

**Work-Life Boundary Management: Measurement, Validation, and Longitudinal Mediation**

by

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A dissertation submitted to the Graduate Faculty of  
Auburn University  
in partial fulfillment of the  
requirements for the Degree of  
Doctor of Philosophy

Auburn, Alabama  
May 5, 2018

Keywords: work-life, boundary management,  
border theory, boundary theory

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## Abstract

Employees constantly transition from work to home roles, crossing boundaries between these roles. Drawing on boundary and border theory, work-life boundary management (WLBM) consists of behaviors that help create and maintain boundaries towards effective work-life balance (McDowall & Lindsay, 2014). WLBM was first examined and validity evidence provided, then it was tested in a longitudinal mediation model. In Study 1, WLBM was found to consist of 27 behaviors representing six competencies: boundary awareness, clarifying boundaries, organizing, framing, scheduling, and partnering. A follow-up study confirmed these results. Study 3 provided validity evidence of WLBM by uncovering the positive relationships between work and family segmentation/integration preference and enactment, work satisfaction, as well as the negative relationship with role conflict. Then, Study 4 attempted to explain the complex relationship between segmentation/integration and satisfaction through WLBM. A three-wave survey spanning 6 months was administered to a large online sample. The relationship between segmentation/integration and work and family satisfaction was analyzed in four longitudinal mediation models with WLBM as the mediator. Results were not significant. Discussion and recommendations for future research on segmentation/integration and WLBM is included.

## Acknowledgements

Behind every successful graduate student is a team of people cheering them on. I'm lucky to have an incredible team—people in my life that believed in me beyond my wildest dreams as a first-generation college student. On my work team, I am beyond thankful for the unwavering support of my advisor, Dr. Michel. This achievement would not have been possible without your genuine care in my success as a graduate student and professional. Thank you for your continuous advice, calm flexibility, and expert knowledge that helped me grow throughout this process. Never has there been a more encouraging and understanding individual, your mentorship style is one I will continue to model and pay forward. A big thank you to the other faculty at Auburn, especially to my committee members, Dr. Bardeen, Dr. Franco-Watkins, and Dr. Svyantek. Finally, thanks to my peers, especially Melissa, for the supportive work environment and coffee. On the home team, I'm fortunate enough to have too many supportive members to acknowledge. Thank you all for being there in some way at crucial parts of this journey. Thank you to my parents for the relentless encouragement and not asking why I'm still in college after ten years. Mom, thank you for the inspiration and guidance to find my passion. To Jayden, Tye, Rory, and Rowan, I hope this achievement serves as proof you can do anything you want in life with hard work and perseverance. Being your big sister and role model motivates me daily. Finally, I can't begin to thank Thom for the empathy and sacrifices that gave me the fortitude to complete this journey. Thank you for being my biggest fan. And of course, Jima, for the dog park breaks that kept my work-life balance in check.

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## **CHAPTER 1**

### **Introduction**

Each day employees face a transition from personal life to work and then again when they leave the work domain and return home. Before, during, and after these transitions they are expected to take on multiple roles, with a role referring to a set of socially defined behaviors, expectations, and norms (Biddle & Thomas, 1966). Work-family researchers define role transitions whereby roles are entered and exited by surmounting boundaries or borders (Ashforth, Kreiner, & Fugate, 2000; Clark, 2000). This involves both role exit, or disengagement, and new role entry, or engagement. Furthermore, role transitions involve psychological, physical, or behavioral movement and changes between roles (Burr, 1972).

Transitions can occur between the work and nonwork domain or within one domain. For example, a faculty member may take on the role of a researcher while writing a grant, but receive an email from a student and transition to professor. Furthermore, this faculty member may receive a phone call from home and transition to the role of significant other. Accordingly, employees can change roles within work, from work to personal life, and within personal life. Role transition, or the surmounting of role borderlines between work and personal life, research in the work-family literature typically focuses on micro transitions (e.g., temporary transitions such as leaving work for the day) rather than macro (e.g., permanent transitions such as promotion) or quasi-micro (e.g., longer-term temporary transitions such as vacation) role transitions (Ashforth et al., 2000; Chen, Powell, & Greenahus, 2009; Nippert-Eng, 1996). While macro transitions have a large impact on new roles, the current research focuses on the small, daily shifts employees face and how they manage the boundaries between roles.



Central to the concept of role transitions are the borderlines around roles that must be transcended. Hall and Richter (1988) proposed “that the best way to understand how two domains [work and home] affect each other is to look at them in their interface” (p. 215). Although not a new idea, a recent shift in the work-family literature has ultimately led researchers to more closely examine these borderlines. Two theories guide this novel stream of research: boundary theory and border theory. By using both theories and their predictions for work-family outcomes, researchers can better understand how employees manage their work and personal life boundaries to meet the demands of multiple life roles. Although the term border and boundary is sometimes used interchangeably in work-family research, consistent with a recent review, the term boundary is used unless specifically referencing border theory (Allen, Cho, & Meier, 2014). Moreover, employees have certain preferences for creating, transitioning, and maintaining these boundaries. Boundary management tactics are important to understand how employees achieve work-life balance (WLB), referring to their ability to accomplish role-related expectations that are negotiated and shared with role-related partners at work and in one’s personal life (Grzywacz & Carlson, 2007). Through boundary and border theory, we can uncover what behaviors individuals use to manage boundaries and achieve WLB.

The goal of this paper is to review current literature on boundary management, psychometrically examine and potentially revise a measure of Work-Life Boundary Management (WLBM), and link WLBM to desirable WLB outcomes. This research contributes to current work-family research and application in the following ways. First, specific behaviors, rather than attitudes, individuals use to negotiate and maintain work-life boundaries have been sparsely examined. By studying these behaviors, we can more specifically understand which lead to successful WLB and other positive outcomes. For example, work-family conflict has

traditionally been studied as the perception of conflicting role demands (Greenhaus & Beutell, 1985). By identifying behaviors that reduce work-family conflict, scholars may help subsequent researchers and interventions to measure and change ineffective behaviors more directly than general attitudes. Second, past research grouped WLBM behaviors into competencies, and the current research aims to confirm or modify the factor structure and labeling (McDowall & Lindsay, 2014). By grouping these behaviors together as competencies, we can gather robust groups of behavioral strategies to increase the likelihood of employees achieving their desired level of WLBM. Third, these identified behaviors transcend the segmentation-integration debate, and incongruent conclusions on the facets (i.e., physical, temporal, psychological) of boundary management, to provide actionable competencies. Furthermore, even when facets are identified, the indicators are still behavior-based (Carlson, Ferguson, & Kacmar, 2016), and lines of demarcations between roles are most evident and tangible as behaviors. As boundary management is an emerging research area, beginning with observable behaviors will contribute to sound theory development. Furthermore, because of the well-established negative effects of conflict between work and family roles on a multitude of negative outcomes (Frone, Russell, & Cooper, 1992), WLBM competencies are essential for the well-being of employees and ultimately the organization. Although previous research has aimed to categorize facets of WLBM, it is also fruitful to identify useful tactics to help employees achieve WLB. The theoretical underpinning is first explicated to provide a rationale for the subsequently identified competencies.

### **Boundary Theory**

Ashforth and colleagues (2000) proposed boundary theory to describe how people engage in role transitions, or boundary-crossing activities. Generally, they argued that roles are either

*segmented*, with thick boundaries, or *integrated*, with thin boundaries. Boundaries in this case are defined as delimiting the scope of a role. Thick boundaries are more difficult to cross, but prevent role blurring. An example of a thick, segmented boundary can be seen between the work role of hockey player and family role of parent. When in the work role, the player would most likely not cross the boundary into the parental role, for instance, by taking personal phone calls or acting nurturing. On the other hand, thin boundaries are easier to cross, requiring a lower magnitude of change between roles, but may lead work and personal life roles to be more blurred. An example of a thin, integrated boundary can be seen in bed and breakfast owners. Their roles of host and parent are likely characterized by little physical, psychological, and behavioral change (Li, Miao, Zhao, & Lehto, 2013).

Another concept central to understanding WLBM is role identity, or the “extent that a role cures or connotes a certain persona” (Ashforth et al., 2000, p. 475). Features of the social and environmental context of the role cue different behaviors from the individual. Role identities at work or home may determine different integration or segmentation behaviors and preferences. For instance, if work and home roles demand the same characteristics of the individual, it will be easier to switch between them. A person would theoretically find it harder to switch between the emotions of caring and compassion in a parent role to a job that demands different role-related characteristics. From the parent role, it is easier to transition to a nurturing job role than a more extreme role such as drill sergeant. For this job, the individual may find it necessary to create thicker work-family boundaries and employ stricter WLBM. Thus, Ashforth and colleagues also proposed that *role contrast* plays a part in the ease or difficulty of role transitions.

If core features of two roles are sharply contrasted, the transition between them will be more difficult, meaning a thicker boundary. A cost of segmentation is high role contrast, while

the benefit of integration is low role contrast and easier transitions (Ashforth et al., 2000). However, this could also be reversed to consider the cost of high role contrast is necessary segmentation as in the above drill sergeant example. Regardless, the benefit of segmentation is less role blurring due to differential spatio-temporal associations, symbolic markers that cue distinctive role behaviors, less cross-role interruptions, and the ability to psychologically compartmentalize identities. Role contrast has not been widely studied, but work-family policies such as flexible work arrangements may reduce role contrast (Rau & Hyland, 2002). Another contribution of boundary theory is the role transition process outlined by Ashforth and colleagues, which defined the process of role transition to include: role exit, movement, then role entry. Each step involves a rite, separation, transition, and incorporation, respectively. While the current research focuses on the competencies to avoid unwanted work-to-family or family-to-work role transition, these rites are important to identify and possibly avoid. For instance, if a work laptop at home is cue to make it easier to transition from parent to manager, but the individual prefers thick boundaries, then this rite of transition should be removed.

Spatio-temporal associations such as work laptops at home also play a role in transitions. Fewer role sets in the same space-time setting leads to less permeability. In contrast, if multiple roles exist in the same space at the same time, such as homeworkers, more micro-role transitions are required, so the boundaries must be more permeable (Shumate & Fulk, 2004). The expansion of the space-time work setting, as seen in coffee shops and technology use, may complicate measuring this aspect of role contrast and transitions (Towers, Duxbury, Higgins, & Thomas, 2006). While boundary theory remains the most widely used theory to support research on the work-family interface and WLBM, most researchers cite both boundary and border theory together as a theoretical basis (Allen et al., 2014).

## **Border Theory**

In 2000, Clark also developed a theory of WLB that focused on borders, similarly defined as “lines of demarcation between domains, defining the point at which domain-relevant behavior begins or ends” (p. 756). While Clark defined the characteristics of borders similar to Ashforth and colleagues, she added border-keepers as role-related individuals who are influential in defining the role and border of that role. Her additional consideration adds a piece of the puzzle on how other individuals shape borders, specifically through other-domain awareness and commitment, and how these impact WLB. For instance, a supervisor with high other-domain awareness may allow personal calls to be answered at work, leading to more integrated work and personal life roles and possibly increased WLB. However, this depends on the employee’s preference for integration or segmentation in combination with organizational supplies to enact this preference (Kreiner, 2006) as discussed later. Another way border-keepers impact boundaries is through role modeling. Supervisors that separate work and home modeled this behavior for employees, who were also more likely to segment and reported less exhaustion and more engagement with work (Koch & Binnewies, 2015).

There is currently no measure of other domain awareness, but the expectations of role-related individuals have been shown to impact WLB (Helms-Erikson, Tanner, Crouter, & McHale, 2000). Role-related individuals’ commitment to the border crosser and communication about role-related expectations may facilitate smoother role transitions due to the support and awareness of other role demands (Clark, 2000). In contrast, Carlson et al. (2016) found that communicative tactics were negatively related to job and family satisfaction perhaps because telling family role-related individuals not to cross work boundaries, and vice versa, may cause hostility or stress. Individuals likely consider the behaviors, attitudes, and expectations of role-

related others when engaging in boundary management. In fact, spousal support is a resource to achieve WLB (Ferguson, Carlson, Kacmar, & Halbesleben, 2016), and managing the expectations of role-related others may be an effective WLBM strategy.

### **Boundaries versus Borders**

At the forefront, boundary and border theory have many similarities as they both share historical origins in the seminal works of famous organizational and work-family scholars. Both are influenced by: Lewin's (1951) work and nonwork domain boundaries; Biddle (1979) role theory; Hall and Richter's (1988) descriptions of WLB and transition styles; and Nippert-Eng's (1996) detailed accounts of boundary work through segmenting and integrating. While the course and purpose of development of each resulting theory differed, the multiple discovery of boundary and border theory shifted the landscape of work-family research.

Boundary theory was uniquely developed from a cognitive sociological perspective of lumping and splitting things into mental clusters (Zerubavel, 1991). Specific to this theory is how we mentally fence domain-based roles, later applied to work-family by Ashforth and colleagues (2000). Border theory was developed out of Clark's frustration with the atheoretical use of the spillover and compensation hypotheses in the work-family literature, and the inability to explain spatial, temporal, social, and behavioral connections between work and personal life. The purpose of border theory development was to explain how individuals negotiate borders to achieve WLB. Further shared origin of these theories is based in the segmentation hypothesis, one of three ways job-life satisfaction research was originally conceptualized, additionally including the spillover and compensation hypotheses (Staines, 1980; Wilensky, 1960).

A shared characteristic of boundary and border theory addresses the degree of segmentation and integration of roles. Although researchers have applied these theories to

examine spillover and compensation (Ferguson, Carlson, & Kacmar, 2015; Lourel, Ford, Gamassou, Guéguen, & Hartmann, 2008), this application does not address the boundary per se, but rather provides insight into cross-boundary experiences between work and personal life domains. Furthermore, the underlying assumption is that rigid boundaries are in place for experiences to spillover across, ignoring the freedom of role enactment in contemporary workplaces (Glavin & Schieman, 2012). This application does not adequately capture the dynamic nature of role transitions or boundary management. For these reasons, and consistent with original theory conceptualization, further examining segmentation and integration under these theories has the propensity to uncover richer, theory driven information about boundary characteristics.

Both theories similarly define boundaries in terms of *flexibility*, or pliability depending on other role-related demands, and *permeability*, the degree to which elements from other domains may enter or when one can be physically located in a role but psychologically or behaviorally involved in another (Ashforth et al., 2000; Clark, 2000). As a result, the concept of blurring or blending around boundaries is also found in both theories. When permeability and flexibility is high the boundary is undefined, leading to less exclusivity of thoughts, behaviors, and emotions between roles, which is termed integration. Boundary management likely falls along a continuum with integration at one end and segmentation at the other, referring to the desire for mental, physical, or behavioral separation between work and personal life roles (Ashforth et al., 2000; E. E. Kossek, Noe, & DeMarr, 1999; Kreiner, 2006; Nippert-Eng, 1996). Likewise, integration refers to various aspects of work and home roles being merged or blended, while segmentation is the degree to which each domain is cognitively, physically, or behaviorally separate (Kreiner, 2006; Kreiner, Hollensbe, & Sheep, 2009). Both Ashforth and

colleagues and Clark also agree that integration depends on domain similarity, and neither integration nor segmentation is touted as the solution to achieve WLB.

Based on the previous example, a bed and breakfast owner would have high domain similarity between work and home roles, and thus higher integration. However, Ashforth and colleagues' explanation of this occurrence stems from role contrast. As previously discussed, core and peripheral features create a certain role-related identity. If two identities are similar, switching gears from one role to another will be easier. For instance, faculty members may find it easier to transition from professor to parent than from presenter to parent to meet role-related demands. Alternatively, Clark posited the interaction between domain similarity and border strength (i.e., flexibility, permeability, blending) is the best explanation for the achievement of WLB. In this case, although professor and parent roles may share similar characteristics, if the border between them is inflexible and impermeable, the individual will find it more difficult to meet parental role demands, leading to decreased WLB. Future research should address the underlying mechanism of integration as low role contrast or the interaction of domain similarity and border strength. Nevertheless, the relationship between boundary management and WLB depends on many factors, including boundary-crosser preferences, boundary-keepers, and work context.

### **A Closer Look at Boundary Characteristics**

Boundary characteristics were originally conceptualized as flexible, permeable, or blurred (Ashforth et al., 2000). Recent work-family research has expanded these conceptualizations to further define flexibility-ability and –willingness, asymmetric permeability, role blurring versus integration, and segmentation preferences and supplies.



