidence that for certain subpopulations, boundary control is more important in influencing recovery than an alignment between one's segmentation preference and supplies alone.

In sum, these results point towards the importance of profiles in understanding the nuances across individuals in the after-hours recovery process. An important next step in this area of research is to confirm the profile structure

and to examine the potential moderating influence of such profiles in determining how after-hours work influence recovery experiences and outcomes. Future research should also examine predictors of boundary management profiles in order to better aide organizations in promoting environments conducive to the most optimal profiles.

Conclusion

The present study is one of the first person-centered examinations of the influence of boundary management variables on the after-work recovery process. Examining the profiles that emerge regarding an individual's segmentation preference, segmentation supplies, and boundary control allowed us to begin to elucidate conflicting findings regarding the positive or negative impact of after-hours work-related tasks on recovery. The present study suggests boundary management profiles do exist and individuals in such profiles experience different levels of variables that are key in the recovery process.

Finally, the current study also provides insight into how a person-centered approach uncovers additional information that traditional variable-centered approaches would not. For example, LPA enabled us to examine how the detrimental influence of a misalignment between segmentation supplies and preferences on after-hours recovery variables can be buffered for subpopulations with high boundary control. The current study has provided the preliminary evidence necessary to justify examining the different relationships concerning the recovery process across boundary management profiles.

Results of this study not only help us to further our theoretical understanding of the influence that boundary management variables have on the after-work recovery process, but also help to inform organizations of best practices regarding how to help promote recovery for employees with differing needs. Specifically, the initial evidence provided by the current study suggests that there are subpopulations of individuals who respond similarly to segmentation preference, segmentation supplies, and boundary control, and that such subpopulations are differentially related to key recovery variables. Organizations can utilize this information to promote those profiles that result in optimal outcomes.

References

American Psychological Association Center for Organizational Excellence (APA, 2015). Work-Life survey. American Psychological Association. Retrieved from http://www.apaexcellence.org/assets/general/2015-work-life-survey-results.pdf?_ga=2.77120469.1567538925.1603744425-602752965.1533831464

American Psychological Association Center for Organizational Excellence (APA, 2013). Communication technology implications for work and well-being. American Psychological Association. Retrieved from http://www.apaexcellence.org/assets/general/2013-work-and-communication-technology-survey-final.pdf?_ga=2.119252041.1567538925.1603744425-602752965.1533831464

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.

Barber, L. K., & Santuzzi, A. M. (2015). Please respond ASAP: Workplace telepressure and employee recovery. *Journal of Occupational Health Psychology*, *20*(2), 172–189. https://doi.org/10.1037/a0038278

Butts, M. M., Becker, W. J., & Boswell, W. R. (2015). Hot buttons and time sinks: The effects of electronic communication during nonwork time on emotions and work-nonwork conflict. *Academy of Management Journal*, *58*(3), 763–788. https://doi.org/10.5465/amj.2014.0170

Carlson, D. S., Kacmar, K. M., Wayne, J. H., & Grzywacz, J. G. (2006). *Work-family enrichment scale* http://dx.doi.org.portal.lib.fit.edu/10.1037/t09194-000

Carlson, D. S., Kacmar, K. M., &Williams, L. J. (2000). Construction and initial validation of a multidimensional measure of work-family conflict. *Journal of Vocational Behavior, 56*, 249–276.

Cropley, M., Dijk, D. J., & Stanley, N. (2006). Job strain, work rumination, and sleep in school teachers. *European journal of work and organizational psychology*, *15*(2), 181-196.

Dahling, J. J., Gabriel, A. S., & MacGowan, R. (2017). Understanding typologies of feedback environment perceptions: A latent profile investigation. *Journal of Vocational Behavior*, *101*, 133-148.

de Bloom, J., Geurts, S. A. E., & Kompier, M. A. J. (2012). Effects of short vacations, vacation activities and experiences on employee health and well-being. *Stress and Health: Journal of the International Society for the Investigation of Stress, 28*(4), 305-318. doi:http://dx.doi.org.portal.lib.fit.edu/10.1002/smi.1434

de Bloom, J., Geurts, S. A. E., & Kompier, M. A. J. (2013). Vacation (after-) effects on employee health and well-being, and the role of vacation activities, experiences and sleep. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-being, 14*(2), 613-633. doi:http://dx.doi.org.portal.lib.fit.edu/10.1007/s10902-012-9345-3

de Bloom, J., Kinnunen, U., & Korpela, K. (2015). Recovery processes during and after work: Associations with health, work engagement, and job performance. Journal of Occupational and Environmental Medicine, 57, 732–742. http://dx.doi.org/10.1097/JOM.000000000000047

De Fruyt, F. (2002). A person-centered approach to P–E fit questions using a multiple-trait model. *Journal of Vocational Behavior*, *60*(1), 73-90.

Derks, D., & Bakker, A. B. (2014). Smartphone use, work–home interference, and burnout: A diary study on the role of recovery. *Applied Psychology*, *63*(3), 411-440.

Derks, D., ten Brummelhuis, L. L., Zecic, D., & Bakker, A. B. (2014). Switching on and off: Does smartphone use obstruct the possibility to engage in recovery activities? *European Journal of Work and Organizational Psychology*, *23*(1), 80–90. https://doi.org/10.1080/1359432X.2012.711013

Derks, D., van Mierlo, H., & Schmitz, E. B. (2014). A diary study on work-related smartphone use, psychological detachment and exhaustion: Examining the role of the perceived segmentation norm. *Journal of Occupational Health Psychology*, *19*(1), 74–84. https://doi.org/10.1037/a0035076

Ferguson, M., Carlson, D., & Kacmar, K. M. (2015). Flexing work boundaries: The spillover and crossover of workplace support. *Personnel Psychology*, *68*(3), 581-614.

