PERSONNEL PSYCHOLOGY

THE STUDY OF PEOPLE AT WORK

PERSONNEL PSYCHOLOGY
2017, 70, 167–210

IN SEARCH OF BALANCE: A CONCEPTUAL AND EMPIRICAL INTEGRATION OF MULTIPLE MEANINGS OF WORK–FAMILY BALANCE

JULIE HOLLIDAY WAYNE
Wake Forest University

MARCUS M. BUTTS
University of Texas at Arlington

WENDY J. CASPER
University of Texas at Arlington

TAMMY D. ALLEN
The University of South Florida

This paper provides a framework that elaborates on four conceptualizations of work-family balance: additive spillover (unique effects of bidirectional conflict and enrichment), multiplicative spillover (interactive effects of lower conflict with higher enrichment), balance satisfaction (one's attitude toward resource allocation across work and family roles) and balance effectiveness (one's interdependent self-evaluation of meeting shared expectations across work and family roles). We describe the conceptual differences among these approaches and hypothesize how they operate differently in predicting work and family attitudes and performance. Relative weights analyses showed that additive spillover was the most important predictor of work attitudes (organizational commitment, job satisfaction, and turnover intent), followed by balance satisfaction and effectiveness. However, balance satisfaction and effectiveness together were the most important predictors of family satisfaction and job and family performance. Mediation tests revealed that unique and interactive effects of bidirectional conflict and enrichment related to work and family attitudes and performance indirectly through balance satisfaction and effectiveness. We discuss implications of these findings and offer suggestions to guide future research and theory on work-family balance.

The study of the work-family interface has evolved in recent years, moving beyond a focus on work-family conflict to include positive aspects of engagement in multiple roles such as work-family enrichment (Greenhaus & Powell, 2006). Another recent addition to the literature that has garnered popular press and scholarly attention has been the phenomenon

Correspondence and requests for reprint should be addressed to Julie Holliday Wayne, Wake Forest University, 369 Farrell Hall, Winston-Salem, NC 27109; waynej@wfu.edu.

 doi: 10.1111/peps.12132

of work-family balance (e.g., Greenhaus & Allen, 2011; Grzywacz & Carlson, 2007; Valcour, 2007). Despite the popularity of this concept, only recently have scholars made a concerted effort to empirically study work-family balance, and the concept has been acknowledged as a unique and useful addition to the applied psychology literature (Maertz & Boyar, 2011).

Initially, when the term work-family balance was used in the literature, its meaning was taken as self-evident and an explicit definition seldom provided (Greenhaus & Allen, 2011). When a definition was provided, balance was equated with the absence (or low levels) of conflict, or negative spillover, between work and family roles (Buffardi, Smith, O'Brien, & Erdwins, 1999). Frone (2003) defined balance as the simultaneous experience of low conflict and high enrichment (i.e., positive spillover between roles). The use of conflict and enrichment to define balance is common (Casper, DeHauw, Wayne, & Greenhaus, 2014); given the nature of these constructs, we categorize these conceptualizations as *combined spillover approaches*.

More recently, others have argued that balance is distinct from conflict and enrichment, though many different definitions have been provided. Early on, Greenhaus, Collins, and Shaw (2003) defined balance as spending equal time and being equally engaged in and satisfied with work and family roles, but since then, researchers have diverged from the notion of equality. Voydanoff (2005) defined balance as a global assessment that work resources meet family demands (and vice versa) such that participation is effective in both domains. Valcour (2007) defined balance as satisfaction with fit and allocation of time and attention across work and family roles. Grzywacz and Carlson (2007) defined it as the accomplishment of work and family expectations that are negotiated and shared with role partners. Most recently, Greenhaus and Allen (2011) defined balance as when effectiveness in and satisfaction with work and family are consistent with one's life priorities. Across these definitions, researchers consider balance to be a global evaluation of the interplay between work and family (e.g., Carlson, Grzywacz, & Zivnuska, 2009; Valcour, 2007; Voydanoff, 2005); as such, we refer to these as *global balance approaches.*