Matthews and Barnes-Farrell (2010) defined flexibility-ability as an individual's perceptions of how easily they can move between domains, and flexibility-willingness as the motivation to engage in boundary flexing. This extension allows for a more precise explanation of how boundary characteristics influence WLB. For individuals who prefer integration, high flexibility-ability is useful to balance role demands, but increasing flexibility-ability perceptions for those who value segmentation will most likely have little impact on WLB. Subsequent research has largely failed to account for this distinction (Ferguson et al., 2015; E. E. Kossek & Lautsch, 2012), with few exceptions. For instance, Winkel and Clayton (2010) found that flexibility-willingness predicted work-family transitions, while flexibility-ability predicted family-work transitions, and willingness to flex was weaker if the individual highly identified with work roles. This same year, Matthews, Barnes-Farrell, and Bulger (2010) suggested that inter-domain transitions may more accurately capture the flexibility aspect.

Asymmetric permeability of various role boundaries refers to the differential degrees to which elements of one domain may enter another (Clark, 2000). Individuals may shield their personal life from work interruptions, but allow personal life demands to permeate workplace performance. A German study found that personal life boundaries were thicker than work boundaries, meaning employees are more likely to let personal life interruptions permeate their work roles (Janke, Stamov-Roßnagel, & Scheibe, 2016). As an example of a physical work-family boundary being differentially permeable, we often see pictures of families on work desks, while few employees likely have pictures of their workgroup hanging on the walls at home. While little empirical research has explicitly examined this relationship, Clark (2000) proposed that individuals would experience increased WLB when they identify with a less permeable domain, and decreased WLB when they identify with a more permeable domain. This

proposition makes logical sense in that interruptions that cause a transition to the favored domain may be less detrimental than interruptions that force a role transition into a peripherally identified role. For example, family interruptions for someone who values the parental role are less intrusive than for someone who values the supervisor role. In jobs requiring long working hours, role identity may shift and the boundary between home and work may be more permeable than the work-home boundary (Perlow, 1998).

Although integration has been found to decrease WLB (Olson-Buchanan & Boswell, 2006), we cannot turn a blind eye to the growing trend of work and nonwork roles colliding (Lewis, 2003). Desrochers and Sargent (2004) described role blurring as the “experience of confusion or difficulty in distinguishing one’s work from one’s family roles in a given setting which these roles are seen as highly integrated, such as doing paid work at home” (p. 41). There is some confusion in the literature about to what extent integration becomes role blurring (Halbesleben, Zellars, Carlson, Perrewé, & Rotondo, 2010). This confusion is exacerbated by the development of scales such as the Work-Family Integration-Blurring Scale (Desrochers, Hilton, & Larwood, 2005). Ashforth and colleagues (2000) originally defined integration as, “denoted by roles that are weakly differentiated (low contrast), are not tied to specific places and times (flexible boundary), and allow cross-role interruptions (permeable boundary). Highly integrated roles tend to have similar identities, be embedded in similar contexts, and overlap in the physical location and the membership of the role sets” (p. 479). By looking at extreme cases of integration, we can better understand the differences between role blurring and integration. Complete integration is rare, but involves only one way of acting regardless of the domain or role (Nippert-Eng, 1996). Hence, there is no confusion or difficulty distinguishing how to act in one domain as in role blurring, supporting the case that role blurring is a separate construct than

integration. Future measure development studies should specifically focus on integration rather than blurring (Allen et al., 2014).

The final boundary characteristic expanded by recent research is segmentation. According to Kreiner (2006), segmentation preference refers to the degree individuals want to segment or integrate work and personal life, while segmentation supplies refer to the degree the workplace creates an environment that promotes segmentation or integration. Based on boundary and person-environment fit theory and by using polynomial regression, he found the interaction of these two aspects of segmentation asymmetrically predicted work-family conflict, stress, and job satisfaction. When segmentation supplies and preferences were closely matched, work-family conflict decreased. Interestingly, as supplies surpassed preferences, work-family conflict continued to decrease. More resources to segment work and family are beneficial for those who prefer segmentation. Derks, Bakker, Peters, and van Wingerden (2016) found segmentation preference moderated the relationship between work-related smartphone use and work-family conflict.

Although these styles of segmenting or integrating work and family domains have been researched, there is yet to be consensus on terminology. Some researchers use terms interchangeably such as preference for segmentation (Hyland, Rowsome, & Rowsome, 2005; Rothbard, Phillips, & Dumas, 2005), work-family role integration (Halbesleben et al., 2010; Ilies, Wilson, & Wagner, 2009), work-home segmentation behavior (Koch & Binnewies, 2015), boundary preference toward segmentation (McNall, Scott, & Nicklin, 2015), work-home segmentation preference and work-life integration strategy (Leduc, Houliort, & Bourdeau, 2016), or integrating boundary management preference (Paustian-Underdahl, Halbesleben, Carlson, & Kacmar, 2016). This difference poses an issue because some researchers believe integration and

segmentation are at two ends of the same continuum (Ashforth, 2001; Kreiner, 2006; Nippert-Eng, 1996), or perhaps they are on separate planes or co-occur depending on the roles under question (Bulger, Matthews, & Hoffman, 2007). For example, an employee may answer a nonwork text while physically at work, but it's unclear to what extent this constitutes a role transition and thus integration. The benefit of defining WLBM is that, while based on segmentation theory, the term may be used regardless of continuum, preference, or level of integration or segmentation.

Furthermore, in light of increased telework and the ability to bring work home, employees are likely experiencing more role transitions and less definition between work and family domains. Researchers have found this blurring leads to more conflict when job resources are low. In other words, work resources like schedule control and job autonomy alleviate the conflict caused by boundary transitions (Glavin & Schieman, 2012). But, not every employee has access to these organizational resources—identifying individuals' WLBM strategies can help cultivate personal resources to reduce conflict. Overall, boundary characteristics, and the extent to which an employee prefers to enact thick or thin, flexible or asymmetric, and integrated or segmented WLBM, has a differential impact on WLB attempts.

### **Boundary Violations and Role Transitions**

Research on work and family role boundaries has supported the myth of separate worlds (Kanter, 1977). Roles in the work and home domain frequently intersect, forcing individuals to constantly engage in boundary crossing. Behaviors or events that negatively impact the preferred work-personal life boundary are called boundary violations (Kreiner et al., 2009), interruptions (Desrochers et al., 2005), or cross-role interruption behaviors (Ellen E. Kossek, Ruderman, Braddy, & Hannum, 2012). While little research has explicitly examined boundary violations,

this component of boundary management is important to understanding how interruptions and transitions can be mitigated and managed.

The source of conflict, whether due to transitions or interruptions, has been identified as is an important consideration for WLBM (Rau & Hyland, 2002). Ashforth (2001) suggested that transition scripts help ease the impact of transitions and interruptions. Over time individuals develop these scripts based on internal and external cues to organize transition tasks and subroutines. Ashforth et al. (2000) mentioned rites of separation, incorporation, passage, and transitions that facilitated transitions. Consideration should be given to exploring role transitions between new and well-established roles and the rites that accompany those transitions (Cleveland, 2005). Macro-transitions are a good fit for the examination of new roles. In the face of life events such as promotion to a new position, many different scripts will be used to manage transitions and interruptions.

Matthews, Winkel, and Wayne (2014) found a similar positive relationship between transitions and conflict. However, they examined role transitions as an episodic coping mechanism in the face of role overload. Overall, they found transitions mediate the relationship between overload and conflict. Transitioning from work-to-family or family-to-work roles was helpful to better allocate resources to the overloaded role. While this tactic is beneficial in the short term, it makes sense that over time it would cause increased conflict in the long term. One domain is demanding more resources and increased transitions. Confirming this supposition, Carlson, Kacmar, Zivnuska, and Ferguson (2015) looked at boundary transitions as a stressor. For instance, going into work on the weekend would deplete resources to meet family role-related expectations. They found that increased family-to-work boundary transition was related to work-to-family conflict, and that this boundary management strain was also transmitted to the

spouse. By including integration or segmentation preference, they may have found that these transitions increase or decrease stress for individuals that allow integration of roles.

### **Boundary-Crosser Preferences and Management Styles**

In addition to the characteristics of boundaries that delineate aspects of a role, individual differences and preferences to engage in boundary crossing contribute to understanding work-family outcomes. Kossek, Noe, and DeMarr (1999) first defined work-family role synthesis as an individual's approach to structure how work and personal life roles merge given personal and situational factors. Note that although Kossek and colleagues used the term merge, the inclusion of personal and situational factors may better parallel Kreiner's (2006) notion of segmentation preference (personal) and supplies (situational). In later research, Kossek recounted this definition as boundary management strategy and, "the principles one uses to organize and separate role demands and expectations into specific realms of home (e.g., dependent care giving) and work (i.e., doing one's job)" (E. E. Kossek, Lautsch, & Eaton, 2006, p. 350). Others simply defined boundary management as integration or segmentation (Bulger et al., 2007); consider it the way individuals maintain, negotiate, and transition across the socially constructed lines of demarcation between work and family roles (Allen et al., 2014); or measure the spouse's perception of incumbent boundary management, defined as how well the boundary-crosser manages boundaries given family expectations (Ferguson et al., 2015). Overall, boundary management refers to the creation and maintenance of physical, temporal, spatial, cognitive, and relational boundaries of work and personal life roles.

One aspect of boundary management is the individual's choice to construct thick or thin boundaries. That is, either segment or integrate various roles. Companies often attempt to increase integration through work-family policies (e.g., telecommuting, on-site childcare). Yet,

results are mixed as to whether these policies and practices lead to desirable outcomes (Braunstein-Bercovitz, 2014; Bulger et al., 2007; Edwards & Rothbard, 2000; Kreiner, 2006), sometimes in the same study (Hislop & Axtell, 2007). Rothbard et al. (2005) found that company policies promoting integration had negative effects on work-family outcomes for employees with a preference for segmentation. Findings like these are important to inform policy, as many companies implement integration policies and practices to the detriment of employees who prefer segmentation. Kreiner's results suggest an excess of opportunities to segment work and personal life roles may not be detrimental to those who prefer integration. Additional evidence against one-size-fits-all policies was uncovered by Rau and Hyland (2002). They found individuals with high role conflict preferred flextime, while those with low role conflict were more attracted to organizations with telecommuting opportunities.

Supplies that cater to employees with both integration and segmentation preferences will help increase person-environment fit, thus increasing well-being and work and family satisfaction. Previous researchers found no negative consequences for individual outcomes when supplies exceed preferences (Edwards & Rothbard, 1999; Kreiner, 2006). Unfortunately, much of the current research has focused on homogeneous work groups such as priests (Kreiner et al., 2009), police officers (McDowall & Lindsay, 2014), white collar workers with college degrees in Fortune 500 companies (Ammons, 2013), university employees (Ilies et al., 2009), or entrepreneurs (Ezzedeen & Zikic, 2017). Furthermore, schedule flexibility, work-personal life integration, and border tangibility contribute to work-personal life conflict (Kinman & Jones, 2008; Li et al., 2013). Liao, Yang, Wang, and Kwan (2016) also found segmentation preferences weakened the relationship between leader-member exchange and work-family enrichment, while strengthening the relationship between work-family enrichment and family performance.

In fact, past research has found integration to be related to increased work-to-family and family-to-work conflict (Kossek, Lautsch, & Eaton, 2006; Matthews, Barnes-Farrell, & Bulger, 2010), psychological distress, and turnover intentions (Kossek et al., 2006). However, some studies have revealed the benefits of integration, such as easier transitions from one role to another (Olson-Buchanan & Boswell, 2006) and greater instrumental support from significant others (Halbesleben et al., 2010). Still others found a link between integration and work-family enrichment, but not family-work enrichment, perhaps because of the negative perception of bringing work home (McNall et al., 2015).

On the same page, Leduc et al. (2016) found a positive relationship between work-life integration strategy with both directions of enrichment (i.e., work-to-family, family-to-work). Parallel with Kossek and Matthew's research, they also found a significant negative relation to both directions of conflict. Interestingly, work-home segmentation preference was negatively related to enrichment, and positively linked to conflict. Although many studies have touted the benefits of segmentation, this style of boundary management may increase conflict and reduce enriching experiences between work and home. Another study confirming the benefits of integration revealed work-family enrichment may mediate the relationship between integration and job satisfaction. Specifically, researchers measured permeability and flexibility preference, as well as perceived permeability and flexibility supplies of the workplace. Only permeability preference and flexibility supplies were both positively related to work-family enrichment (Daniel & Sonnentag, 2016). Although based on a resource perspective, it is possible permeability supplies (e.g., private contacts between other coworkers and the employee's family for support) has negative consequences that outweigh enrichment benefits.



Most recently, researchers have considered integration a double-edged sword. While integration may increase things like family involvement enriching work, it also weakens the relationship between this enrichment and the supervisor's perceptions of promotability (Paustian-Underdahl et al., 2016). For instance, taking personal calls at work (i.e., transitioning from work-to-family) may be viewed as detrimental to performance by the supervisor. Conversely, this call may also be a source of enrichment by putting the employee in a good mood and boosting performance. This inconsistency in the literature is yet another reason to focus on employee's own competencies for WLBM.

One explanation for the conflicting results is the flexible-resource perspective versus the greedy-role perspective. Although described as role blurring, these perspectives may also be applied to examine integration. Based on the flexible-resource perspective, integration offers flexibility to meet competing role demands, thereby decreasing work-family conflict (Glavin & Schieman, 2012). For instance, when an employee is at work they may be able to take a personal call instead of ignoring the call and experiencing conflict. However, the latter perspective offers insight into why work-family conflict may increase. The greedy-role perspective posited that integration increases the likelihood that one role will subsume resources delimited for other roles, decreasing the ability to meet other role-related expectations (Glavin & Schieman, 2012). If this same employee constantly receives calls at work, they may experience increased time-based conflict and the integration of these roles is not beneficial to WLB. Research on entrepreneurs' WLBM supports both perspectives, where the flexibility is a resource but the role is demanding (Ezzedeen & Zikic, 2017), and may also provide insight into diverse results.

Another explanation for the conflicting results on the effectiveness of integration or segmentation promoting workplace policies was examined by E. E. Kossek and Lautsch (2008).

They defined three boundary management styles, called flexstyles, as follows: separators, integrators, and volleyers. The first two prefer segmentation and integration, respectively; the last group uses various physical, temporal, and mental tactics to flex their boundaries according to the situation and current demands. In each category, Kossek and colleagues further delineated by control over these boundaries. For instance, a separator may be a family firster if they have high control or a captive separator if they have little control over exerting their segmentation preference. Based on the interaction of preferred flexstyle and opportunities for control of implementing this style, the employee may find the policies available to them to either help or hinder their WLB. No researchers to date have empirically examined these flexstyles using Kossek's measures.

However, researchers have found different levels of perceived boundary control. Men perceived more boundary control than women integrators or segmenters (Mellner, Aronsson, & Kecklund, 2014). Another study based on research by Kossek and Lautsch (2012) measured cross-role interrupting behaviors to classify participants as follows: work guardians (21%), nonwork guardians (14%), integrators (25%), separators (18%), and an intermediate group (22%). The first two having asymmetrical boundaries, for example a work guardian would allow work to interrupt family but not vice versa. Interesting demographics differences were found based on these profiles. For instance, nonwork guardians were the youngest group, while work guardians were the oldest. Also, a marked difference existed in occupational status. Managers were typically integrators while blue- and lower-white collar workers were typically nonwork guardians and separators. Overall, work guardians scored lowest on recovery experiences and outcomes, indicating they show a deficit in recovering from work stress over other WLBM styles (Kinnunen et al., 2016). Another finding that explains this recovery deficit and lends support to

the argument against integration is the negative relationship between extended work availability and increased cortisol levels in the morning, as well as a negative mood (Dettmers, Vahle-Hinz, Bamberg, Friedrich, & Keller, 2016).