Festinger, L. (1957). *A theory of cognitive dissonance* (2). Stanford university press.

Foti, R. J., Bray, B. C., Thompson, N. J., & Allgood, S. F. (2012). Know thy self, know thy leader: Contributions of a pattern-oriented approach to examining leader perceptions. *The Leadership Quarterly*, *23*(4), 702-717.

Fredrickson, B. L. (2000). Cultivating positive emotions to optimize health and well-being. *Prevention & treatment*, *3*(1), 1a.

Frone, M. R., Russell, M., & Cooper, M. L. (1992). Antecedents and outcomes of work-family conflict: testing a model of the work-family interface. *Journal of applied psychology*, *77*(1), 65.

Gabriel, A. S., Daniels, M. A., Diefendorff, J. M., & Greguras, G. J. (2015). Emotional labor actors: A latent profile analysis of emotional labor strategies. *Journal of Applied Psychology*, *100*(3), 863.

Gadeyne, N., Verbruggen, M., Delanoeije, J., & De Cooman, R. (2018). All wired, all tired? Work-related ICT-use outside work hours and work-to-home conflict: The role of integration preference, integration norms and work demands. *Journal of Vocational Behavior*, *107*, 86-99.

Garton, E. (2017, July 20). Employee Burnout Is a Problem with the Company, Not the Person. Retrieved October 26, 2020, from https://hbr.org/2017/04/employee-burnout-is-a-problem-with-the-company-not-the-person

Geurts, S., & Demerouti, E. (2003). Work-nonwork interface: A review of theories and findings. In M. J. Schabracq, J. A. M. Winnubst, & C. L. Cooper (Eds.), The Handbook of Work and Health Psychology (pp. 279/312). Chichester: John Wiley & Sons Ltd.

Geurts, S. A., & Sonnentag, S. (2006). Recovery as an explanatory mechanism in the relation between acute stress reactions and chronic health impairment. *Scandinavian journal of work, environment & health*, 482-492.

Greenhaus, J. H., & Powell, G. N. (2006). When work and family are allies: A theory of work-family enrichment. *Academy of management review*, *31*(1), 72-92.

Harmon-Jones, E., & Mills, J. (2019). An introduction to cognitive dissonance theory and an overview of current perspectives on the theory. In E. Harmon-Jones (Ed.), *Cognitive dissonance: Reexamining a pivotal theory in psychology* (p. 3–24). American Psychological Association. https://doi-org.portal.lib.fit.edu/10.1037/0000135-001

Hobfoll, S. E. (1989). Conservation of resources: a new attempt at conceptualizing stress. *American psychologist*, *44*(3), 513.

Kacmar, K. M., Crawford, W. S., Carlson, D. S., Ferguson, M., & Whitten, D. (2014). A short and valid measure of work-family enrichment. *Journal of Occupational Health Psychology, 19*(1), 32-45. http://dx.doi.org.portal.lib.fit.edu/10.1037/a0035123

Karasek Jr, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative science quarterly*, 285-308.

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.

Kreiner, G. E., Hollensbe, E., & Sheep, M. (2009). Balancing borders and bridges: Negotiating the work–home interface via boundary work tactics. Academy of Management Journal, 52(4), 704–730.

Kossek, E. E., & Lautsch, B. A. (2012). Work–family boundary management styles in organizations: A cross-level model. Organizational Psychology Review, 2(2), 152-171.

Kossek, E. E., Ruderman, M. N., Braddy, P. W., & Hannum, K. M. (2012). Work–nonwork boundary management profiles: A person-centered approach. Journal of Vocational Behavior, 81(1), 112-128.

Lapierre, L. M., Spector, P. E., Allen, T. D., Poelmans, S., Cooper, C. L., O'Driscoll, M. P., & Kinnunen, U. (2008). Family-supportive organization perceptions, multiple dimensions of work–family conflict, and employee satisfaction: A test of model across five samples. *Journal of Vocational Behavior*, *73*(1), 92-106.

Li, P., Stuart, E. A., & Allison, D. B. (2015). Multiple Imputation: A Flexible Tool for Handling Missing Data. *JAMA*, *314*(18), 1966–1967. https://doi.org/10.1001/jama.2015.15281

Lubke, G., & Neale, M. C. (2006). Distinguishing between latent classes and continuous factors: Resolution by maximum likelihood?. *Multivariate Behavioral Research*, *41*(4), 499-532.

Marsh, H. W., Lüdtke, O., Trautwein, U., & Morin, A. J. (2009). Classical latent profile analysis of academic self-concept dimensions: Synergy of person- and variable-centered approaches to theoretical models of self-concept. *Structural Equation Modeling: A Multidisciplinary Journal*, *16*(2), 191-225.

Maslach, C., & Leiter, M. P. (2006). Burnout. *Stress and quality of working life: current perspectives in occupational health*, *37*, 42-49.

Meijman, T. F., & Mulder, G. (1998). Psychological aspects of workload. In P. J. D. Drenth & H. Thierry (Eds*.), Handbook of work and organizational psychology. Volume, 2*. Hove, UK: Psychology Press.

Mellner, C. (2016). After-hours availability expectations, work-related smartphone use during leisure, and psychological detachment: The moderating role of boundary control. *International Journal of Workplace Health Management*, *9*(2), 146–164. https://doi.org/10.1108/IJWHM-07-2015-0050

Mojza, E. J., Lorenz, C., Sonnentag, S., & Binnewies, C. (2010). Daily recovery experiences: The role of volunteer work during leisure time. *Journal of Occupational Health Psychology*, *15*(1), 60.