This stream of research underscores the diverse conceptualizations of balance, ranging from combinations of positive and negative spillover to global constructs with multiple meanings. Despite differences in meaning, all these constructs have been labeled "work-family balance" as if they are interchangeable and their differences irrelevant. Ambiguity in the meaning of balance is problematic because strong constructs are the building blocks of theory, and a precise, parsimonious definition is fundamental to a strong construct (Suddaby, 2010). Before theory can identify how balance relates to other constructs, scholars must identify its

essential properties and define it consistently (Suddaby, 2010). Theoretically, it is important to know whether balance is best conceived of as one or multiple constructs. If various conceptualizations are indistinguishable, theory could be formed around a single construct and measures used interchangeably. However, if the conceptualizations have meaningful differences, it is important to (a) understand their conceptual differences, (b) provide unique labels for them, (c) account for these differences when theorizing about balance, (d) consider how these constructs relate to one another, and (e) consider how they relate to valued outcomes. In short, for scholars to develop a comprehensive theory of balance and build a cohesive body of research, conceptual elaboration and empirical examination of the existing approaches is needed.

This study addresses these needs by providing a framework in which we elaborate on the theoretical underpinnings of four balance conceptualizations from the extant literature—two types of combined spillover (*additive spillover, multiplicative spillover*) and two types of global balance (*balance satisfaction, balance effectiveness*). Our framework explicates how these approaches differ in conceptually meaningful ways important for developing richer theories of balance. Our framework also provides a common language scholars can use to consistently label their approach and aggregate findings across studies.

As Zajonc (1984) notes, however, at some point of theoretical development we must confront our definitions with empirical reality and ensure that theoretical distinctions have empirical value. Conceptual frameworks such as provided by Voydanoff (2005) and Marks and MacDermid's role balance theory (1996) suggest that balance relates to positive attitudes and behavior, but this proposition has rarely been tested, particularly in terms of in-role performance rated by role partners. Our study uses data from 954 employees, 492 supervisors, and 453 spouses to empirically examine the unique and relative importance of four balance approaches with regard to attitudes (organizational commitment, job satisfaction, turnover intent, and family satisfaction) and performance (as rated by supervisors and spouses). We draw from the job demands-resources (JD-R) model (Bakker & Demerouti, 2007) to examine the mediating role of balance satisfaction and effectiveness in the relationship between combined spillover approaches and these outcomes. Collectively, our framework, conceptual elaboration, and empirical examination build more clarity around this important construct as a foundation for scholars to develop stronger theories and research on this burgeoning topic in the future.

Relating Work-Family Balance to Work and Family Outcomes

Although there is no single, comprehensive theory of balance (Carlson, Kacmar, Grzywacz, Tepper, & Whitten, 2013), several theoretical

arguments coalesce to suggest that balance is associated with positive attitudes and behaviors. For example, role balance theory (Marks & MacDermid, 1996) posits that people engage in role responsibilities that are embedded in an entire system of roles and that those who navigate the entire system in a balanced way (i.e., approaching all roles with attentiveness, care, and commitment) have a stronger, more integrated sense of self, have higher quality role experiences, perform roles with greater ease, and experience less role strain. According to this theory, role balance is associated with positive outcomes because when people are attentive to every one of their roles, they are primed to seize opportunities, experience more positive self-experiences, have a greater sense of control, are more creative, view situational urgencies as less chronic, and perceive roles as helping rather than hindering one another. Notably, Marks and MacDermid found that less role balance was associated with lower self-esteem, greater depression, and poorer role functioning at work and school. Similarly, Voydanoff's (2005) framework suggests demands and resources relate to in-role performance and role quality through work-family balance as an intervening variable. Voydanoff drew from Lazarus and Folkman's (1984) work on appraisal theory to suggest that positive appraisals of work and family demands and resources result in higher balance, generating resources for better role performance and quality. Taken together, these perspectives suggest that balance relates to positive work and family attitudes and performance.

Despite the theoretical proposition that balance generates positive outcomes, theory and research have not yet considered the many ways balance has been conceptualized. Testing whether multiple balance approaches relate to positive outcomes is important for determining whether this theoretical principle holds true across balance conceptualizations. This is also an important step in developing the balance construct. If different nomological networks exist for the balance approaches, this is evidence that these are unique constructs, and thus richer theories incorporating the conceptual differences are needed. In the following sections, we elaborate on conceptual differences among balance approaches and offer theoretical explanations for why each might differentially relate to work-family attitudes and performance.