In practice, the delineation between boundary management styles is further blurred by technology in the modern workplace. A survey by the American Psychological Association (2015) revealed that 42% of Americans attend to family during work and 26% bring work home, providing evidence of increased integration and asymmetrical boundaries. Interestingly, technology can also be looked at as way employees transcend instead of construct boundaries—toward a positive integration of different aspects of the self (Golden & Geisler, 2007). WLB resources like technology may have a differential impact depending on the boundary crosser's preference for integration or segmentation. While technology is considered in a few current measures (McDowall & Lindsay, 2014), results have been mixed as to the impact of technology on WLB (Boswell & Olson-Buchanan, 2007; Golden & Geisler, 2007; Hill, Miller, Weiner, & Colihan, 1998). The benefits of technology are relaxed space-time work constraints, increased schedule and pacing control, and more time at home (Towers et al., 2006). A qualitative study by Schlosser (2002) supported these benefits, but also found challenges to WLB such as setting limits on work and getting hooked on the device. In one study, a majority of respondents felt their family understood the use of work extending technology, but one third reported they probably don't like it (Towers et al., 2006). Overall, the integration of technology into work-family research is likely a useful resource for WLBM.

WLBM is a growing topic in work-family literature, including boundary construction, flexstyles, and integration or segmentation. A focus on understanding employees' WLBM tactics

and the competencies they possess to balance multiple roles in the way that works for them, regardless of organizational resources, is essential to advancing theory and practice.

### **Work-Life Boundary Management**

The idea of boundary management is not new to work-family research—albeit under many different pseudonyms. Perhaps one of the first to study behaviors to manage work-family conflict was Folkman and Lazarus (1980) when they identified emotion- versus problem-focused coping. The main idea, applied to work-family, is to reduce distress from conflicting role demands. Other roots of boundary management can be found in social support (House, 1981). Some of these previously identified, conflict-reducing behaviors are aimed at managing boundaries (e.g., cognitive reappraisal, time management, leveraging technology, structural role defining), while others serve to reduce conflict in other ways that ambiguously involve boundaries (e.g., avoidance, job mobility, hiring outside help, restructuring). Some classify boundary management as a subset of methods for managing conflict episodes, and include reappraisal or enlisting support separately under this umbrella (Maertz & Boyar, 2011). This concept is difficult to parse out due to the vast nature of changing and diverse work-family demands, so developing research on boundary management has been muddled. However, prolific work-family researchers agree boundary management does not fit into the coping or support category (Morganson, Culbertson, & Matthews, 2013).

One of the first researchers to define behavioral strategies for WLB was Wiersma (1994), who interviewed dual-earner couples to understand how they solved work-family conflicts. He found couples employed external strategies (e.g., hiring outside help, dividing chores, mutual sharing, discussing norms), and developed personal competencies (e.g., set priorities, cognitive reappraisal), and frequently managed time for personal, recreational, and family activities. Other

researchers have found similar results, and expanded on earlier findings to include the important role of technology (Kreiner et al., 2009). Golden and Geisler (2007) also took a technological approach in examining the personal digital assistant's role in WLBM. They found employees used the technology to exert more control over work-life boundaries. They also took a step forward in classifying WLBM behaviors into categories of containing work, integrating the self, transitioning work, and protecting the private. There is also a complex relationship between thick (segmented) role boundaries and thin (integrated) role boundaries regarding technology. If segmentation is the norm at work, employees have a harder time psychologically detaching when work phones are used more (Derks, Mierlo, & Schmitz, 2014). Integrators that use smartphones to take care of work tasks at home show better family performance through reduced conflict (Derks et al., 2016). Managing time and leveraging technology are very commonly seen in boundary management (Kreiner et al., 2009; Sturges, 2012).

As the construct develops, a difficulty in defining WLBM is the traditional approach to studying work-family conflict, which takes an attitudinal perspective. In other words, conflict is the general perception of incompatible demands (Greenhaus & Beutell, 1985). More recently scholars have called for an episodic approach wherein episodes of conflict and enrichment are examined (Maertz & Boyar, 2011). Rather than looking at overall feelings of conflict or balance, this approach allows researchers to look at specific behaviors. The way boundary management is defined (i.e., the creation and maintenance of physical, temporal, spatial, cognitive, and relational boundaries of work and personal life roles) lends itself to a more behavioral investigative approach. This is especially beneficial when developing WLBM strategies.

Moreover, there may be a delineation between proactive and reactive WLBM. Although to date researchers have scarcely considered these two approaches as differentially affecting

work-family outcomes, proactive strategies were shown to be useful in research on helping (Spitzmuller & Van Dyne, 2013) and coping (Schwarzer, 2001). For example, the Job Demands-Resources model was expanded to introduce proactive coping. Researchers found a proactive strategy mediated the relationship between job demands and burnout, as well as job resources and engagement (Ângelo & Chambel, 2014). Another example is the differential effects of proactive versus reactive organizational citizenship on work-family conflict. Reactive citizenship behavior led to increased work-family conflict, while proactive led to work-family enrichment (Germeys, Griep, & De Gieter, 2015). Proactively managing work-family boundaries, rather than responding to conflicts as they arise, is likely a more effective strategy to reduce role conflict. This is precisely what Sturges (2012) identified in a qualitative study of work-life balance crafting. She defined these behaviors as proactive, self-initiated, and goal oriented, and further categorized them in physical, relational, and cognitive techniques. Methot and LePine (2016) also suggested millennials more proactively anticipate and act on WLBM preferences. They found individuals who prefer family segmentation protect the home domain by not accepting jobs where a significant other is employed, and those who prefer to protect the work domain would be less likely to date in the workplace. Furthermore, satisfaction differed based on the domain they were more likely to construct thick boundaries around. More satisfaction is reported in the protected domain. But, this doesn't affect border keepers performance ratings at work (i.e., supervisor ratings of job performance), only at home. Thus, those who prefer to segment family are at an advantage, as border keepers at home are more likely to appreciate this preference. Extending this concept, supervisors may expect little to no nonwork intrusions, while significant others may expect work to interfere in family life and are more pleasantly surprised when this

domain is protected. The current paper makes a novel contribution by extending the research on classification of proactive behaviors of WLBM.

Another divide in current boundary management research is the delimitation between tactics for boundary management and styles of boundary management. Research streams such as those of Kreiner and Sturges aim to identify WLBM tactics, while much of the integration and segmentation research, such as that of Kossek and Ammons, attempts to identify boundary management preferences and styles. Prominent work-family scholars have also recommended the development of additional measures to capture other aspects (Allen et al., 2014; Shumate & Fulk, 2004). One issue faced by previous researchers is the categories of WLBM are confounded by levels of specificity or overlap within and across frameworks (Maertz & Boyar, 2011). Some categorize boundary management into physical, behavioral, mental, temporal, and relational aspects (E. E. Kossek et al., 2006). The most recent study included four of these facets (i.e., temporal, physical, behavioral, communicative) and measured both affect and behavior in each. Both directions, keeping work out of the family and keeping family out of work, were also considered. Researchers found the physical aspect was the most salient to effectively segment work and family, while communicative tactics were detrimental. They recommended future research extend this work by examining other tactics (Carlson et al., 2016).

The current research extends this literature by classifying WLBM into competencies instead of domains to clarify the construct and identify distinct tactics that fit into these competencies. Previously, WLBM competencies have been identified as follows: keeping perspective, boundary management, being organized, proactively prioritizing WLB, managing flexibility, lifestyle changes, cooperation and coordination, managing expectations (McDowall & Lindsay, 2014). However, additional inquiry into these classifications is warranted due to the

limitations of the study, including a homogenous work group, lack of test-rest reliability, generalizability, and link to longitudinal outcomes, which the authors recommend as a future direction.

WLBM is currently conceptualized as the creation and maintenance of role boundaries at work and at home, with an episodic approach to identify proactive behaviors. This study aims to further classify these behaviors into competencies, identify which behaviors within these competencies are most effective, examine the nomological network of WLBM and link it to desirable organizational outcomes, then examine how WLBM changes over time.

**Research Question 1:** *Which proactive behaviors best capture WLBM; and as a result, which of these competencies or labeled groups of behaviors best represent WLBM? (Study 1)*

**Hypothesis 1:** *The resultant model of WLBM is a better fit to the data than the original eight-factor model or a single-factor model (Study 2).*

**Hypothesis 2:** *WLBM is related to work and family segmentation/integration, role conflict, and work satisfaction (Study 3).*

**Hypothesis 3a:** *WLBM will mediate the work segmentation/integration preference to family satisfaction relationship (Study 4).*

**Hypothesis 3b:** *WLBM will mediate the family segmentation/integration preference to work satisfaction relationship (Study 4).*

**Hypothesis 3c:** *WLBM will mediate the work segmentation/integration enactment to family satisfaction relationship (Study 4).*

**Hypothesis 3d:** *WLBM will mediate the family segmentation/integration enactment to work satisfaction relationship (Study 4).*



## CHAPTER 2

### STUDY 1: EXPLORATORY FACTOR ANALYSIS

#### Methods

##### Procedure

Participants were recruited through Amazon's Mechanical Turk (MTurk), an online, crowdsourced survey platform where individuals could complete research tasks for compensation. MTurk workers are typically diverse, show less social desirability responding (Behrend, Sharek, Meade, & Wiebe, 2011), and are also more attentive (Hauser & Schwarz, 2016) and reliable (Buhrmester, Kwang, & Gosling, 2011) than more traditional samples. The survey was created using Qualtrics, and hosted on MTurk where workers can scroll through research opportunities and participate in eligible studies. The first page of the survey informed participants of the purpose, 5-10 minute expected response time, and \$0.25 compensation paid to their Amazon account after completing the survey. Eligible participants, with an approval rating above 95%, were also required to pass three prescreen questions. Respondents were required to be over 18 years of age, reside in the United States, and work at least 30 hours per week. After affirmative responses to these questions, the WLBM and demographic questions were available for completion. Response quality was bolstered with two insufficient effort responding items (i.e., please choose quite effective), along with a question regarding careless responding (Meade & Craig, 2012). "Realistically, I know some MTurk respondents do not pay close attention to the questions they are answering. This affects the quality of my data. Please select one of the following honestly. Your answer is confidential. It will not affect whether or not you receive payment and will not affect any rating given to you for your work. Did you pay attention and answer honestly?"

**Participants.** A total of 632 participants completed the survey. Sixty were removed due to not meeting prescreen requirements and careless responding. Another 45 were removed for incorrectly answering the insufficient effort responding items. The final sample size used for analysis is 527. Recommended sample sizes for EFA include five to 10 subjects for every manifest variable (MV; DeCoster, 1998; Suhr, 2006) or 10-15 subjects per question (Field, 2000; Nunnally, 1967), at least 300 cases (Barbara G. Tabachnick & Fidell, 2007). With 45 items in the analysis, the current sample size allows for adequate power to complete the factor analysis.

Of the 572 participants, 47.2% ( $n = 249$ ) were male and 52.8% ( $n = 278$ ) were female. Participants' race/ethnicity was 74.5% ( $n = 392$ ) Caucasian/White (Non-Hispanic), 9.3% ( $n = 49$ ) Asian American/Pacific Islander, 7% ( $n = 37$ ) African American/Black, 5.9% ( $n = 31$ ) Hispanic, 0.8% ( $n = 4$ ) Native American, and 2.5% ( $n = 13$ ) specifying other to include mixed race, post-racial, and Arab American, among others. Most participants were married, 41% ( $n = 219$ ) others were single (33.4%,  $n = 176$ ) or living with a partner (17.6%,  $n = 93$ ). The highest education attained was 38.5% Bachelor's ( $n = 203$ ), 28.1% ( $n = 148$ ) no college degree, 15.7% ( $n = 83$ ) Associate's, and 15% ( $n = 79$ ) Master's. On average, participants worked 40.58 hours per week ( $SD = 5.97$ ) in some of the following industries: 13.9% ( $n = 73$ ) Marketing, Sales, and Services; 10.6% ( $n = 56$ ) Education and Training; 8.3% ( $n = 44$ ) Health Science; 7.8% ( $n = 41$ ) Business Management and Administration. The average yearly household income was \$40,000 to \$44,999.

## **Measures**

**Work-Life Boundary Management.** The WLBM measure (Appendix A) asked participants how effective each of the 45 behaviors are at helping them manage work and family. Responses are measured on a 5-point scale: do not use (1), ineffective (2), slightly effective (3),

quite effective (4), extremely effective (5). An example behavior is, “Using effective filing systems to organize workflow.” McDowall and Lindsay (2014) originally developed and grouped these behaviors into eight competencies (keeping perspective, boundary management, being organized, proactively prioritizing WLB, managing flexibility, making lifestyle changes, cooperation and coordination, managing expectations). Because the measure was validated on a homogenous sample (i.e., police officers), exploratory factor analysis (EFA) is necessary to explore the factor structure in a more diverse sample (Conway & Huffcutt, 2003).

## **Results**

To answer Research Question 1, Exploratory Factor Analysis (EFA) was conducted. Maximum likelihood and direct oblimin rotation were used to identify underlying factors in MPlus. Factor structure and item retention were examined through eigenvalues, communalities, factor loadings, and cross loadings. The first iteration with all 45 items identified a nine-factor solution, 6 items did meet the minimum loading requirement of .32 (B. G. Tabachnick & Fidell, 2001; Velicer & Fava, 1998) and were thus not retained for further consideration. A second iteration with 39 items revealed an eight-factor solution, with another 2 items without significant loadings. A subsequent analysis with 37 items again revealed an eight-factor solution where all items adequately loaded onto one or more factors. However, two items with similar wording (“Negotiating informally with manager for flexibility.” and “Negotiating work role/responsibilities with manager.”) loaded onto their own factor. Because each factor must include at least three items, these items were deleted.

The remaining 35 items were again analyzed resulting in a seven-factor solution. Two items loaded on multiple factors and were not retained for further consideration in favor of more discriminant items. Another two items were again loading on their own factor due to similar

wording and hence not retained for further consideration. An analysis of the remaining 31 items resulted in a six-factor solution. One item did not significantly load on any factor, and another item loaded on more than one factor. Both were not retained for further consideration. The 29 items were factor analyzed again resulting in a six-factor solution. An additional two items barely met the .32 threshold and cross-loaded on other factors, and thus were not retained for further consideration. The result of EFA culminated in a six-factor solution with 27 discriminant items, each loading above .32 with low cross-loadings. All eigenvalues of the retained factors were above 1 (8.67, 2.26, 1.63, 1.41, 1.27, 1.05). The final factors also explained an acceptable 60.33% of variance. The first factor explained 32.13% of the variance, the second 8.36%, the third 6.03%, the fourth 5.24%, the fifth 4.70%, and sixth 3.90%.

The Kaiser-Meyer-Olkin measure of sampling adequacy was .91, above the recommended value of .6, and Bartlett's test of sphericity was significant ( $\chi^2(351, N = 572) = 5952.54, p < .001$ ). The scree plot (Costello & Osborne, 2005) and Kaiser rule (Kaiser, 1960) both support the six-factor solution. Although the chi-square statistic was significant,  $\chi^2(204, N = 572) = 411.16$ , this may be attributed to the large sample size. There were no gender differences in average WLBM,  $t(525) = -0.76, p = .45$ , and no differences in average WLBM scores of those who attended versus did not attend college,  $t(525) = -0.45, p = .66$ .

Scale means, standard deviations, and intercorrelations can be found in Table 1. The final item loadings on their principal factors and communalities can be found in Table 2. Positive and negative loadings were considered when naming factors, and averages were used to retain scale metric and simplify interpretation (DiStefano, Zhu, & Míndrilà, 2009). Item means, standard deviations, skewness, and kurtosis can be found in Table 3. Skewness and kurtosis were acceptable, all less than plus or minus 2 (Field, 2000). The alpha if item deleted statistics did not

indicate deleting any items would substantially increase overall reliability. Cronbach's alpha for the total scale was .91 and for each subscale as follows: .82, .84, .84, .76, .76, .83.

In answer to Research Question 1, the 27 items retained best capture WLBM. The original eight factors were labeled: keeping perspective, boundary management, being organized, proactively prioritizing WLB, managing flexibility, making lifestyle change, cooperation and coordination, and managing expectations (McDowall & Lindsay, 2014). Items in the last two categories were not present in the final list. The category names are further evidence of the lack of discrimination by these items as cooperation and coordination and managing expectations overlapped with the categories of being organized, proactively prioritizing, and managing flexibility. Based on the item grouping, the six factors were relabeled as follows: boundary awareness, clarifying boundaries, organizing, framing, scheduling, partnering.

## **STUDY 2: CONFIRMATORY FACTOR ANALYSIS**

### **Methods**

**Procedure.** The same procedure outlined in Study 1 was followed for Study 2. Participants were recruited from MTurk and compensated \$0.25 USD. They were also required to be 18 years or older, living in the United States, and work at least 30 hours per week. Those who participated in Study 1 were excluded from viewing the posted survey to ensure independent samples. The same measure from Study 1 was administered, along with equivalent demographic, insufficient effort, and careless responding questions.