Morin, A. J., Morizot, J., Boudrias, J. S., & Madore, I. (2011). A multifoci person-centered perspective on workplace affective commitment: A latent profile/factor mixture analysis. *Organizational Research Methods*, *14*(1), 58-90.

Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work–family conflict and family–work conflict scales. *Journal of applied psychology*, *81*(4), 400.

Nippert-Eng, C. (1996). Calendars and keys: The classification of "home" and "work". *Sociological Forum*, *11,* 563–582. https://doi.org/10.1007/BF02408393

Nippert-Eng, C. E. (2008). Home and work: Negotiating boundaries through everyday life. *University of Chicago Press.*

Nylund, K. L., Asparouhov, T., & Muthén, B. O. (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study. *Structural equation modeling: A multidisciplinary Journal*, *14*(4), 535-569.

Nylund-Gibson, K., & Choi, A. Y. (2018). Ten frequently asked questions about latent class analysis. *Translational Issues in Psychological Science*, *4*(4), 440.

Park, Y., & Jex, S. M. (2011). Work-home boundary management using communication and information technology. *International Journal of Stress Management*, *18*(2), 133–152. https://doi.org/10.1037/a0022759

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. https://doi.org/10.1037/a0023594

Piszczek, M. M. (2017). Boundary control and controlled boundaries: Organizational expectations for technology use at the work–family interface. *Journal of Organizational Behavior*, *38*(4), 592-611.

Schieman, S., & Young, M.C., (2013) Are communications about work outside regular working hours associated with work-to-family conflict, psychological distress and sleep problems? *Work & Stress, 27*:3, 244-261.

Siltaloppi, M., Kinnunen, U., & Feldt, T. (2009). Recovery experiences as moderators between psychological work characteristics and occupational well-being. Work & Stress, 23, 330 –348. http://dx.doi.org/10 .1080/02678370903415572

Sonnentag, S., & Bayer, U. V. (2005). Switching off mentally: predictors and consequences of psychological detachment from work during off-job time. *Journal of occupational health psychology*, *10*(4), 393.

Sonnentag, S., Binnewies, C., & Mojza, E. J. (2008). " Did you have a nice evening?" A day-level study on recovery experiences, sleep, and affect. *Journal of Applied Psychology*, *93*(3), 674.

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., & Geurts, S. A. (2009). Methodological issues in recovery research. In *Current perspectives on job-stress recovery*. Emerald Group Publishing Limited.

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*(3), 355-365.

Sonnentag, S., Mojza, E. J., Binnewies, C., & Scholl, A. (2008). Being engaged at work and detached at home: A week-level study on work engagement, psychological detachment, and affect. *Work & Stress*, *22*(3), 257-276.

Sonnentag, S., Venz, L., & Casper, A. (2017). Advances in recovery research: What have we learned? What should be done next?. *Journal of occupational health psychology*, *22*(3), 365.

Sonnentag, S., & Zijlstra, F. R. (2006). Job characteristics and off-job activities as predictors of need for recovery, well-being, and fatigue. *Journal of applied psychology*, *91*(2), 330.

Spurk, D., Hirschi, A., Wang, M., Valero, D., & Kauffeld, S. (2020). Latent profile analysis: A review and "how to" guide of its application within vocational behavior research. *Journal of Vocational Behavior*, *120*, 103445.

Stone, A. A., Kennedy-Moore, E., & Neale, J. M. (1995). Association between daily coping and end-of-day mood. *Health psychology*, *14*(4), 341.

Straub, C., Beham, B., & Islam, G. (2019). Crossing boundaries: integrative effects of supervision, gender and boundary control on work engagement and work-to-family positive spillover. The International Journal of Human Resource Management, 30(20), 2831-2854.

Tein, J. Y., Coxe, S., & Cham, H. (2013). Statistical power to detect the correct number of classes in latent profile analysis. *Structural equation modeling: a multidisciplinary journal*, *20*(4), 640-657.

Ten Brummelhuis, L. L., & Trougakos, J. P. (2014). The recovery potential of intrinsically versus extrinsically motivated off-job activities. *Journal of Occupational and Organizational Psychology*, *87*(1), 177-199.

Tofighi, D., & Enders, C. K. (2008). Identifying the correct number of classes in growth mixture models. *Advances in latent variable mixture models*, *2007*(1), 317.

Van Hooff, M. L., Geurts, S. A., Kompier, M. A., & Taris, T. W. (2006). Work–home interference: How does it manifest itself from day to day?. *Work & Stress*, *20*(2), 145-162.

Van Katwyk, P. T., Fox, S., Spector, P. E., & Kelloway, E. K. (2000). Using the Job-Related Affective Well-Being Scale (JAWS) to investigate affective responses to work stressors. *Journal of occupational health psychology*, *5*(2), 219.

Wang, M., & Hanges, P. J. (2011). Latent class procedures: Applications to organizational research. *Organizational Research Methods*, *14*(1), 24-31.

Woo, S. E., & Allen, D. G. (2014). Toward an inductive theory of stayers and seekers in the organization. *Journal of Business and Psychology*, *29*(4), 683-703.

Woo, S. E., Jebb, A. T., Tay, L., & Parrigon, S. (2018). Putting the "person" in the center: Review and synthesis of person-centered approaches and methods in organizational science. *Organizational Research Methods*, *21*(4), 814-845.

Wurpts, I. C., & Geiser, C. (2014). Is adding more indicators to a latent class analysis beneficial or detrimental? Results of a Monte-Carlo study. *Frontiers in psychology*, *5*, 920.