Conceptualizations of Work-Family Balance: An Integrative Framework

Combined Spillover Approaches: Additive and Multiplicative

When the notion of balance entered scientific study, scholars equated it with the absence of work-family conflict (Buffardi et al., 1999). As

interest in work-family enrichment grew, Frone (2003) argued that balance involves positive *and* negative interrole experiences and proposed a four-fold taxonomy with balance composed of work-to-family and family-to-work conflict and enrichment. Conflict and enrichment are higher-order perceptual representations wherein people report the extent to which time, strain, or behavior in one role impedes another (i.e., conflict) or resources from one role benefit another (i.e., enrichment; e.g., Carlson, Kacmar, Wayne, & Grzywacz, 2006; Greenhaus & Beutell, 1985).

Frone's (2003) definition of balance as the experience of "low levels of interrole conflict and high levels of interrole facilitation" (p. 145) is the most common conceptual definition in the balance literature (Casper et al., 2014). Studies drawing from Frone (2003) most often examine their unique effects, suggesting balance exists when work-family conflict is absent *or* enrichment is present (which we hereafter refer to as the *additive spillover* approach). As an example of this approach, Aryee, Srinivas, and Tan (2005) examined the antecedents and outcomes of balance (operationalized as unique effects of conflict and enrichment) and found that all four conflict and enrichment measures had distinct antecedents but only higher work-to-family enrichment predicted better outcomes. Thus, additive spillover is a significant approach in the history of the balance concept, and as shown in Table 1, which summarizes empirical research using each balance approach, additive spillover is the most commonly used approach in the literature thus far.

However, we contend that additive spillover does not fully capture Frone's (2003) definition, which suggests that greater balance exists when a person has the *simultaneous* experience of low conflict coupled *with* high enrichment. In other words, the *synergistic* effect of low conflict *combined with* high enrichment is greater than the sum of its individual parts. As such, the interaction of a specific direction of lower conflict with the same direction of higher enrichment better reflects Frone's balance definition than does the additive spillover approach. Moreover, because role balance theory promotes a systemic view of how a person integrates roles across their entire role system (Marks & MacDermid, 1996), greater role integration is signified by perceiving fewer role conflicts and more enriching effects, thereby promoting role quality and role ease. Accordingly, we argue that lower conflict combined with higher enrichment denotes high balance and, due to their synergistic effects, will account for additional variance in attitudes and performance beyond additive spillover effects. Conversely, higher conflict with lower enrichment signifies lack of balance, and role balance theory suggests that poor role integration generates negative attitudes and poor performance.

We refer to this interactive approach as *multiplicative spillover* and assert that it is a unique conceptualization that needs to be considered. To

TABLE 1
Literature Summary of Operationalizations, Antecedents, and Consequences of the Four Work-Family Balance Approaches

Operationalization	Citation	Key antecedents		Key consequences	
Additive spillover[a]	Aryee, S., Srinivas, E., & Tan, H. H. (2005). Rhythms of life: Antecedents and outcomes of work-family balance in employed parents. *Journal of Applied Psychology, 90*(1), 132–146.	Of WFC	Of FWC	Of WFC	Of FWC
		pro pers (ns)	pro pers (ns)	JS (-)	JS (-)
		neuroticism (ns)	neuroticism (+)	OC (-)	OC (-)
		optimism (+)	optimism (-)		
		work RO (+)	work RO (+)		
		parental RO (ns)	parental RO (ns)		
		work SS (ns)	work SS (ns)		
		family SS (ns)	family SS (ns)		
		work inv (ns)	work inv (-)		
		family inv (ns)	family inv (ns)		
		Of WFE	Of FWE	Of WFE	Of FWE
		pro pers (+)	pro pers (ns)	JS (+)	JS (+)
		neuroticism (ns)	neuroticism (-)	OC (+)	OC (+)
		optimism (ns)	optimism (ns)		
		work RO (ns)	work RO (ns)		
		parental RO (-)	parental RO (ns)		
		work SS (ns)	work SS (ns)		
		family SS (-)	family SS (+)		
		work inv (+)	work inv (ns)		
		family inv (-)	family inv (ns)		
Additive spillover[a]	Bulger, C. A., Matthews, R. A., & Hoffman, M. E. (2007). Work and personal life boundary management: Boundary strength, work/personal life balance, and the segmentation-integration continuum. *Journal of Occupational Health Psychology, 12*, 365–375.	Of WLC	Of LWC		
		ability wflex (-)	ability wflex (ns)		
		willing wflex (-)	willing wflex (ns)		
		wperm (ns)	wperm (+)		
		ability pflex (-)	ability pflex (-)		
		willing pflex (ns)	willing pflex (ns)		
		pperm (+)	pperm (ns)		