**Participants.** A total of 665 participants completed the survey. Sixty were removed due to not meeting prescreen requirements and careless responding. Another 41 were removed for incorrectly answering the insufficient effort responding items. The final sample size used for analysis is 564.

Of the 564 participants, 45.6% ( $n = 257$ ) were male and 54.4% ( $n = 307$ ) were female. Participants' race/ethnicity was 74.8% ( $n = 422$ ) Caucasian/White (Non-Hispanic), 9.4% ( $n = 53$ ) African American/Black, 7.3% ( $n = 36$ ) Asian American/Pacific Islander, 6.4% ( $n = 36$ ) Hispanic, 0.9% ( $n = 5$ ) Native American, and 1.1% ( $n = 6$ ) specifying other to include bi-racial and mixed. Most participants were married, 39.7% ( $n = 224$ ) others were single (35.6%,  $n = 201$ ) or living with a partner (17.6%,  $n = 99$ ). The highest education attained was 39.2% Bachelor's ( $n = 221$ ), 24.8% ( $n = 140$ ) no college degree, 17.2% ( $n = 97$ ) Associate's, and 13.8% ( $n = 78$ ) Master's. On average, participants worked 40.89 hours per week ( $SD = 6.12$ ) in some of the following industries: 14.5% ( $n = 82$ ) Education and Training; 9% ( $n = 51$ ) Marketing, Sales, and Services; 9% ( $n = 51$ ) Health Science; 6.2% ( $n = 35$ ) Finance. The average yearly household income was \$40,000 to \$44,999.

## Results

To confirm the results in Study 1, confirmatory factor analysis (CFA) was employed. CFA requires specifying the theoretically derived number of common factors and the pattern of loadings of each MV on the respective factor (Ferrando & Lorenzo-Seva, 2000) based on Study 1 findings. Factor loadings of MVs hypothesized to load onto that factor were free, while the MV factor loadings were fixed to zero for the other factors. The regression weight for one item per factor was fixed to one and factors allowed to correlate. To provide evidence of the distinction between factors, a single-factor model was also analyzed. This model should demonstrate poor fit if there is in fact more than one latent factor (Hu & Bentler, 1999). Then the model determined in Study 1 was evaluated for how well this solution fits the new data and compared to the original eight-factor model based on goodness-of-fit statistics in MPlus. Table 4 shows the fit statistics for the single-factor and eight-factor solution for the full measure, as well as the one-

factor, and six-factor CFAs for the reduced measure. Fit statistics include chi-square, Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA), Standardized Root Mean Square Residual (SRMR), and Akaike Information Criteria (AIC).

Hypothesis 1 tested whether the six-factor model from Study 1 is a better fit to the data than a single- or eight-factor model. Hu and Bentler (1999) contend that most fit index cutoff values must meet the following criteria to indicate adequate model fit: SRMR below .08, RMSEA below .06, TLI greater than .95, and CFI above .95 (Hinkin, 1998). First, the full, 45-item measure was tested in a single-factor model, which showed poor fit,  $\chi^2(945, N = 564) = 5315.80, p > .001, SRMR = 0.08, RMSEA = 0.09, TLI = 0.56, CFI = 0.58, AIC = 71917.75$ . Although an improvement from the single-factor analysis, the eight-factor model with the full measure also poorly fit the data,  $\chi^2(917, N = 564) = 3461.90, p > .001, SRMR = 0.08, RMSEA = 0.07, TLI = 0.74, CFI = 0.76, AIC = 70119.84$ .

The reduced measure with 27-items was then tested in a single- and six-factor model. The single-factor model resulted in unacceptable fit,  $\chi^2(324, N = 564) = 2757.96, p > .001, SRMR = 0.09, RMSEA = 0.12, TLI = 0.57, CFI = 0.60, AIC = 42598.16$ . None of the fit indices met the expected cutoff values. In support of hypothesis 1, the six-factor reduced model was the best fit to the data,  $\chi^2(309, N = 564) = 800.93, p > .001, SRMR = 0.05, RMSEA = 0.05, TLI = 0.91, CFI = 0.92, AIC = 40671.14$ . This model met most cutoff criteria for acceptable model fit. Additionally, model fit was improved from the full measure, single-factor ( $\chi^2_{diff} = 4514.86, df_{diff} = 636$ ) and eight-factor model ( $\chi^2_{diff} = 2660.96, df_{diff} = 608$ ). Overall, CFA results in Study 2 confirm Hypothesis 1 and the resultant six-factor structure from Study 1.

## **STUDY 3: VALIDITY EVIDENCE**

### **Methods**

To better understand WLBM, Study 3 gathered validity evidence by starting to build a nomological network. First, to provide evidence of construct validity, the relationship between WLBM and other work-family variables was examined (Cronbach & Meehl, 1955). Previous researchers have linked boundary management with work and family segmentation, as both are related theoretically through boundary theory. An individual who prefers segmentation will enact in behaviors to separate work and family domains (Carlson et al., 2016). WLBM should show convergent validity with work and life segmentation, and thus is hypothesized to be related to this construct.

Segmentation research has revealed an interesting relationship with satisfaction outcomes. Kreiner (2006) found that the lowest scores on segmentation preferences and supplies actually led to the highest level of job satisfaction, but also found that high job satisfaction when employee preference for segmentation fit the amount of resources organizations provided. Carlson and colleagues (2016) also found most components of their boundary management measure to be significantly related to work and family satisfaction. Similarly, WLBM is expected to be related to work satisfaction. Overall, WLBM should show a stronger correlation with segmentation over satisfaction, as they are more similar conceptually and theoretically.

### **Procedure**

Participants were recruited through Amazon's Mechanical Turk (MTurk) for a two-wave study. The surveys were created using Qualtrics, the first containing WLBM and second containing outcome measures. The first page informed participants of the purpose, expected response time, and \$2.50 USD compensation paid to their Amazon account for completing the



first survey, and \$2.00 after the second survey. Eligible participants, with an approval rating above 95%, were required to be over 18 years of age, reside in the United States, and work at least 35 hours per week. After affirmative responses to these questions, the remainder of the items were available. Consistent with previous studies, insufficient effort responding items were interspersed throughout. Response sets that fail one or more checks were removed to strengthen data quality. Participants successfully completing the first survey were invited back via MTurk email with a link to the second survey.

### **Participants**

A total of 1114 participants completed the first survey. One hundred and ninety-five were excluded due to missing MTurk ID or failing more than one insufficient effort responding item. A total of 704 participants completed the second survey, 68 were removed due to missing MTurk ID or failing more than one insufficient effort responding item. Survey 1 and 2 were then merged, resulting in an additional 19 unmatched response sets and a total of 617 participants responding to both surveys to be used in analysis.

Of the 617 retained participants, 40% ( $n = 247$ ) were male and 60% ( $n = 370$ ) were female. Participants' race/ethnicity was 80.2% ( $n = 495$ ) Caucasian/White (Non-Hispanic), 7.0% ( $n = 43$ ) African American/Black, 6.2% ( $n = 38$ ) Asian American/Pacific Islander, 4.7% ( $n = 29$ ) Hispanic, 0.5% ( $n = 9$ ) Native American, and 1.5% ( $n = 9$ ) specifying other. Most participants were married/living as married, 56.6% ( $n = 349$ ) others were single (32.4%,  $n = 200$ ) or separated/divorced/widowed (11%,  $n = 68$ ). The average age was 37.94 ( $SD = 10.34$ ). The highest education attained was 44.1% Bachelor's ( $n = 272$ ), 26.4% ( $n = 163$ ) some college, and 14.9% ( $n = 92$ ) Master's. On average, participants worked 42.27 hours per week ( $SD = 4.89$ ).

### **Measures**

Appendix B contains a complete list of items included in Study 3.

**WLBM.** The WLBM measure developed by McDowall and Lindsay (2014) and adapted in Study 1 and 2 was used in Study 3. Participants were instructed to rate how effective each of the behaviors are at helping them manage work and family. Responses were measured on a 5-point scale: do not use (1), ineffective (2), slightly effective (3), quite effective (4), extremely effective (5). An example behavior is, “Scheduling in time for activities that are important.” Cronbach’s alpha for the full scale was .91, and for each of the six subscales as follows: .84, .86, .84, .82, .80, .88.

**Segmentation/Integration.** The measure of segmentation developed by Kreiner (2006) will be adapted for Study 3. Kreiner’s measure was adapted to capture: work segmentation/integration preference, family segmentation/integration preference, work segmentation/integration enactment, and family segmentation/integration enactment. This adaptation captures the bi-directional nature of work and family segmentation/integration preference parallel with recent research confirming the two distinct factors (Methot & LePine, 2016). Furthermore, the extent to which someone prefers to integrate/segment and the extent to which they can employ this preference are likely distinct, necessitating the measurement of preference versus enactment. An example work segmentation preference is, “I like to be able to leave work behind when I go home.” A parallel item for family segmentation preference is, “I like to be able to leave home behind when I go to work.” An example of work integration enactment is, “I am unable to mentally leave work behind when I go home.” A parallel item for family integration enactment is, “I am unable to mentally leave home behind when I go to work.” Overall, the 16 items measure 4 facets of segmentation/integration (i.e., work, family, preference, enactment). Responses are rated on a 1 (*strongly disagree*) to 7 (*strongly agree*)

scale. See Figure 1 for a visual representation. Cronbach's alpha were as follows: work segmentation/integration preference (.94), family segmentation/integration preference (.90), work segmentation/integration enactment (.94), and family segmentation/integration enactment (.91).

**Role Conflict.** A widely-used measure of role conflict was used, containing three items developed by (Rizzo, House, & Lirtzman, 1970). Respondents rated the level of agreement with each statement on a 1 (*strongly disagree*) to 5 (*strongly agree*) Likert-type scale. An example item is, "I receive incompatible requests from two or more people." Cronbach's alpha was .81.

**Work Satisfaction.** A three-item measure of job satisfaction developed by Cammann, Fichman, Jenkins, and Klesh (1983) was used. Each item was rated on a Likert-type scale from 1 (*strongly disagree*) to 7 (*strongly agree*). An example item is, "I enjoy my job." Cronbach's alpha was .96.

**Demographics.** A complete list of demographics can be found in Appendix B, including hours worked per week, marital status, job family, race, sex, education, income. Response quality was bolstered with insufficient effort responding items (e.g., Please choose number 1) interspersed throughout the survey. Response sets failing one or more of these items were omitted from analyses.

## Results

First, a CFA was conducted to ensure segmentation/integration is, in fact, comprised of four distinct factors. The four-factor model was an acceptable fit to the data,  $\chi^2(98, N = 617) = 508.15, p > .001, SRMR = 0.05, RMSEA = 0.08, TLI = 0.94, CFI = 0.95$ . Correlations between all study variables can be found in Table 5. Surprisingly, WLBM was not correlated to work or family segmentation/integration preference, only enactment. Thus, preference is omitted from

subsequent hypothesis testing, which examined work and family segmentation/integration enactment, role conflict, and work satisfaction. Also contrary to the assumption that WLBM is more closely related to segmentation/integration and thus has a stronger relationship than WLBM and work satisfaction, the correlation between WLBM and work satisfaction was higher,  $r = .33, p < .05$ . All analyses included a visual examination of normality, linearity, and homoscedasticity graphs, as well as the variance inflation factor values for multicollinearity. None of these regression assumptions appeared to be violated.

Hypothesis 2 was tested using regression analyses in IBM SPSS Statistics Version 22 with WLBM as the predictor. In the first step, related control variables were entered. Because family segmentation/integration enactment was significantly correlated to marital status,  $r(617) = .15, p < .01$ , and gender,  $r(617) = .14, p < .01$ , each of these demographic variables were used as controls in the subsequent analysis (Becker, 2005). Bonferroni correction was used to reduce familywise Type I error.

Hypothesis 2 was partially supported, WLBM significantly predicted work and family segmentation/integration enactment, role conflict, and work satisfaction. Specifically, WLBM predicted a significant amount of variance in work segmentation/integration enactment,  $F(1, 615) = 39.36, p < .001, R^2 = .06$ , and was significantly related,  $\beta = -.25, p < .001$ . In the parallel family domain, WLBM also predicted family segmentation/integration enactment. Because marital status and gender were related to this facet of segmentation/integration enactment, they were entered as control in step 1 of the regression,  $F(2, 614) = 12.79, p < .001, R^2 = .04$ . Marital status and gender were moderately, significantly related to family segmentation/integration enactment,  $\beta = .15, p < .001, \beta = .13, p < .01$ , respectively. Then WLBM was entered in step 2,

$F(3, 613) = 10.79, p < .001, R^2 = .05$ , and had a significant relationship with family segmentation/integration enactment,  $\beta = -.25, p < .001$ .

Next, the regression analysis revealed WLBM was a significant predictor of work segmentation/integration preference,  $F(1, 615) = 3.84, p = .05, R^2 = .01$ . Although significant, the relationship was weak,  $\beta = .08, p = .05$ . A subsequent regression analysis revealed WLBM was not a significant predictor of family segmentation/integration preference,  $F(1, 615) = 1.95, p = .16$ , and no significant relationship existed,  $t = 1.40, p = .16$ . Alternatively, WLBM was related to role conflict,  $\beta = -.11, p < .01$ , and predicted a statistically significant amount of variance,  $F(1, 615) = 7.98, p < .01, R^2 = .01$ . Finally, WLBM predicted the largest amount of variance in work satisfaction,  $F(1, 615) = 75.81, p < .001, R^2 = .11$ , with a moderately strong relationship,  $\beta = .33, p < .001$ . These results generally support Hypothesis 2, WLBM is a viable predictor of the hypothesized variables, except family segmentation/integration preference, the results of which are further explored in Study 4.

## **STUDY 4: LONGITUDINAL MEDIATION**

### **Methods**

To build on Study 3, the relationships between WLBM and various facets of segmentation/integration and satisfaction were examined longitudinally. Recent research on boundary management has shown aspects of boundary management mediate the relationship between segmentation preference and work and family satisfaction (Carlson et al., 2016). In the past, researchers have obtained varying results when examining integration. Based on the greedy role perspective, where one role overtakes the resources for another (Glavin & Schieman, 2012), integration may be due to the constant needs of ones work or family role. On the other hand, based on the flexible resource perspective (Glavin & Schieman, 2012), integration may allow for

resources from different roles to be more flexibly applied to respond to competing demands. For instance, the WLBM tactic of setting a clear boundary between work and home would explain the relationship between segmentation enactment and satisfaction. However, someone who prefers integration would not employ this tactic, making WLBM less likely to explain the relationship between integration preference and enactment and satisfaction. To help explain the mixed segmentation/integration results in the literature, WLBM may explain the differential effects of this predictor on satisfaction.

Satisfaction is a commonly used outcome related to boundary management and segmentation/integration (Carlson et al., 2016; Kreiner, 2006). One study found work-family enrichment, when experiences in one role increase performance in another, mediated the relationship between permeability preference and satisfaction, as well as between permeability supplies and satisfaction. The authors recommend this relationship be examined longitudinally, an aim of the current study (Daniel & Sonnentag, 2016). Due to the nature of mediation as a casual process (Kenny, 2014), longitudinal data collection is imperative to draw accurate conclusions (Collins, Graham, & Flaherty, 1998; MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002; Maxwell & Cole, 2007). Previous levels of the variables must also be controlled for to more accurately predict true values (Selig & Preacher, 2009). Thus, Study 4 required three time points of data collection, which included all variables at each time point. This rigorous data collection and analysis provided further insight into the role of WLBM.

## **Procedure**

Participants continued to be recruited through Amazon's Mechanical Turk (MTurk) for a three-wave survey. All surveys were created using Qualtrics. The first survey informed participants of the purpose, expected response time, and \$1.50 USD compensation paid to their

Amazon account after completing the survey. Eligible participants, with an approval rating above 95%, were required to be over 18 years of age, reside in the United States, and work at least 20 hours per week. After affirmative responses to these questions, the remainder of the items were available. One month after the successful completion of the first survey, participants were emailed through Amazon using their MTurk ID with the opportunity to complete the second survey. The second survey followed a similar format and participants were compensated \$1.50 USD for their time.