Zijlstra, F. R., Cropley, M., & Rydstedt, L. W. (2014). From recovery to regulation: An attempt to reconceptualize 'recovery from work'. *Stress and Health*, *30*(3), 244-252.

Appendix A

List of Study Measures

From Kreiner (2006):

Work Segmentation Preferences (5-point scale, strongly agree to strongly disagree)

1. I don't like to have to think about work while I'm at home
2. I prefer to keep work-life at work
3. I don't like work issues creeping into my home life
4. I like to be able to leave work behind when I go home

Work Segmentation Supplies (5-point scale, strongly agree to strongly disagree)

1. My workplace lets people forget about work when they're at home
2. Where I work, people can keep work matters at work
3. At my workplace, people are able to prevent work issues from creeping into their home life
4. Where I work, people can mentally leave work behind when they go home

Created based on Kreiner (2006):

Home Segmentation Preference (5-point scale, strongly agree to strongly disagree)

1. I don't like to have to think about home matters while I'm at work
2. I prefer to keep home matters at home
3. I don't like home issues creeping into my work life
4. I like to be able to leave home matters behind when I go to work

Home Segmentation Supplies (5-point scale, strongly agree to strongly disagree)

1. I am able to forget about home when I'm at work
2. I can keep my home matters at home
3. I am able to prevent home issues from creeping into my work life
4. I can mentally leave home matters behind when I go to work

From Kossek et al. (2012):

Boundary control (5-point scale, strongly agree to strongly disagree)

1. I control whether I am able to keep my work and personal life separate
2. I control whether I have clear boundaries between my work and personal life.
3. I control whether I combine my work and personal life activities throughout the day.

Adapted from Parks & Fritz (2011):

After-hours Work Tendencies (5-point scale, not at all to always)

In the last week, during non-work hours…

1. I took part in work-related tasks using my smartphone for work.
2. I took part in work-related tasks using my PC/Laptop for work.
3. I took part in work-related tasks using email and/or the Internet for work.

4. I took part in work-related tasks that did not require the use of technology.

From Sonnentag & Fritz (2007):
Recovery Experience Questionnaire (5-point scale, strongly agree to strongly disagree)

1. I forget about work.
2. I don't think about work at all.
3. I distance myself from my work.
4. I get a break from the demands of work.
5. I kick back and relax.
6. I do relaxing things.
7. I use the time to relax.
8. I take time for leisure.
9. I learn new things.
10. I seek out intellectual challenges.
11. I do things that challenge me.
12. I do something to broaden my horizons.
13. I feel like I can decide for myself what to do.
14. I decide my own schedule.
15. I determine for myself how I will spend my time.
16. I take care of things the way that I want them done

From Van Katwyk, Fox, Spector, & Kelloway (2000):
Job-related Affective Wellbeing (5-point scale, never to extremely often)

Below are a number of statements that describe different emotions that a job can make a person feel. Please indicate the amount to which <u>any part of your job (e.g., the work, coworkers, supervisor, clients, pay) has made you feel</u> that emotion in the past <u>30</u> days.

1. My job made me feel angry.
2. My job made me feel anxious.
3. My job made me feel at ease.
4. My job made me feel bored.
5. My job made me feel calm.
6. My job made me feel content.
7. My job made me feel depressed.
8. My job made me feel discouraged.
9. My job made me feel disgusted.
10. My job made me feel ecstatic.
11. My job made me feel energetic.
12. My job made me feel enthusiastic.
13. My job made me feel excited.
14. My job made me feel fatigued.

15. My job made me feel frightened.
16. My job made me feel furious.
17. My job made me feel gloomy.
18. My job made me feel inspired.
19. My job made me feel relaxed.
20. My job made me feel satisfied.

From Kreiner (2006) adapted from Netemeyer et al. (1996):
Work-Home Conflict (5-point scale, strongly disagree to strongly agree)

1. The demands of my work interfere with my home and personal life
2. The amount of time my job takes up makes it difficult to fulfill home responsibilities
3. Things I want to do at home do not get done because of the demands my job puts on me
4. My job produces strain that makes it difficult to fulfill home duties
5. Due to work-related duties, I have to make changes to my plans for home activities

From Kacmar et al. (2014) adapted from Carlson et al. (2006):
Work-Family Enrichment
Work-to-Family Enrichment
My involvement in my work . . .

1. Helps me to understand different viewpoints and this helps me be a better family member
2. Makes me feel happy and this helps me be a better family member
3. Helps me feel personally fulfilled and this helps me be a better family member

Family-to-Work Enrichment
My involvement in my family . . .

1. Helps me acquire skills and this helps me be a better worker
2. Puts me in a good mood and this helps me be a better worker
3. Encourages me to use my work time in a focused manner and this helps me be a better worker

Demographics/Controls:

1. What is your employment status?
2. Do you hold multiple jobs?
3. What is your job title?

4. What job family/sector does it fall under?
5. During what time of day is your normal working shift/working hours?
6. How long have you held your current job?
7. What country do you live in?
8. What is your ethnicity?
9. What gender do you identify with?
10. How many children/dependents are under your care?
11. What is your martial/relationship status?
12. What is your age?
13. In which of the following ways has COVID-19 changed your work environment in the past 3 months?
    A. I have recently switched back to working in-person again
    B. I have recently permanently switched to a hybrid work arrangement (e.g., working partially from home/remotely *and* partially in-person)
    C. I have recently permanently switched to a fully remote work arrangement
    D. In the past 3 months, there have been no significant changes in my work environment.