Additionally, five months later, participants successfully completing the second survey were emailed a link to complete the third survey for which they were compensated \$1.50 USD. Lagged effects of depleted resources increase over time (Ford et al., 2014). The extended lag in the final survey allowed the capture of lagged effects of depleted WLBM resources on satisfaction. Demographic questions were included in the first survey, and each survey included all measures to use previous time points as control in mediation analysis (Maxwell & Cole, 2007). Consistent with previous studies, insufficient effort responding items were interspersed throughout. Response sets that failed one or more checks were removed to strengthen data quality.

## **Participants**

A total of 1116 participants started the first survey. Of those, 1056 passed the pre-screen requirements and completed the survey. Another 111 missed one or more insufficient effort responding item and provided accurate MTurk IDs. A total of 945 invites were sent in MTurk to complete the second survey (1 month after the Time 1 survey), and 769 participants began the survey. Of those, 727 completed the survey, but 58 were omitted due to missing more than one insufficient effort responding item. A total of 669 participants successfully completed the second

survey. Another invitation was sent for the third wave (5 months after the Time 2 survey), and 583 began the third survey. Of those, 548 completed the survey and 512 were retained after missing less than one insufficient effort responding item. Finally, data from the three surveys were merged, resulting in 418 useable responses with participants providing an accurate MTurk ID and passing all insufficient effort responding items in all three waves of data collection. Thus, a total of 418 participants with valid Time 1, 2, and 3 responses were retained for subsequent analyses. Although there was a difference in marital status ( $\chi^2(5, N = 418) = 18.57, p < .01$ ), there were no significant differences in most demographics of the original group completing the first survey and the final 418 used for analysis: hours worked per week ( $\chi^2(46, N = 418) = 62.29, p > .05$ ), race ( $\chi^2(6, N = 418) = 6.72, p > .05$ ), gender ( $\chi^2(1, N = 418) = 0.19, p > .05$ ), or education ( $\chi^2(6, N = 418) = 5.21, p > .05$ ).

Of the 418 retained participants, 43.5% ( $n = 182$ ) were male and 56.5% ( $n = 236$ ) were female. Participants' race/ethnicity was 78.2% ( $n = 327$ ) Caucasian/White (Non-Hispanic), 7.9% ( $n = 33$ ) African American/Black, 6.7% ( $n = 28$ ) Asian American/Pacific Islander, 5.5% ( $n = 23$ ) Hispanic, 0.2% ( $n = 1$ ) Native American, and 1.4% ( $n = 6$ ) specifying other. Most participants were married, 47.6% ( $n = 199$ ), or living with a partner, 12.2% ( $n = 51$ ). Others were single (29.9%,  $n = 125$ ) or separated/divorced/widowed (10.3%,  $n = 33$ ). The average age was 37.49 ( $SD = 11.24$ ). The highest education attained was 40.4% Bachelor's ( $n = 169$ ), 23.9% ( $n = 100$ ) no degree, and 16% ( $n = 67$ ) Master's. On average, participants worked 39.76 hours per week ( $SD = 8.74$ ).

## Measures

Appendix C contains a complete list of items included in Study 4.



**WLBM.** The WLBM measure developed by McDowall and Lindsay (2014) and adapted in Study 1 and 2 was also used in Study 4. Participants were instructed to rate how effective each of the behaviors are at helping them manage work and family. Responses were measured on a 5-point scale: do not use (1), ineffective (2), slightly effective (3), quite effective (4), extremely effective (5). An example behavior is, “Scheduling in time for activities that are important.” Cronbach’s alpha for Time 1 and 2 was .94, and .95 at Time 3.

**Segmentation/Integration.** Similar to Study 3, the measure of segmentation/integration developed by Kreiner (2006) was used. The adapted measure in this case captures work segmentation/integration preference, family segmentation/integration preference, work segmentation/integration enactment, and family segmentation/integration enactment to better understand how WLBM mediates the relationship between segmentation/integration and satisfaction. Overall, the 16 items measure 4 facets of segmentation/integration (i.e., work, family, preference, enactment). Responses were rated on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale. Cronbach’s alpha for Time 1, 2, and 3 were as follows: work segmentation/integration preference ( $\alpha = .92, .93, .92$ ), family segmentation/integration preference ( $\alpha = .92, .92, .93$ ), work segmentation/integration enactment ( $\alpha = .91, .94, .94$ ), and family segmentation/integration enactment ( $\alpha = .93, .90, .91$ ).

**Work and Family Satisfaction.** The 5-item Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) was adapted by Grawitch, Maloney, Barber, and Mooshegian (2013) to assess satisfaction with work and nonwork separately. This adaptation more closely resembles the two-domain conceptualization in work-family research. Recent research has even suggested increased satisfaction in the more segmented domain (Methot & LePine, 2016). An example is, “In most ways my work life is close to my ideal.” And “In most ways my nonwork

life is close to my ideal.” Each of the 10 items were rated on a 1 (*strongly disagree*) to 5 (*strongly agree*) Likert-type scale. Cronbach’s alpha for work satisfaction at Time 1 was .93, and .94 at Time 2 and 3. Cronbach’s alpha for family satisfaction at Time 1 was .94, .94 at Time 2, and .91 at Time 3.

**Other items.** A complete list of demographic questions can be found in Appendix C, including those used in the previous surveys. Response quality continued to be bolstered with insufficient effort responding items (e.g., Please choose number 1) interspersed throughout the survey. Again, response sets failing one or more of these items were deleted prior to analysis.

## Results

The means, standard deviations, and correlations between all study variables can be found in Table 6. Variables of interest showed significant relationships, for example at Time 1 between WLBM and work-family segmentation/integration enactment ( $r = .17, p < .001$ ), or WLBM and work satisfaction ( $r = .41, p < .001$ ). Hypotheses 3a-d were tested for mediation in four separate cross-lagged panel models using MPlus (see Figure 2) as outlined by Cole and Maxwell (2003) to test mediational processes in longitudinal designs. The models were constructed with segmentation/integration as the independent variable predicting satisfaction outcomes, and this relationship was hypothesized to be mediated by WLBM. Autoregressive direct paths assume variables at Time 1 predict subsequent Time 2 and 3 constructs, and variability is based on previous levels. Cross-lagged paths estimate the effect of one variable on another after controlling for time. Mediational effects are examined by first estimating the total effect of the independent variable at Time 1 with the dependent variable at Time 3. Then, overall indirect effects are calculated by summing the time-specific effects of the independent variable,

mediator, and dependent variable. After the overall direct effect is calculated, the existence of mediation is calculated with the Sobel test.

First, Hypothesis 3a stated the relationship between work segmentation/integration preference and family satisfaction would be mediated by WLBM (see Figure 3). The model did not appear to fit the data adequately using maximum likelihood estimation,  $\chi^2(5608, N = 418) = 44743.21, p < .001, CFI = .78, TLI = .78, RMSEA = .06, SRMR = .08$ . Table 7 contains a comparison of model fit indices for Hypotheses 3a-d. Time 1 work segmentation/integration preference was not related to Time 2 WLBM,  $\beta = .03, p = ns$ . Also, Time 2 WLBM was not significantly related to Time 3 family satisfaction,  $\beta = .04, p = ns$ . Time 1 work segmentation/integration preference was unrelated to Time 3 family satisfaction,  $\beta = -.05, p = ns$ . Thus, the first conditions outlined by Baron and Kenny (1986) to test mediation were not met. Overall, Hypothesis 3a was not supported.

Next, Hypothesis 3b stated the relationship between family segmentation/integration preference and work satisfaction was hypothesized to be mediated by WLBM (see Figure 4). The model did not fit the data adequately,  $\chi^2(5608, N = 418) = 14118.01, p < .001, CFI = .78, TLI = .77, RMSEA = .06, SRMR = .07$ . Time 1 family segmentation/integration preference was unrelated to Time 2 WLBM,  $\beta = -.02, p = ns$ , and Time 3 work satisfaction,  $\beta = -.04, p = ns$ , failing to satisfy the requirements for further mediation analysis. In this case, Time 2 WLBM was related to work satisfaction,  $\beta = .13, p < .01$ . Overall, mediation was not present, and hypothesis 3b was not supported.

Hypothesis 3c stated the relationship between work segmentation/integration enactment and family satisfaction was mediated by WLBM (see Figure 5). The model did not adequately fit the data,  $\chi^2(5608, N = 418) = 13954.46, p < .001, CFI = .79, TLI = .78, RMSEA = .06, SRMR =$

.08. Time 1 work segmentation/integration enactment was related to Time 2 WLBM,  $\beta = -.13$ ,  $p < .001$ , but Time 2 WLBM was unrelated to Time 3 family satisfaction,  $\beta = .02$ ,  $p = ns$ . Time 1 work segmentation/integration enactment was also unrelated to Time 3 family satisfaction,  $\beta = -.05$ ,  $p = ns$ . Overall, mediation was not present, and hypothesis 3c was not supported.

Finally, hypothesis 3d stated the relationship between family segmentation/integration enactment and work satisfaction would be mediated by WLBM (see Figure 6). The model did not adequately fit the data,  $\chi^2(5608, N = 418) = 14016.59$ ,  $p < .001$ , CFI = .78, TLI = .77, RMSEA = .06, SRMR = .07. Time 1 family segmentation/integration enactment was unrelated to Time 2 WLBM,  $\beta = -.03$ ,  $p = ns$ , and Time 3 work satisfaction,  $\beta = .03$ ,  $p = ns$ . Time 2 WLBM was significantly related to Time 3 work satisfaction,  $\beta = .12$ ,  $p < .01$ . Mediation was not present. Overall, hypothesis 3d was not supported.

## CHAPTER 3

### Discussion

A main goal was to examine and validate WLBM, a fresh perspective on the work-life interface based on boundary theory. This goal was reached by identifying specific behaviors individuals employ to meet competing work-family demands, and grouping those behaviors into competencies that may be used in future research and training assessment to promote WLB. Instead of continuing to examine whether segmentation or integration leads to desirable outcomes, WLBM offers a middle ground solution by identifying behavioral strategies that work for both groups. Linking WLBM to previous work-family research and satisfaction outcomes helped further theory and understanding of an additional WLB resource.

### Study 1 and 2

The original conceptualization of WLBM by McDowall and Lindsay (2014) was assessed in the first study. Twenty-seven related behaviors that best capture WLBM were grouped into the following six categories: boundary awareness, clarifying boundaries, organizing, framing, scheduling, partnering. One challenge uncovered by the factor analytic results was the varying interpretation of ambiguous wording or similar wording interfering with the ability of the item to adequately capture the corresponding competency. The use of common words such as negotiating, or ambiguous phrasing such as ring-fencing, was reduced. The original eight categories were condensed and relabeled for clarity and to strengthen the measure. For instance, the second group called boundary management was relabeled to clarifying boundaries as the full measure is capturing different aspects of boundary management. The shortened version facilitates administration, reduces participant fatigue, and represents distinct competencies. A limitation of the ability to capture all aspects of WLBM was starting with predetermined questions from previous research rather than deducting new behaviors. Thus, future research may consider additional aspects of boundary management to be included. For example, making lifestyle changes was originally included. Although changing jobs may not be a common strategy, there are likely other lifestyle change behaviors to consider.

The second study confirmed the current conceptualization accurately captured WLBM. The behaviors continued to represent the six identified competencies. Strengths of these studies include large and diverse sample sizes in multiple samples to provide confidence in the results. However, the sample was limited by those represented having access to internet as the survey was distributed online. Although MTurk respondents are representative of the population (Michel, O'Neill, Hartman, & Lorys, 2017), further confirmation on cross-cultural and understudied groups is recommended.

Regarding practical implications, the original aim of the development of WLBM was to provide a competency-based framework to inform WLB interventions (McDowall & Lindsay, 2014). Although less behaviors are identified in the current conceptualization, these behaviors more accurately capture the facets of WLBM and can guide efforts in developing WLB trainings. The employee can identify their most and least effective behaviors, and possibly some they have not previously considered, to achieve WLB. Training may include round-table discussions or goal setting to increase participants' WLB resources.

### **Study 3**

After confirming how to measure WLBM, the third study aimed to provide validation by linking it to previously studied work-family variables. Specifically, work-family researchers have recently considered how boundaries are constructed, these boundaries being thin or thick, asymmetrical, permeable, and how they define individual roles (Allen et al., 2014). A strength of this study is the use of multiple time points to reduce error, with WLBM measured at a separate time than the outcomes. WLBM was significantly related to work and family segmentation/integration enactment, role conflict, and work satisfaction. However, in this study, no relationship was found between work and family segmentation/integration preference. A few explanations are offered.

First, WLBM captures behaviors that can be found in both integrators and segmenters. For instance, asking for help when needed may be used by both groups at a different rate. Integrators may ask for help with work at home, and segmenters may ask for help picking up children from school. Both are engaging in the behavior, or are equally as likely to not engage in the behavior. Second, the segmentation/integration preference measure used conceptualized segmentation/integration at two separate ends of the same spectrum. For example, answering

affirmatively to “I don’t like to have to think about work while I’m at home” would indicate segmentation, but may not indicate a lack of integration. Some aspects of each role in the work and family domain may be more separated than others, so high segmentation does not exclude integration. While the adapted measure of segmentation/integration captured both preference and enactment, and was applied to the work and family domains, a more thorough assessment of the components of this construct is a viable future research outlet.

The conflation of work and family segmentation/integration preference and enactment is the strength of WLBM. Although grounded in segmentation theory, the term may be used regardless of continuum or preference. Interestingly, work and family segmentation/integration enactment, meaning whether the preference can be acted upon, was related to WLBM. Because both are actions, they are more similar in nature as the significant relationships would suggest. Because most measures are based on attitudes or perceptions, future research should continue to validate WLBM by linking it to traditional work-family variables such as balance, conflict, and enrichment. Ideally, WLBM will show stronger convergent validity with these more traditional conceptualizations of the work-family interface. As further validity evidence, the effect of WLBM on other outcomes such as stress, performance, and well-being may be examined. Additionally, comparisons of partners WLBM strategies may be fruitful. Partners employing similar WLBM behaviors may experience increased synergistic WLB outcomes.

#### **Study 4**

The last study aimed to use WLBM to explain the inconstant relationship between segmentation/integration and satisfaction over a 6-month time period in a 3 wave study. A strength of the research was the rigorous design and data collection over three waves to examine longitudinal mediation, one of the first of its kind in the current work-family literature.

Longitudinal data allows for stronger conclusions, especially when examining mediation, giving confidence in the results. Furthermore, pioneering online data collection methods such as MTurk is a useful avenue for future researchers to consider when attempting to gather large samples of multi-wave data. A drawback of the cross-lagged panel model approach used is the possibility of omitted paths such as alternate indirect effects, and focus on autoregressive paths rather than cross-lagged regression paths, measuring a change in inter-individual differences rather than intra-individual, or within a given person (Selig & Preacher, 2009). WLBM is not expected to have large variability over the time assessed, but may change dramatically when more effective behaviors are needed as roles increase throughout the life span. Relatedly, the time lag must be carefully selected such that mediation unfolds, but is not too long for the effect to disappear. A one- and five-month period may be an unsuitable lag to detect mediation effects, and little theoretical guidance exists to choose this important component of the model. Work-family research should continue longitudinal and event-based studies to guide future decisions on the matter.

While the proposed model was not supported, implications for future research can be drawn. Specifically, WLBM did not mediate the cross-domain relationships examined. The work segmentation/integration preference and family satisfaction relationship, then the family segmentation/integration preference with work satisfaction relationship was expected to be mediated by WLBM. Again, the construct of segmentation/integration assumes those answering affirmatively prefer segmentation, while respondents not ascribing to keeping work life at work or leaving work behind would be considered integrators. As previously mentioned, this conceptualization may be problematic and should be further scrutinized. Interestingly, segmentation/integration enactment and preference were weakly related to satisfaction outcomes.



This finding helps explain the variability in previous research findings, as lack of power or low sample size may not be robust enough to detect the relationship. WLBM had a stronger relationship with both work and family satisfaction outcomes, providing evidence towards the construct as a useful antecedent to satisfaction for future research.

Second, the work segmentation/integration enactment with family satisfaction and family segmentation/integration with work satisfaction relationship was expected to be explained in part by WLBM. Interestingly, both work and family segmentation/integration enactment had a consistent negative relationship with work satisfaction, while its relationship with family satisfaction was mixed. These results mirror the differential results in previous work-family studies, and continue to be a challenge to explain. For example, it makes sense that employees who think about work while at home may have lower work satisfaction, but it is unclear why family satisfaction would not be impacted. Based on the previously mentioned perspectives of flexible-resources versus greedy-roles, we would expect to see a consistent negative or positive relationship (i.e., being distracted by work at home takes away from the ability to meet family role demands, or being able to work flexibly from home allows for the ability to meet family demands). An alternate, poignant explanation for satisfaction outcomes was offered by Shockley and Singla (2011).