Appendix B

Means and Standard Deviations of Home Segmentation Variables per Profile for Five Indicator, 4-Profile Solution

	Home Segmentation Preference		Home Segmentation Supplies	
Profile	*M*	*SD*	*M*	*SD*
1	3.45	0.97	3.27	1.11
2	3.96	0.85	2.97	1.11
3	4.18	0.77	3.24	1.05
4	4.01	0.83	3.56	0.85

Note. $N = 354$. Results based on the 4-profile solution using all five indicators (i.e., work segmentation supplies, work segmentation preference, home segmentation supplies, home segmentation preference, and boundary control).

Appendix C

One-Way ANOVA for Profile Differences on Study Variables

Variable	Source	Sum of Squares	df	Mean Square	F	Sig.
After-hours work	Between Groups	79.587	4	19.897	23.050	.000
	Within Groups	301.253	349	.863		
	Total	380.840	353			
Recovery Experiences (General)	Between Groups	41.137	4	10.284	35.230	.000
	Within Groups	101.878	349	.292		
	Total	143.015	353			
Recovery Experiences (Psychological Detachment)	Between Groups	152.325	4	38.081	53.420	.000
	Within Groups	248.791	349	.713		
	Total	401.116	353			
Recovery Experiences (Relaxation)	Between Groups	40.749	4	10.187	13.495	.000
	Within Groups	263.456	349	.755		
	Total	304.205	353			
Recovery Experiences (Control)	Between Groups	11.237	4	2.809	4.026	.003
	Within Groups	243.514	349	.698		
	Total	254.751	353			
Recovery Experiences (Mastery)	Between Groups	30.205	4	7.551	12.671	.000

	Within Groups	207.993	349	.596		
	Total	238.198	353			
Job-related Affective Wellbeing	Between Groups	23.694	4	5.923	14.731	.000
	Within Groups	140.339	349	.402		
	Total	164.033	353			
Work-home Conflict	Between Groups	165.622	4	41.405	38.734	.000
	Within Groups	373.073	349	1.069		
	Total	538.695	353			
Work to Family Enrichment	Between Groups	38.448	4	9.612	10.362	.000
	Within Groups	323.747	349	.928		
	Total	362.195	353			
Family to Work Enrichment	Between Groups	10.211	4	2.553	3.593	.007
	Within Groups	247.950	349	.710		
	Total	258.161	353			

Note. $N = 354$.

Appendix D

One-Way ANOVA Post-Hoc Test Multiple Comparisons from SPSS

Tukey HSD

Dependent Variable	(I) m3class	(J) m3class	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
home_supply	1	2	.27065	.28231	.873	-.5035	1.0448
		3	.30235	.25342	.755	-.3926	.9973
		4	-.05869	.24463	.999	-.7295	.6121
		5	.55634	.26801	.233	-.1786	1.2912
	2	1	-.27065	.28231	.873	-1.0448	.5035
		3	.03170	.19155	1.000	-.4935	.5569
		4	-.32934	.17975	.357	-.8222	.1636
		5	.28570	.21046	.655	-.2914	.8628
	3	1	-.30235	.25342	.755	-.9973	.3926
		2	-.03170	.19155	1.000	-.5569	.4935
		4	-.36104*	.12974	.045	-.7168	-.0053
		5	.25399	.16975	.566	-.2115	.7195
	4	1	.05869	.24463	.999	-.6121	.7295
		2	.32934	.17975	.357	-.1636	.8222
		3	.36104*	.12974	.045	.0053	.7168
		5	.61503*	.15632	.001	.1864	1.0437
	5	1	-.55634	.26801	.233	-1.2912	.1786
		2	-.28570	.21046	.655	-.8628	.2914
		3	-.25399	.16975	.566	-.7195	.2115
		4	-.61503*	.15632	.001	-1.0437	-.1864
work_supply	1	2	1.97072*	.15684	.000	1.5406	2.4008
		3	1.88919*	.14079	.000	1.5031	2.2753
		4	-.34946	.13591	.078	-.7221	.0232
		5	2.02044*	.14889	.000	1.6122	2.4287
	2	1	-1.97072*	.15684	.000	-2.4008	-1.5406
		3	-.08153	.10642	.940	-.3733	.2103
		4	-2.32018*	.09986	.000	-2.5940	-2.0463
		5	.04972	.11692	.993	-.2709	.3703
	3	1	-1.88919*	.14079	.000	-2.2753	-1.5031
		2	.08153	.10642	.940	-.2103	.3733