Their meta-analysis compared the domain specificity model used in the current paper with a less popular source attribution perspective. While the domain specificity model is supported in examining stressors, where work stressors lead to interference of the family domain, it may be less useful for explaining affective domain-specific consequences. Alternatively, the source attribution posits that individuals will attribute blame to the same domain as the problem area, reducing satisfaction in that area. For example, an employee required to work late will

experience lowered work satisfaction, not family satisfaction. Similar to the current study, Shockley and Singla also found less support for satisfaction outcomes in the family domain. This model may be a better explanation of how segmentation/integration preference and enactment affects satisfaction outcomes. Beyond the unexplained variability in outcomes in the segmentation/integration literature, WLBM allows researchers to examine effective behaviors on both ends of the spectrum. Future research should further explore the WLBM-satisfaction relationship and other positive work-family outcomes from a source attribution perspective.

### **Conclusion**

In sum, WLBM is a useful addition to the work-family literature and further border and boundary theories. Shifting to a focus on boundary management behaviors opens a new avenue to explore how individuals meet, manage, and achieve role-related demands at home and at work by constructing boundaries. Additional validity evidence beyond segmentation/integration, role conflict, and satisfaction should be gathered to further the nomological network of WLBM and explore relationships with traditional work-family variables. Finally, although WLBM did not explain the segmentation/integration and satisfaction relationship, the relationship with work and family satisfaction is promising for future exploration, along with other desirable outcomes.

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Table 1

*Study 1 Factor Means, Standard Deviations, and Intercorrelations*

Factor	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1	3.86	.63						
2	3.77	.82	.60*					
3	3.50	1.06	.43*	.46*				
4	3.62	.86	.58*	.54*	.50*			
5	3.11	1.10	.30*	.25*	.38*	.35*		
6	3.47	1.15	.40*	.33*	.36*	.40*	.36*	

Note:  $N = 527$ ,  $*p < .01$ .

Table 2

*Study 1 Item Loadings and Communalities*

	Loading	Communalities
<b>Factor 1. Boundary Awareness (<math>\alpha = .82</math>)</b>		
1. Keeping work in perspective	.37	.36
2. Avoiding being a martyr to the job	.48	.23
3. Recognizing when you have done enough	.61	.35
4. Valuing own worth in the workplace	.50	.37
5. Not feeling guilty about taking time owed	.46	.28
6. Having the mind-set that you are in control	.42	.35
7. Refocusing work-life balance priorities at different life stages	.52	.50
8. Scheduling in time for activities that are important	.58	.48
9. Asking for help when needed	.40	.36
<b>Factor 2. Clarifying Boundaries (<math>\alpha = .84</math>)</b>		
10. Setting a clear boundary between work and home	-.72	.63
11. Having clear identity definition between work and home	-.70	.62
12. Consciously limiting time talking about work at home	-.70	.47
13. Setting boundaries with others at home as well as at work	-.58	.53
14. Keeping work separate from friends	-.52	.29
15. Forcing self to make time for home	-.45	.39
<b>Factor 3. Organizing (<math>\alpha = .84</math>)</b>		
16. Using effective filing systems to organize workflow	-.83	.60
17. Setting up systems to streamline day to day life administration	-.76	.62
18. Structuring physical office space to give control over workflow	-.66	.49
<b>Factor 4. Framing (<math>\alpha = .76</math>)</b>		
19. Thinking about work-life balance as a challenge not a problem	-.56	.43
20. Consciously managing work-life balance on a day to day basis	-.66	.48
21. Creatively devising solutions appropriate for work-life balance dilemmas	-.56	.47
<b>Factor 5. Scheduling (<math>\alpha = .76</math>)</b>		
22. Recording extra time work and ensuring to take time in lieu	-.73	.48
23. Proactively requesting shifts that suit home needs	-.55	.35
24. Offsetting overtime with days in lieu	-.83	.50
<b>Factor 6. Partnering (<math>\alpha = .83</math>)</b>		
25. Cooperating with partner to juggle work/family demands	.75	.53
26. Allowing partner to proactively organize home life to ensure balance	.82	.55
27. Matching time off with that of partner	.76	.49

Note:  $N = 527$ .

Table 3

*Study 1 Item Means, Standard Deviations, Skewness, and Kurtosis*

	<i>M</i>	<i>SD</i>	Skewness	Kurtosis
<b>Factor 1. Boundary Awareness</b>				
1. Keeping work in perspective	3.94	.80	-.86	1.46
2. Avoiding being a martyr to the job	3.70	1.11	-.65	-.22
3. Recognizing when you have done enough	3.90	.94	-.66	-.07
4. Valuing own worth in the workplace	3.94	.90	-.68	.22
5. Not feeling guilty about taking time owed	3.78	1.13	-.63	-.52
6. Having the mind-set that you are in control	3.76	.99	-.68	.14
7. Refocusing work-life balance priorities at different life stages	3.84	.99	-.69	.13
8. Scheduling in time for activities that are important	4.04	.93	-.85	.30
9. Asking for help when needed	3.89	.99	-.63	-.21
<b>Factor 2. Clarifying Boundaries</b>				
10. Setting a clear boundary between work and home	4.01	1.04	-.96	.33
11. Having clear identity definition between work and home	3.95	1.06	-.91	.26
12. Consciously limiting time talking about work at home	3.64	1.15	-.62	-.36
13. Setting boundaries with others at home as well as at work	3.70	1.07	-.62	-.22
14. Keeping work separate from friends	3.54	1.18	-.51	-.58
15. Forcing self to make time for home	3.76	1.07	-.77	.16
<b>Factor 3. Organizing</b>				
16. Using effective filing systems to organize workflow	3.56	1.21	-.70	-.30
17. Setting up systems to streamline day to day life administration	3.57	1.20	-.71	-.27
18. Structuring physical office space to give control over workflow	3.36	1.24	-.54	-.63
<b>Factor 4. Framing</b>				
19. Thinking about work-life balance as a challenge not a problem	3.51	1.11	-.52	-.34
20. Consciously managing work-life balance on a day to day basis	3.77	.989	-.68	.18
21. Creatively devising solutions appropriate for work-life balance dilemmas	3.60	1.05	-.69	.19

Factor 5. Scheduling				
22. Recording extra time work and ensuring to take time in lieu	3.07	1.36	-.22	-1.14
23. Proactively requesting shifts that suit home needs	3.31	1.32	-.56	-.82
24. Offsetting overtime with days in lieu	2.94	1.35	-.14	-1.17
Factor 6. Partnering				
25. Cooperating with partner to juggle work/family demands	3.57	1.29	-.75	-.43
26. Allowing partner to proactively organize home life to ensure balance	3.36	1.34	-.59	-.81
27. Matching time off with that of partner	3.47	1.37	-.63	-.78

Note:  $N = 527$ . All standard Errors for skewness were .106 and kurtosis .212.

Table 4

*Comparison of WLBM Factor Structures*

	$\chi^2$	<i>df</i>	$\chi^2_{diff}$	<i>df</i> <sub>diff</sub>	<i>RMSEA</i>	<i>CFI</i>	<i>TLI</i>	<i>SRMR</i>	<i>AIC</i>
1 Factor Model (45 items)	5315.80	945	-	-	0.09	0.58	0.56	0.08	71917.75
8 Factor Model (45 items)	3461.90	917	1853.90	28	0.07	0.76	0.74	0.08	70119.84
1 Factor Model (27 items)	2757.96	324	703.94	593	0.12	0.60	0.57	0.09	42598.16
6 Factor Model (27 items)	800.94	309	1957.02	15	0.05	0.92	0.91	0.05	40671.14

Note:  $N = 564$ .

Table 5

*Bivariate Correlations Between All Study 3 Variables*

	<i>Mean</i>	<i>Std Dev</i>	1. WLBM	2. WSIE	3. FSIE	4. WSIP	5. FSIP	6. Role Conflict	7. Work Satisfaction
1. WLBM	3.53	.68							
2. WSIE	3.43	1.82	-.25*						
3. FSIE	3.43	1.62	-.11*	.37*					
4. WSIP	5.97	1.28	.08*	-.27*	-.11*				
5. FSIP	4.99	1.54	.06	-.06	-.32*	.17*			
6. Role Conflict	2.38	1.12	-.11*	.27*	.19*	.15*	-.04		
7. Work Satisfaction	4.89	1.81	.33*	-.08	-.07	-.23*	.05	-.42*	

Note: WLBM = Work-Life Boundary Management, WSIE = Work Segmentation/Integration Enactment, FSIE = Family Segmentation/Integration Enactment, WSIP = Work Segmentation/Integration Preference, FSIP = Family Segmentation/Integration Preference,  $N = 617$ ,  $*p < 0.01$ .

Table 6

*Bivariate Correlations Between All Study 4 Variables*

	<i>Mean</i>	<i>Std Dev</i>	1	2	3	4	5	6	7	8	9
1. WLBM T1	3.42	.74									
2. WSIE T1	6.00	1.19	.17**								
3. FSIE T1	4.86	1.52	.11*	.18**							
4. WSIP T1	3.48	1.64	-.38**	-.29**	-.07						
5. FSIP T1	3.81	1.48	-.11*	-.01	-.40**	.33**					
6. Work Satisfaction T1	3.33	1.02	.41**	-.12*	.09	-.26**	-.22**				
7. Family Satisfaction T1	3.54	1.09	.46**	.11*	-.14**	-.34**	-.10	.56**			
8. WLBM T2	3.45	0.75	.79**	.17**	.08	-.41**	-.12*	.41**	.44**		
9. WSIE T2	6.04	1.18	.20**	.69**	.13**	-.24**	.01	-.12*	.15**	.21**	
10. FSIE T2	4.92	1.52	.07	.08	.76**	-.12**	-.42**	.12*	-.15**	.10*	.13**
11. WSIP T2	3.47	1.72	-.35**	-.27**	-.10*	.74**	.23**	-.26**	-.34**	-.37**	-.31**
12. FSIP T2	3.81	1.54	-.12*	-.05	-.36**	.26**	.69**	-.21**	-.06	-.16**	-.03
13. Work Satisfaction T2	3.32	1.09	.40**	-.11*	.11*	-.31**	-.24**	.82**	.52**	.43**	-.11*
14. Family Satisfaction T2	3.59	1.09	.47**	.11*	-.13**	-.34**	-.10*	.52**	.87**	.49**	.19**
15. WLBM T3	3.43	0.77	.70**	.14**	.05	-.38**	-.12*	.42**	.47**	.75**	.22**
16. WSIE T3	6.02	1.21	.18**	.70**	.08	-.27**	.04	-.15**	.14**	.17**	.73**
17. FSIE T3	4.94	1.55	.04	.11*	.67**	-.06	-.36**	.11*	-.14**	.06	.10*
18. WSIP T3	3.35	1.69	-.36**	-.24**	-.05	.69**	.18**	-.28**	-.38**	-.40**	-.26**
19. FSIP T3	3.65	1.54	-.08	-.02	-.38**	.24**	.65**	-.21**	-.07	-.17**	-.02
20. Work Satisfaction T3	3.35	1.07	.36**	-.16**	.04	-.26**	-.18**	.76**	.51**	.42**	-.11*
21. Family Satisfaction T3	3.56	1.09	.40**	.05	-.18**	-.33**	-.12*	.51**	.82**	.44**	.12*

Note: T1 = Time 1, T2 = Time 2, T3 = Time 3, WLBM = Work-Life Boundary Management, WSIE = Work Segmentation/Integration Enactment, FSIE = Family Segmentation/Integration Enactment, WSIP = Work Segmentation/Integration Preference, FSIP = Family Segmentation/Integration Preference,  $N = 617$ , \* $p < 0.05$ , \*\* $p < 0.01$ .

Table 6 continued

	10	11	12	13	14	15	16	17	18	19	20	21
1. WLBM T1												
2. WSIE T1												
3. FSIE T1												
4. WSIP T1												
5. FSIP T1												
6. Work Satisfaction T1												
7. Family Satisfaction T1												
8. WLBM T2												
9. WSIE T2												
10. FSIE T2												
11. WSIP T2	-.09											
12. FSIP T2	-.48**	.28**										
13. Work Satisfaction T2	.17**	-.31**	-.26**									
14. Family Satisfaction T2	-.12*	-.32**	-.07	.55**								
15. WLBM T3	.08	-.36**	-.13**	.42**	.49**							
16. WSIE T3	.02	-.29**	.02	-.14**	.13**	.16**						
17. FSIE T3	.72**	-.04	-.35**	.11*	-.13**	.08	.12*					
18. WSIP T3	-.10*	.70**	.19**	-.30**	-.33**	-.44**	-.34**	-.05				
19. FSIP T3	-.45**	.18**	.63**	-.25**	-.11*	-.21**	.04	-.49**	.26**			
20. Work Satisfaction T3	.13**	-.27**	-.20**	.76**	.53**	.48**	-.18**	.07	-.31**	-.27**		
21. Family Satisfaction T3	-.15**	-.36**	-.08	.52**	.83**	.49**	.11*	-.19**	-.34**	-.11*	.56**	

Note: T1 = Time 1, T2 = Time 2, T3 = Time 3, WLBM = Work-Life Boundary Management, WSIE = Work Segmentation/Integration Enactment, FSIE = Family Segmentation/Integration Enactment, WSIP = Work Segmentation/Integration Preference, FSIP = Family Segmentation/Integration Preference,  $N = 617$ , \* $p < 0.05$ , \*\* $p < 0.01$ .



Table 7

*Study 4 Model Fit Comparison*

Model	$\chi^2$	df	CFI	TLI	RMSEA	SRMR
H3a: WSIP, Family Satisfaction	44743.21***	5608	.78	.78	.06	.08
H3b: FSIP, Work Satisfaction	14118.01***	5608	.78	.77	.06	.07
H3c: WSIE, Family Satisfaction	13954.46***	5608	.79	.78	.06	.08
H3d: FSIE, Work Satisfaction	14016.59***	5608	.78	.77	.06	.07

Note: Model was 3 wave cross-lagged panel model with Work-Life Boundary Management as mediator to examine longitudinal mediation. WSIE = Work Segmentation/Integration Enactment, FSIE = Family Segmentation/ Integration Enactment, WSIP = Work Segmentation/Integration Preference, FSIP = Family Segmentation/Integration Preference.

\*\*\*  $p < .001$ .

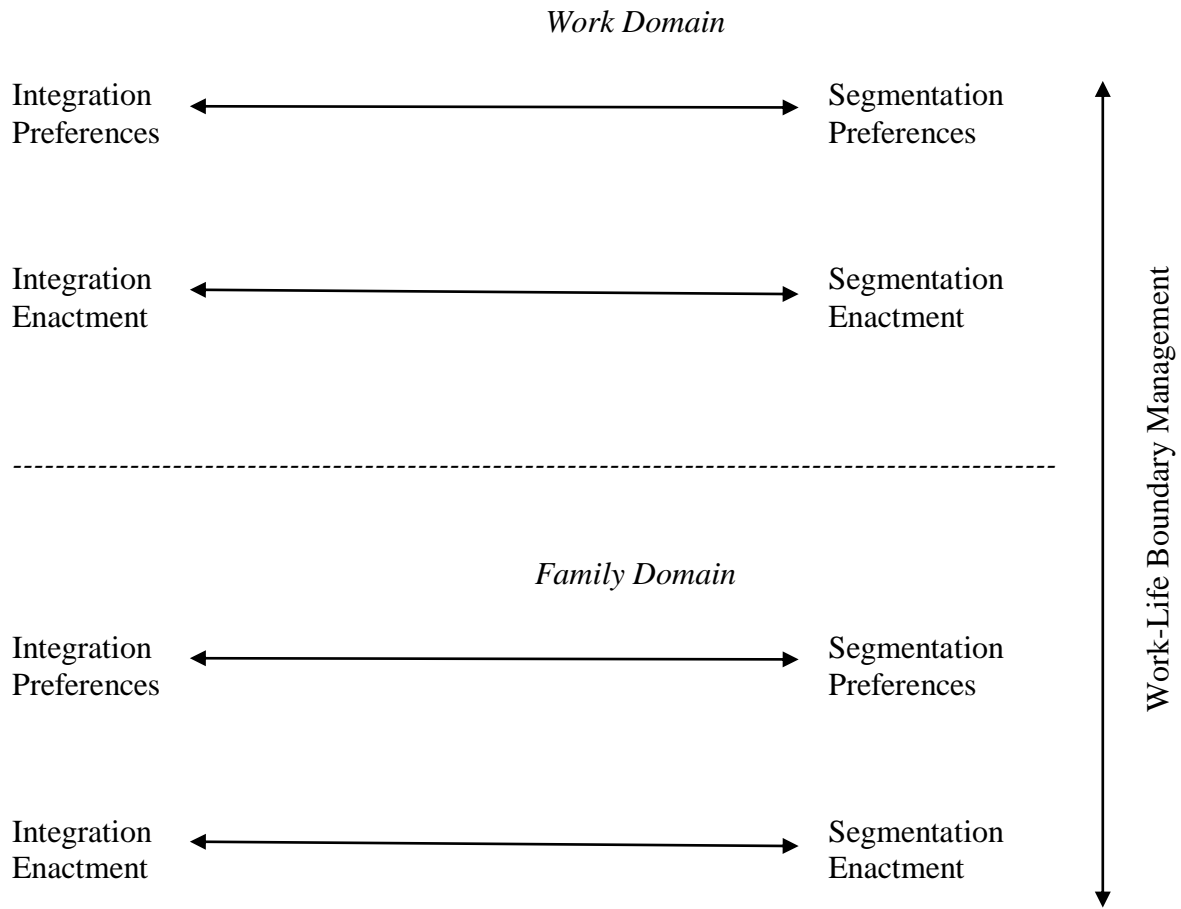


Figure 1. Conceptual model of segmentation/integration used in the current study.