		4	-2.23866*	.07208	.000	-2.4363	-2.0410
		5	.13125	.09431	.633	-.1274	.3898
	4	1	.34946	.13591	.078	-.0232	.7221
		2	2.32018*	.09986	.000	2.0463	2.5940
		3	2.23866*	.07208	.000	2.0410	2.4363
		5	2.36990*	.08685	.000	2.1318	2.6080
	5	1	-2.02044*	.14889	.000	-2.4287	-1.6122
		2	-.04972	.11692	.993	-.3703	.2709
		3	-.13125	.09431	.633	-.3898	.1274
		4	-2.36990*	.08685	.000	-2.6080	-2.1318
home_preferences	1	2	-.31006	.24217	.704	-.9741	.3540
		3	-.82387*	.21738	.002	-1.4200	-.2278
		4	-.77706*	.20984	.002	-1.3525	-.2017
		5	-.67034*	.22989	.031	-1.3007	-.0399
	2	1	.31006	.24217	.704	-.3540	.9741
		3	-.51381*	.16431	.016	-.9644	-.0633
		4	-.46700*	.15419	.022	-.8898	-.0442
		5	-.36028	.18053	.270	-.8553	.1348
	3	1	.82387*	.21738	.002	.2278	1.4200
		2	.51381*	.16431	.016	.0633	.9644
		4	.04681	.11129	.993	-.2584	.3520
		5	.15354	.14561	.830	-.2457	.5528
	4	1	.77706*	.20984	.002	.2017	1.3525
		2	.46700*	.15419	.022	.0442	.8898
		3	-.04681	.11129	.993	-.3520	.2584
		5	.10673	.13409	.932	-.2610	.4744
	5	1	.67034*	.22989	.031	.0399	1.3007
		2	.36028	.18053	.270	-.1348	.8553
		3	-.15354	.14561	.830	-.5528	.2457
		4	-.10673	.13409	.932	-.4744	.2610
work_preferences	1	2	.33258	.16300	.249	-.1144	.7795
		3	-1.82082*	.14632	.000	-2.2220	-1.4196
		4	-2.05251*	.14124	.000	-2.4398	-1.6652
		5	-1.94916*	.15474	.000	-2.3735	-1.5249
	2	1	-.33258	.16300	.249	-.7795	.1144
		3	-2.15340*	.11059	.000	-2.4567	-1.8502
		4	-2.38509*	.10378	.000	-2.6697	-2.1005
		5	-2.28174*	.12151	.000	-2.6149	-1.9485

	3	1	1.82082*	.14632	.000	1.4196	2.2220
		2	2.15340*	.11059	.000	1.8502	2.4567
		4	-.23169*	.07491	.018	-.4371	-.0263
		5	-.12834	.09801	.685	-.3971	.1404
	4	1	2.05251*	.14124	.000	1.6652	2.4398
		2	2.38509*	.10378	.000	2.1005	2.6697
		3	.23169*	.07491	.018	.0263	.4371
		5	.10335	.09025	.782	-.1441	.3508
	5	1	1.94916*	.15474	.000	1.5249	2.3735
		2	2.28174*	.12151	.000	1.9485	2.6149
		3	.12834	.09801	.685	-.1404	.3971
		4	-.10335	.09025	.782	-.3508	.1441
Boundary control	1	2	1.1471*	0.1814	0.0000	0.6496	1.6447
		3	0.3272	0.1629	0.2640	-0.1194	0.7739
		4	0.0186	0.1572	1.0000	-0.4125	0.4498
		5	2.4256*	0.1723	0.0000	1.9532	2.8979
	2	1	-1.1471*	0.1814	0.0000	-1.6447	-0.6496
		3	-.8199*	0.1231	0.0000	-1.1575	-0.4823
		4	-1.1285*	0.1155	0.0000	-1.4453	-0.8117
		5	1.2784*	0.1353	0.0000	0.9075	1.6493
	3	1	-0.3272	0.1629	0.2640	-0.7739	0.1194
		2	.8199*	0.1231	0.0000	0.4823	1.1575
		4	-.3086*	0.0834	0.0020	-0.5372	-0.0799
		5	2.0983*	0.1091	0.0000	1.7992	2.3975
	4	1	-0.0186	0.1572	1.0000	-0.4498	0.4125
		2	1.1285*	0.1155	0.0000	0.8117	1.4453
		3	.30859*	0.0834	0.0020	0.0799	0.5372
		5	2.4069*	0.1005	0.0000	2.1314	2.6824
	5	1	-2.4255*	0.1723	0.0000	-2.8979	-1.9532
		2	-1.2784*	0.1353	0.0000	-1.6493	-0.9075
		3	-2.0983*	0.1091	0.0000	-2.3975	-1.7992
		4	-2.4069*	0.1005	0.0000	-2.6824	-2.1314
After-hours work	1	2	-.80405*	.26699	.023	-1.5362	-.0719
		3	-.51923	.23967	.195	-1.1764	.1380
		4	.33387	.23135	.600	-.3005	.9683
		5	-.67925	.25346	.059	-1.3743	.0158
	2	1	.80405*	.26699	.023	.0719	1.5362
		3	.28482	.18115	.516	-.2119	.7816

		4	1.13793*	.17000	.000	.6718	1.6041
		5	.12481	.19904	.971	-.4210	.6706
	3	1	.51923	.23967	.195	-.1380	1.1764
		2	-.28482	.18115	.516	-.7816	.2119
		4	.85310*	.12270	.000	.5167	1.1895
		5	-.16001	.16054	.857	-.6002	.2802
	4	1	-.33387	.23135	.600	-.9683	.3005
		2	-1.13793*	.17000	.000	-1.6041	-.6718
		3	-.85310*	.12270	.000	-1.1895	-.5167
		5	-1.01312*	.14784	.000	-1.4185	-.6077
	5	1	.67925	.25346	.059	-.0158	1.3743
		2	-.12481	.19904	.971	-.6706	.4210
		3	.16001	.16054	.857	-.2802	.6002
		4	1.01312*	.14784	.000	.6077	1.4185
recovery_experiences	1	2	.4277402*	.1552642	.048	.001991	.853489
		3	.3634768	.1393745	.071	-.018701	.745655
		4	-.1869176	.1345390	.635	-.555836	.182001
		5	.7025681*	.1473948	.000	.298398	1.106738
	2	1	-.4277402*	.1552642	.048	-.853489	-.001991
		3	-.0642634	.1053442	.973	-.353127	.224600
		4	-.6146578*	.0988578	.000	-.885735	-.343580
		5	.2748279	.1157470	.125	-.042561	.592217
	3	1	-.3634768	.1393745	.071	-.745655	.018701
		2	.0642634	.1053442	.973	-.224600	.353127
		4	-.5503944*	.0713523	.000	-.746049	-.354740
		5	.3390913*	.0933576	.003	.083096	.595087
	4	1	.1869176	.1345390	.635	-.182001	.555836
		2	.6146578*	.0988578	.000	.343580	.885735
		3	.5503944*	.0713523	.000	.354740	.746049
		5	.8894857*	.0859716	.000	.653744	1.12523
	5	1	-.7025681*	.1473948	.000	-1.10674	-.298398
		2	-.2748279	.1157470	.125	-.592217	.042561
		3	-.3390913*	.0933576	.003	-.595087	-.083096
		4	-.8894857*	.0859716	.000	-1.12523	-.653744
RE_ Psychological detachment	1	2	.60661	.24263	.093	-.0587	1.2719
		3	.31807	.21780	.589	-.2792	.9153
		4	-.85233*	.21024	.001	-1.4288	-.2758