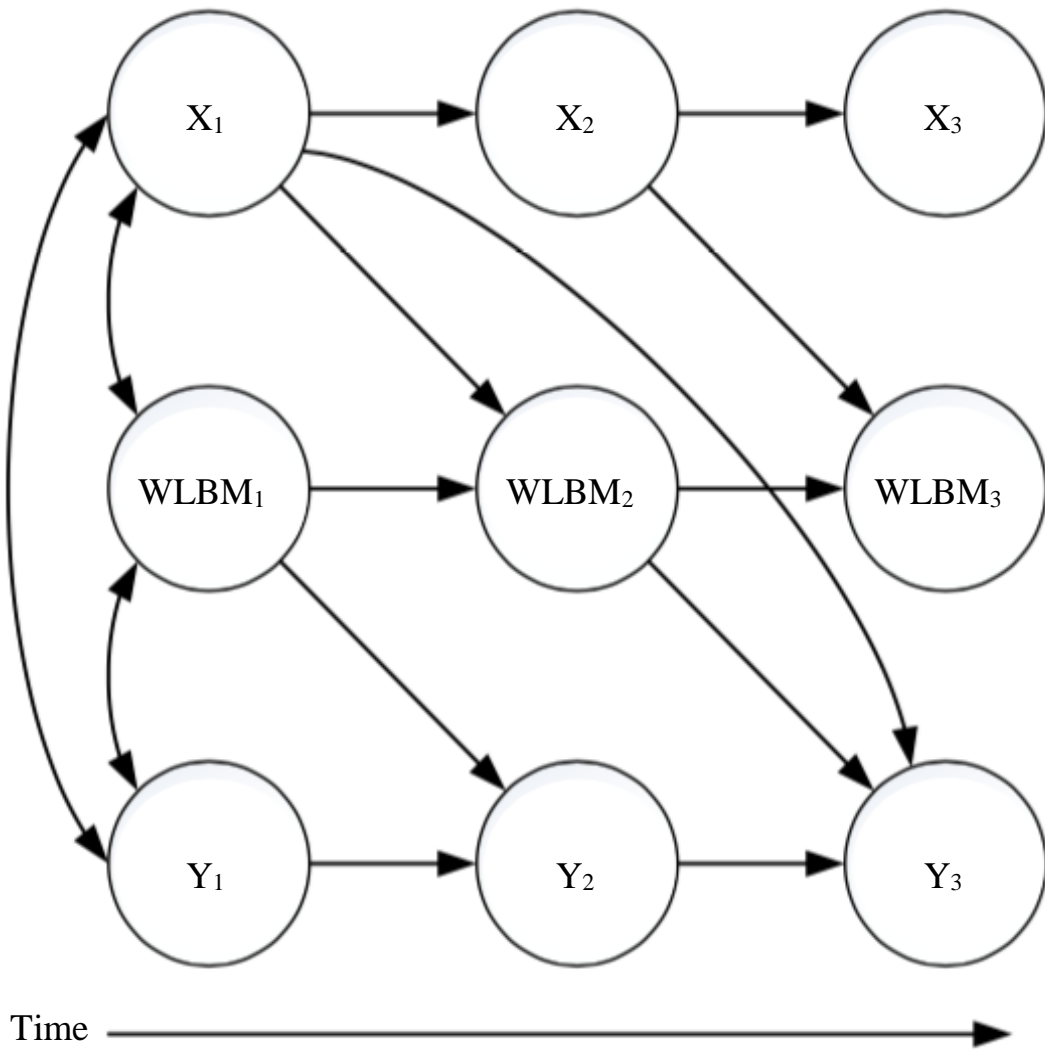


Figure 2. Conceptualization of cross-lagged panel model to test mediation in Hypotheses 4a-d.

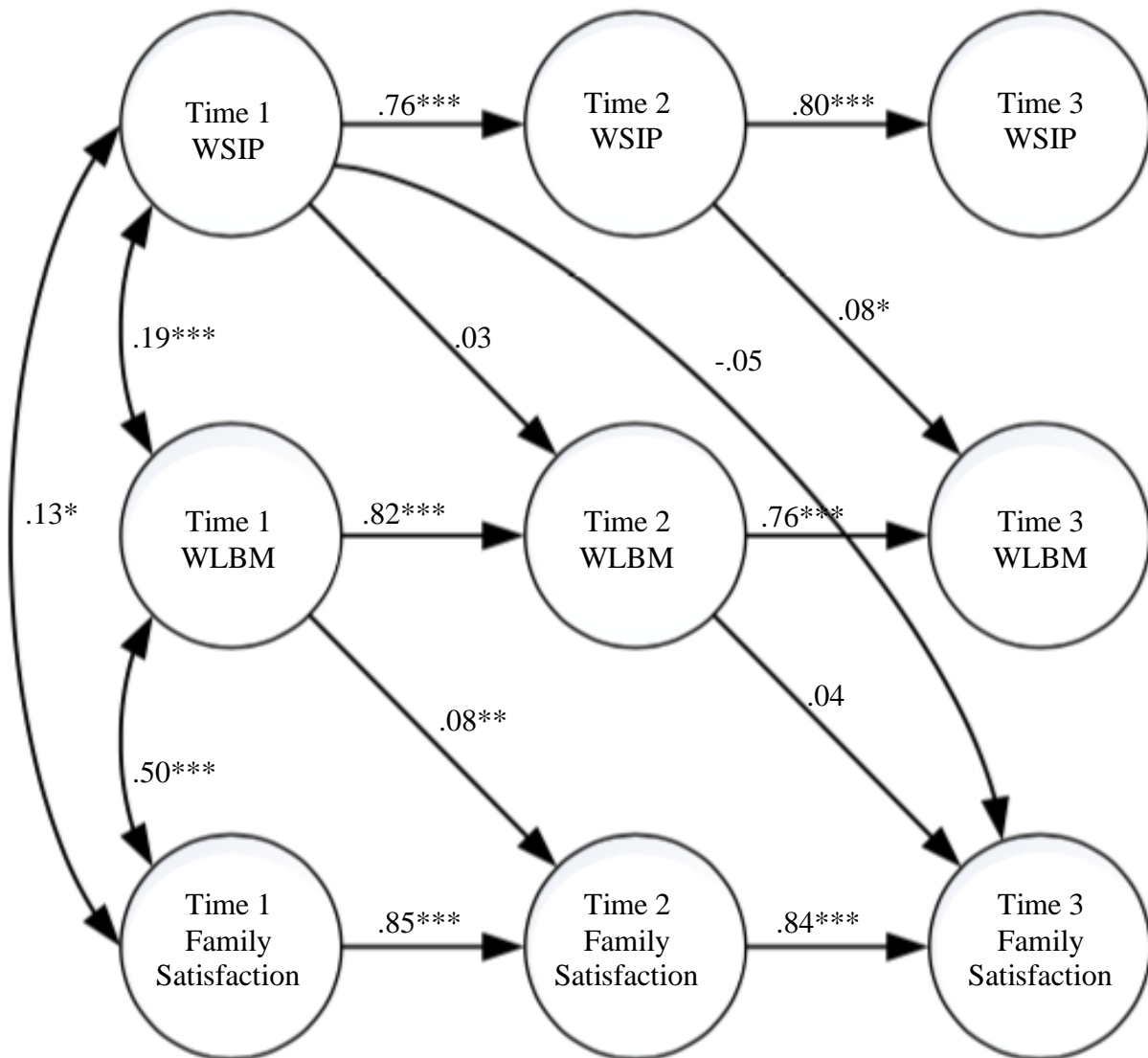


Figure 3. Hypothesis 3a: Longitudinal mediation model of the relationship between work segmentation/integration preference and family satisfaction mediated by work-life boundary management. WSIP = Work Segmentation/Integration Preference, WLBM = Work-Life Boundary Management. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

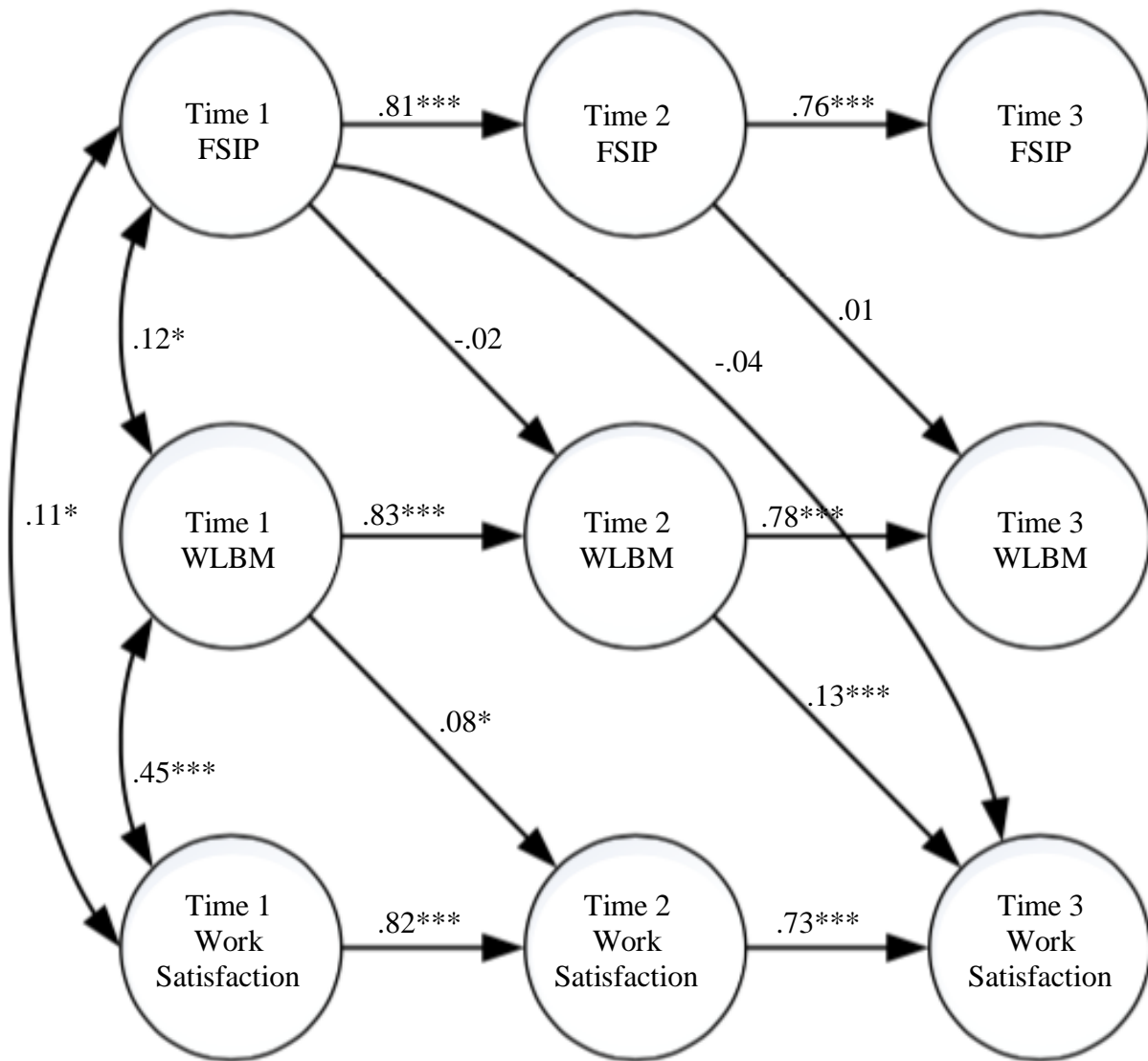


Figure 4. Hypothesis 3b: Longitudinal mediation model of the relationship between family segmentation/integration preference and work satisfaction mediated by work-life boundary management. FSIP = Family Segmentation/Integration Preference, WLBM = Work-Life Boundary Management. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

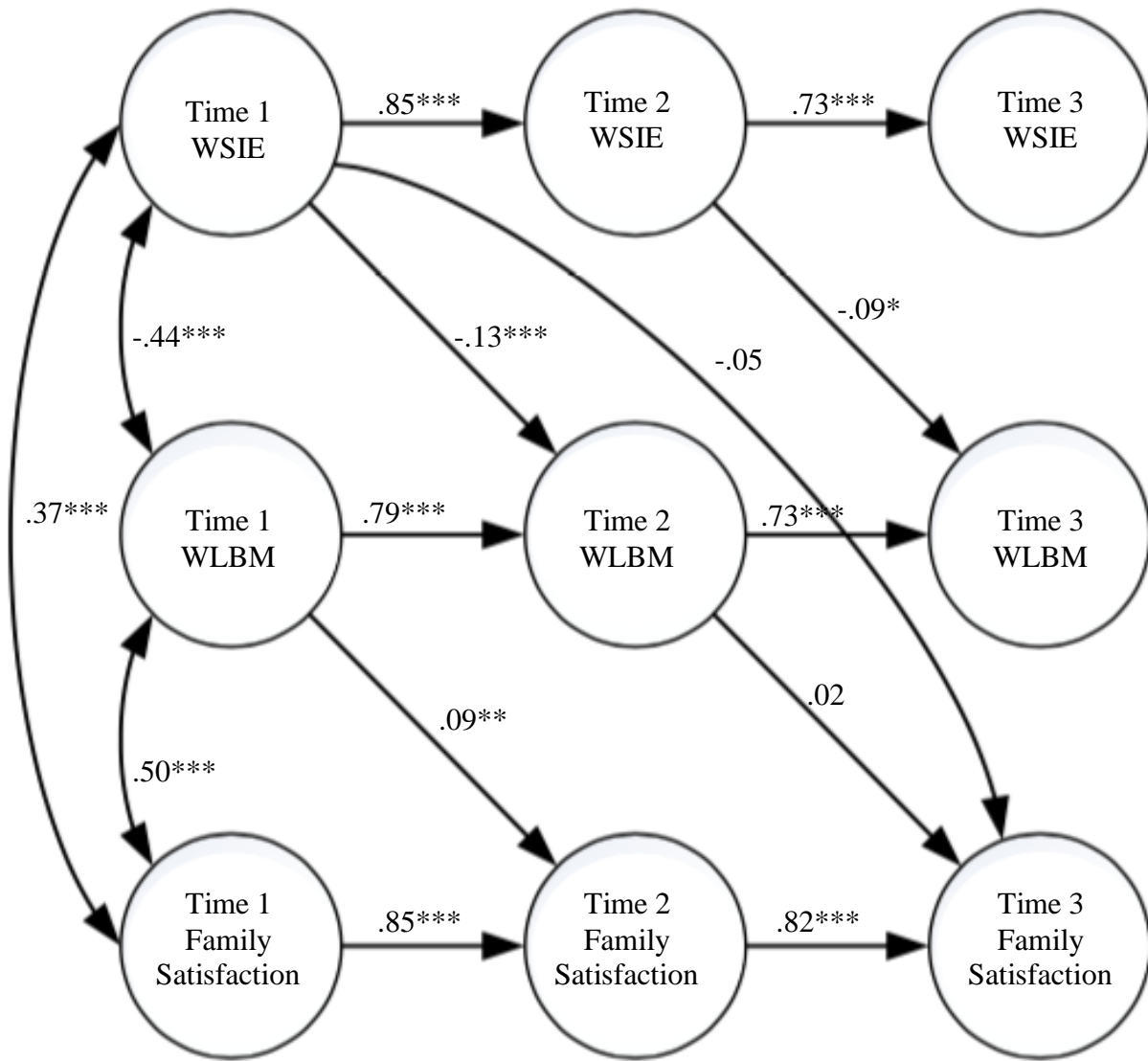


Figure 5. Hypothesis 3c: Longitudinal mediation model of the relationship between work segmentation/integration enactment and family satisfaction mediated by work-life boundary management. WSIE = Work Segmentation/Integration Enactment, WLBM = Work-Life Boundary Management. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

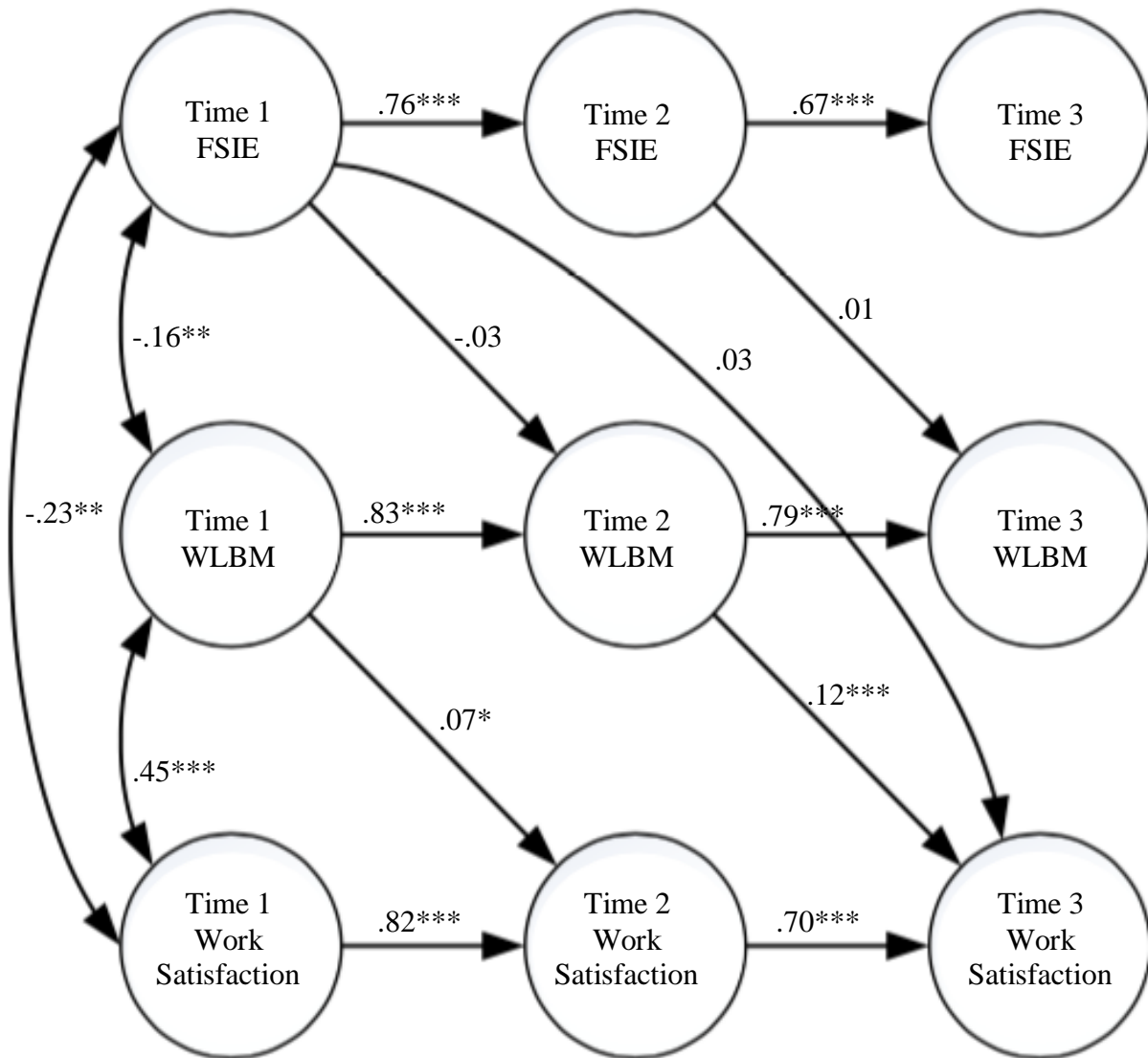


Figure 6. Hypothesis 3d: Longitudinal mediation model of the relationship between family segmentation/integration preference and work satisfaction mediated by work-life boundary management. FSIE = Family Segmentation/Integration Enactment, WLBM = Work-Life Boundary Management.  $*p < .05$ ,  $**p < .01$ ,  $***p < .001$ .

## APPENDIX A



### Original Work-Life Boundary Management Scale

1. Keeping work in perspective
2. Avoiding being a martyr to the job
3. Recognizing when you have done enough
4. Realizing you are dispensable
5. Valuing own worth in the workplace
6. Not feeling guilty about taking time owed
7. Having the mind-set that you are in control
8. Refocusing work-life balance priorities at different life stages
9. Scheduling in time for activities that are important
10. Asking for help when needed
11. Setting a clear boundary between work and home
12. Having clear identity definition between work and home
13. Consciously limiting time talking about work at home
14. Setting boundaries with others at home as well as at work
15. Keeping work separate from friends
16. Forcing self to make time for home
17. Ring-fencing me-time
18. Using effective filing systems to organize workflow
19. Setting up systems to streamline day to day life administration
20. Structuring physical office space to give control over workflow
21. Scheduling work to maximize efficiency
22. Being aware of the stages that tasks are at so can action them immediately that appropriate input is received
23. Anticipating problems
24. Thinking about work-life balance as a challenge not a problem
25. Consciously managing work-life balance on a day to day basis
26. Creatively devising solutions appropriate for work-life balance dilemmas
27. Actively thinking about the stresses of the day in a positive light
28. Focusing on achieving balance in the long-term
29. Avoiding setting self-impossible standards
30. Negotiating informally with manager for flexibility
31. Negotiating work roles/responsibilities with manager
32. Recording extra time worked and ensuring take time in lieu
33. Proactively requesting shifts that suit home needs
34. Offsetting overtime with days in lieu
35. Using technology to be able to work flexibly
36. Changing job if not enjoying it
37. Making lifestyle changes to achieve desired work-life balance
38. Cooperating with partner to juggle work/family demands
39. Allowing partner to proactively organize home life to ensure balance
40. Matching time off with that of partner
41. Giving people worst case scenarios for delivery
42. Managing other people's expectations over deliverables
43. Communicating intention to leave at a certain time

44. Ring-fencing time and space to get work done without interruptions
45. Changing role to achieve a better work-life balance

## APPENDIX B

## Study 3 Items

### **Work Segmentation/Integration Preference**

1. I don't like to have to think about work while I'm at home.
2. I prefer to keep my 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.

### **Family Segmentation/Integration Preference**

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

### **Work Segmentation/Integration Enactment**

1. I often think about work while I'm at home.
2. I am unable to keep work matters at work.
3. My work issues often creep into my home life.
4. I am unable to mentally leave work behind when i go home.

### **Family Segmentation/Integration Enactment**

1. I often think about my home life while I'm at work.
2. I am unable to keep my family/personal matters at home.
3. My home issues often creep into my work
4. I am unable to mentally leave home behind when I go to work.

### **Role Conflict Scale**

1. I must do things that I think should be done differently.
2. I work under incompatible policies and guidelines.
3. I receive incompatible requests from two or more people.

### **Work Satisfaction Scale**

1. I enjoy my job.
2. I enjoy going to work.
3. Overall I am satisfied with my job.

### **Demographics**

1. What is your age in years? \_\_\_\_\_
2. What is your sex? (Male, Female)
3. What is your relationship status?
  - a) = Single
  - b) = Married
  - c) = Living with partner/significant other
  - d) = Separated
  - e) = Divorced
  - f) = Widowed
4. What is the total number of your dependents (children under the age of 18 and other relatives, such as grandparents or elderly parents, that reside with you that you provide more than half the financial support for?) \_\_\_\_\_

5. Which of the following categories best describes your employment status?
  - a) = Employed
  - b) = Not employed, looking for work
  - c) = Not employed, NOT looking for work
  - d) = Retired
  - e) = Disabled, not able to work
6. On average, how many hours do you work per week? \_\_\_\_\_
7. Are you currently a temporary worker (i.e., your working arrangement is limited to a certain period of time based on the needs of the employing organization)? (Yes, No)
8. Have you ever been a temporary worker (i.e., your working arrangement was limited to a certain period of time based on the needs of the employing organization)?
  - a) = Yes (If yes, how long were you a temporary worker? \_\_\_\_\_)
  - b) = No
9. Which of the following job families does your work most closely resemble?
  - a) = Agriculture, Food, and Natural Resources
  - b) = Architecture and Construction
  - c) = Arts, Audio/Video Technology, and Communications
  - d) = Business Management and Administration
  - e) = Education and Training
  - f) = Finance
  - g) = Government and Public Administration
  - h) = Health Science
  - i) = Hospitality and Tourism
  - j) = Human Services
  - k) = Information Technology
  - l) = Law, Public Safety, Corrections and Security
  - m) = Manufacturing
  - n) = Marketing, Sales, and Service
  - o) = Science, Technology, Engineering and Mathematics
  - p) = Transportation, Distribution, and Logistics
10. What is your job title? \_\_\_\_\_
11. How long have you been working for your current employer, in years?  
Dropdown menu ranging from less than 1 to 40+
12. What is your race/ethnicity?
  - a) = African-American/Black
  - b) = Caucasian/White (Non-Hispanic)
  - c) = Hispanic
  - d) = Asian American/Pacific Islander
  - e) = Arabic
  - f) = Native American
  - g) = Other (specify)
13. Which is the highest educational degree that you hold?
  - a) = Did not complete high school
  - b) = Less than college or no degree
  - c) = Associate's
  - d) = Bachelor's

e) = Master's

f) = Doctorate, non-medical (e.g., PhD, DSW)

g) = M.D. or other medical degree

14. What is your yearly household income?

Dropdown menu ranging from Less than \$5,000 to \$250,000 and above

15. Do you currently reside in the United States? (Yes, No)

16. Which state do you currently live in?

Dropdown menu of all states (AL through WY)

17. On average, how many hours per week do you spend doing MTurk surveys?

18. On average, how many MTurk surveys do you complete per week?

19. On average, how much money do you make per week doing MTurk surveys?

20. Where are you currently completing this survey? (Work, Home, Other)

21. About what percentage of surveys do you complete at work?

## APPENDIX C

## Study 4 Items

### **Work Segmentation/Integration Preference**

1. I don't like to have to think about work while I'm at home.
2. I prefer to keep my 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.

### **Family Segmentation/Integration Preference**

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

### **Work Segmentation/Integration Enactment**

1. I often think about work while I'm at home.
2. I am unable to keep work matters at work.
3. My work issues often creep into my home life.
4. I am unable to mentally leave work behind when i go home.

### **Family Segmentation/Integration Enactment**

1. I often think about my home life while I'm at work.
2. I am unable to keep my family/personal matters at home.
3. My home issues often creep into my work
4. I am unable to mentally leave home behind when I go to work.

### **Work Life Satisfaction**

1. In most ways my work life is close to my ideal.
2. The conditions of my work life are excellent.
3. I am satisfied with my work life.
4. So far I have gotten the important things I want in my work life.
5. If I could live my life over, I would change almost nothing about my work experiences.

### **Family Life Satisfaction**

1. In most ways my nonwork life is close to my ideal.
2. The conditions of my nonwork life are excellent.
3. I am satisfied with my nonwork life.
4. So far I have gotten the important things I want in life outside of work.
5. If I could live my life over, I would change almost nothing in my nonwork experiences.

### **Demographics**

1. What is your age? 18-75+
2. Which of the following categories best describes your employment status?
  - 1 = Employed
  - 2 = Not employed, looking for work
  - 3 = Not employed, NOT looking for work
  - 4 = Retired
  - 5 = Disabled, not able to work
3. If you are employed, how many hours per week do you work? 0-60+
4. What is your marital status?



- 1 = Single
  - 2 = Married
  - 3 = Living with partner/significant other
  - 4 = Separated
  - 5 = Divorced
  - 6 = Widowed
5. On average, how many hours do you work per week? 0 - 40+
6. Are you currently a temporary worker (i.e., your working arrangement is limited to a certain period of time based on the needs of the employing organization)? 1 = Yes, 2 = No
7. Have you ever been a temporary worker (i.e., your working arrangement was limited to a certain period of time based on the needs of the employing organization)? 1 = Yes, 2 = No  
If yes, how long were you a temporary worker?
8. Which of the following labor sectors does your work most closely resemble?
- 1=Agriculture, Forestry, and Fishing 2=Construction
  - 3=Healthcare and Social Assistance 4=Manufacturing
  - 5=Mining
  - 6=Services
  - 7=Transportation, Warehousing, and Utilities 8=Wholesale and Retail Trade
  - 9=Other
9. Which of the following job families does your work most closely resemble?
- 1=Agriculture, Food, and Natural Resources
  - 2=Architecture and Construction
  - 3=Arts, Audio/Video Technology, and Communications
  - 4=Business Management and Administration 5=Education and Training
  - 6=Finance
  - 7=Government and Public Administration 8=Health Science
  - 9=Hospitality and Tourism
  - 10=Human Services
  - 11=Information Technology
  - 12=Law, Public Safety, Corrections and Security
  - 13=Manufacturing
  - 14=Marketing, Sales, and Service
  - 15=Science, Technology, Engineering and Mathematics 16=Transportation, Distribution, and Logistics 17=Other
10. What is your job title? Fill in the blank
11. How long have you been working for your current employer, in years? Less than 1 - 40+
12. What is your race/ethnicity?
- 1=African-American/Black
  - 2=Caucasian/White (Non-Hispanic)
  - 3=Hispanic
  - 4=Asian American/Pacific Islander
  - 5=Arabic
  - 6=Native American
  - 7=Other (specify)
13. What is your sex? 1 = Female, 2 = Male, 3 = Other
14. Which is the highest educational degree that you hold?

- 1 = Did not complete high school
- 2 = Less than college or no degree
- 3 = Associate's
- 4 = Bachelor's
- 5 = Master's
- 6 = Doctorate, non-medical (e.g., PhD, DSW)
- 7 = M.D. or other medical degree

15. What is your yearly household income?

- 1=Less than \$5,000, 2=\$5,000 to \$9,999, 3=\$10,000 to \$14,999, 4=\$15,000 to \$19,999,
- 5=\$20,000 to \$24,999, 6=\$25,000 to \$29,999, 7=\$30,000 to \$34,999, 8=\$35,000 to \$39,999,
- 9=\$40,000 to \$44,999, 10=\$45,000 to \$49,999, 11=\$50,000 to \$59,999,
- 12=\$60,000 to \$69,999, 13=\$70,000 to \$79,999, 14=\$80,000 to \$89,999, 15=\$90,000 to \$99,999,
- 16=\$100,000 to \$124,999, 17=\$125,000 to \$149,999, 18=\$150,000 to \$199,999,
- 19=\$200,000 to \$249,999, 20=\$250,000 and above

16. Do you currently reside in the United States? 1 = Yes, 2 = No

17. Do you supervise employees in your current job? 1 = Yes, 2 = No

18. Which of the following most closely matches your job title?

- Intern
- Entry Level
- Analyst/Associate
- Manager
- Senior Manager
- Director
- Vice President
- Senior Vice President
- C level executive (CIO, CTO, COO, CMO, Etc.)
- President or CEO Other

19. Which state do you currently live in? AL AK AZ AR CA CO CT DE FL GA HI ID IL IN IA  
 KS KY LA ME MD MA MI MN MS MO MT NE NV NH NJ NM NY NC ND OH OK OR PA  
 RI SC SD TN TX UT VT VA WA WV WI WY