		5	.65671*	.23033	.037	.0251	1.2883
	2	1	-.60661	.24263	.093	-1.2719	.0587
		3	-.28854	.16462	.403	-.7399	.1629
		4	-1.45894*	.15449	.000	-1.8826	-1.0353
		5	.05010	.18088	.999	-.4459	.5461
	3	1	-.31807	.21780	.589	-.9153	.2792
		2	.28854	.16462	.403	-.1629	.7399
		4	-1.17040*	.11150	.000	-1.4762	-.8646
		5	.33864	.14589	.141	-.0614	.7387
	4	1	.85233*	.21024	.001	.2758	1.4288
		2	1.45894*	.15449	.000	1.0353	1.8826
		3	1.17040*	.11150	.000	.8646	1.4762
		5	1.50904*	.13435	.000	1.1406	1.8774
	5	1	-.65671*	.23033	.037	-1.2883	-.0251
		2	-.05010	.18088	.999	-.5461	.4459
		3	-.33864	.14589	.141	-.7387	.0614
		4	-1.50904*	.13435	.000	-1.8774	-1.1406
RE_Relaxation	1	2	.67005	.24968	.058	-.0146	1.3547
		3	.50321	.22413	.166	-.1114	1.1178
		4	-.06478	.21635	.998	-.6580	.5285
		5	.73035*	.23703	.019	.0804	1.3803
	2	1	-.67005	.24968	.058	-1.3547	.0146
		3	-.16684	.16940	.862	-.6314	.2977
		4	-.73483*	.15897	.000	-1.1708	-.2989
		5	.06030	.18613	.998	-.4501	.5707
	3	1	-.50321	.22413	.166	-1.1178	.1114
		2	.16684	.16940	.862	-.2977	.6314
		4	-.56799*	.11474	.000	-.8826	-.2534
		5	.22714	.15013	.555	-.1845	.6388
	4	1	.06478	.21635	.998	-.5285	.6580
		2	.73483*	.15897	.000	.2989	1.1708
		3	.56799*	.11474	.000	.2534	.8826
		5	.79513*	.13825	.000	.4160	1.1742
	5	1	-.73035*	.23703	.019	-1.3803	-.0804
		2	-.06030	.18613	.998	-.5707	.4501
		3	-.22714	.15013	.555	-.6388	.1845
		4	-.79513*	.13825	.000	-1.1742	-.4160
RE_Control	1	2	.27590	.24005	.780	-.3823	.9341

		3	.54075	.21548	.091	-.0501	1.1316
		4	.34059	.20800	.474	-.2298	.9110
		5	.72720*	.22788	.013	.1023	1.3521
	2	1	-.27590	.24005	.780	-.9341	.3823
		3	.26485	.16287	.482	-.1817	.7114
		4	.06469	.15284	.993	-.3544	.4838
		5	.45130	.17895	.088	-.0394	.9420
	3	1	-.54075	.21548	.091	-1.1316	.0501
		2	-.26485	.16287	.482	-.7114	.1817
		4	-.20016	.11031	.367	-.5027	.1023
		5	.18645	.14434	.696	-.2093	.5822
	4	1	-.34059	.20800	.474	-.9110	.2298
		2	-.06469	.15284	.993	-.4838	.3544
		3	.20016	.11031	.367	-.1023	.5027
		5	.38661*	.13292	.031	.0221	.7511
	5	1	-.72720*	.22788	.013	-1.3521	-.1023
		2	-.45130	.17895	.088	-.9420	.0394
		3	-.18645	.14434	.696	-.5822	.2093
		4	-.38661*	.13292	.031	-.7511	-.0221
RE_Mastery	1	2	.15841	.22185	.953	-.4499	.7667
		3	.09188	.19914	.991	-.4542	.6380
		4	-.17115	.19224	.900	-.6983	.3560
		5	.69602*	.21060	.009	.1185	1.2735
	2	1	-.15841	.22185	.953	-.7667	.4499
		3	-.06653	.15052	.992	-.4793	.3462
		4	-.32956	.14125	.137	-.7169	.0578
		5	.53761*	.16538	.011	.0841	.9911
	3	1	-.09188	.19914	.991	-.6380	.4542
		2	.06653	.15052	.992	-.3462	.4793
		4	-.26303	.10195	.076	-.5426	.0165
		5	.60414*	.13339	.000	.2384	.9699
	4	1	.17115	.19224	.900	-.3560	.6983
		2	.32956	.14125	.137	-.0578	.7169
		3	.26303	.10195	.076	-.0165	.5426
		5	.86716*	.12284	.000	.5303	1.2040
	5	1	-.69602*	.21060	.009	-1.2735	-.1185
		2	-.53761*	.16538	.011	-.9911	-.0841

		3	-.60414*	.13339	.000	-.9699	-.2384
		4	-.86716*	.12284	.000	-1.2040	-.5303
JAWS_comp	1	2	.26584	.18223	.590	-.2339	.7655
		3	.59600*	.16358	.003	.1474	1.0446
		4	.38514	.15791	.107	-.0478	.8181
		5	1.01913*	.17299	.000	.5448	1.4935
	2	1	-.26584	.18223	.590	-.7655	.2339
		3	.33016	.12364	.061	-.0089	.6692
		4	.11930	.11603	.842	-.1989	.4375
		5	.75329*	.13585	.000	.3808	1.1258
	3	1	-.59600*	.16358	.003	-1.0446	-.1474
		2	-.33016	.12364	.061	-.6692	.0089
		4	-.21086	.08374	.089	-.4405	.0188
		5	.42313*	.10957	.001	.1227	.7236
	4	1	-.38514	.15791	.107	-.8181	.0478
		2	-.11930	.11603	.842	-.4375	.1989
		3	.21086	.08374	.089	-.0188	.4405
		5	.63399*	.10090	.000	.3573	.9107
	5	1	-1.01913*	.17299	.000	-1.4935	-.5448
		2	-.75329*	.13585	.000	-1.1258	-.3808
		3	-.42313*	.10957	.001	-.7236	-.1227
		4	-.63399*	.10090	.000	-.9107	-.3573
Work-home conflict	1	2	-.9715*	.2971	.010	-1.786	-.157
		3	-1.1730*	.2667	.000	-1.904	-.442
		4	-.0503	.2575	1.000	-.756	.656
		5	-1.8350*	.2821	.000	-2.608	-1.062
	2	1	.9715*	.2971	.010	.157	1.786
		3	-.2015	.2016	.855	-.754	.351
		4	.9212*	.1892	.000	.402	1.440
		5	-.8635*	.2215	.001	-1.471	-.256
	3	1	1.1730*	.2667	.000	.442	1.904
		2	.2015	.2016	.855	-.351	.754
		4	1.1228*	.1365	.000	.748	1.497
		5	-.6620*	.1787	.002	-1.152	-.172
	4	1	.0503	.2575	1.000	-.656	.756
		2	-.9212*	.1892	.000	-1.440	-.402
		3	-1.1228*	.1365	.000	-1.497	-.748
		5	-1.7848*	.1645	.000	-2.236	-1.334

	5	1	1.8350*	.2821	.000	1.062	2.608
		2	.8635*	.2215	.001	.256	1.471
		3	.6620*	.1787	.002	.172	1.152
		4	1.7848*	.1645	.000	1.334	2.236
Work to family enrichment	1	2	0.3258	0.2768	0.7640	-0.4331	1.0848
		3	0.6416	0.2485	0.0760	-0.0396	1.3229
		4	0.5244	0.2398	0.1870	-0.1333	1.1820
		5	1.3323*	0.2628	0.0000	0.6118	2.0528
	2	1	-0.3258	0.2768	0.7640	-1.0848	0.4331
		3	0.3158	0.1878	0.4470	-0.1991	0.8307
		4	0.1985	0.1762	0.7920	-0.2847	0.6818
		5	1.0064*	0.2063	0.0000	0.4407	1.5722
	3	1	-0.6416	0.2485	0.0760	-1.3229	0.0396
		2	-0.3158	0.1878	0.4470	-0.8307	0.1991
		4	-0.1173	0.1272	0.8880	-0.4660	0.2315
		5	.6906*	0.1664	0.0000	0.2343	1.1470
	4	1	-0.5244	0.2398	0.1870	-1.1820	0.1333
		2	-0.1985	0.1762	0.7920	-0.6818	0.2847
		3	0.1173	0.1272	0.8880	-0.2315	0.4660
		5	.8079*	0.1533	0.0000	0.3877	1.2282
	5	1	-1.3323*	0.2628	0.0000	-2.0528	-0.6118
		2	-1.0065*	0.2063	0.0000	-1.5722	-0.4407
		3	-.6907*	0.1664	0.0000	-1.1470	-0.2343
		4	-.8079*	0.1533	0.0000	-1.2282	-0.3877
Family to work enrichment	1	2	0.6441	0.2422	0.0620	-0.0201	1.3083
		3	0.4634	0.2174	0.2090	-0.1329	1.0596
		4	0.2806	0.2099	0.6680	-0.2949	0.8562
		5	0.6195	0.2299	0.0570	-0.0110	1.2500
	2	1	-0.6441	0.2422	0.0620	-1.3083	0.0201
		3	-0.1808	0.1643	0.8060	-0.6314	0.2699
		4	-0.3635	0.1542	0.1300	-0.7864	0.0594
		5	-0.0246	0.1806	1.0000	-0.5198	0.4705
	3	1	-0.4634	0.2174	0.2090	-1.0596	0.1329
		2	0.1808	0.1643	0.8060	-0.2699	0.6314
		4	-0.1827	0.1113	0.4720	-0.4880	0.1225
		5	0.1561	0.1456	0.8210	-0.2432	0.5555
	4	1	-0.2806	0.2099	0.6680	-0.8562	0.2949
		2	0.3635	0.1542	0.1300	-0.0594	0.7864

		3	0.1827	0.1113	0.4720	-0.1225	0.4880
		5	0.3389	0.1341	0.0870	-0.0289	0.7066
	5	1	-0.6195	0.2299	0.0570	-1.2500	0.0110
		2	0.0246	0.1806	1.0000	-0.4705	0.5198
		3	-0.1561	0.1456	0.8210	-0.5555	0.2432
		4	-0.3389	0.1341	0.0870	-0.7066	0.0289

Note. * denotes significant difference at the 0.05 level.