(Continued)

TABLE 1 (continued)

Operationalization	Citation	Key antecedents		Key consequences	
		Of WLE ability wflex (+) willing wflex (ns) wperm (ns) ability pflex (ns) willing pflex (+) pperm (+)	Of LWE ability wflex (+) willing wflex (+) wperm (+) ability pflex (+) willing pflex (ns) pperm (ns)		
Additive spillover[a]	Hennessy, K. D. (2007). Work-family balance: An exploration of conflict and enrichment for women in a traditional occupation. *Dissertation Abstracts International Section A: Humanities and Social Sciences, 68*(8-A), 3295.	Of WFC work SS (ns) family SS (ns) WFCSE (-) FWCSE (ns)	Of FWC work SS (ns) family SS (ns) WFCSE (-) FWCSE (-)	Of WFC JS (-) FS (-)	Of FWC JS (ns) FS (-)
		Of WFE work SS (+) family SS (+) WFCSE (+) FWCSE (ns)	Of FWE work SS (+) family SS (+) WFCSE (ns) FWCSE (ns)	Of WFE JS (+) FS (+)	Of FWE JS (+) FS (+)
Additive spillover[a]	Lu, J., Siu, O., Spector, P. E., & Shi, K. (2009). Antecedents and outcomes of a fourfold taxonomy of work-family balance in Chinese employed parents. *Journal of Occupational Health Psychology, 14*(2), 182–192.	Of WFC Age 1st child (-) elderly dhelp (-) work hours (+) income (+) fsup supervision (-) fsup coworkers (-)	Of FWC age 1st child (ns) elderly dhelp (-) spouse SS (ns)	Of WFC JS (ns) OC (ns) CS (ns) LS (-)	Of FWC JS (-) OC (ns) CS (-) LS (-)
		Of FWE spouse SS (+)	Of WFE income (ns) fsup supervision (-) fsup coworkers (+)	Of WFE JS (+) OC (+) CS (+) LS (+)	Of FWE JS (+) OC (+) CS (+) LS (+)

(Continued)

TABLE 1 (continued)

Operationalization	Citation	Key antecedents	Key consequences	
Additive spillover[a]	Gareis, K. C., Barnett, R. C., Ertel, K. A., & Berkman, L. F. (2009). Work-family enrichment and conflict: Additive effects, buffering, or balance? *Journal of Marriage and Family, 71*(3), 696–707.		Of WFC mhealth (-) LS (-) affbal (-) frquality (-) Of WFE mhealth (+) LS (+) affbal (ns) frquality (-)	Of FWC mhealth (-) LS (-) affbal (-) frquality (-) Of FWE mhealth (+) LS (+) affbal (+) frquality (+)
Multiplicative spillover[a]	Gareis, K. C., Barnett, R. C., Ertel, K. A., & Berkman, L. F. (2009). Work-family enrichment and conflict: Additive effects, buffering, or balance? *Journal of Marriage and Family, 71*(3), 696–707.		Of WFC x WFE mhealth (ns) LS (ns) affbal (ns) frquality (significant) Of FWC x FWE mhealth (significant) LS (significant) affbal (significant) frquality (significant)	
Balance satisfaction[b] (Valcour, 2007)	Valcour, M. (2007). Work-based resources as moderators of the relationship between work hours and satisfaction with work-family balance. *Journal of Applied Psychology, 92*(6), 1512–1523.	gender (ns) number of children (-) neuroticism (-) commute time (-) ideal work hours (+) actual work hours (-) job complexity (+) control over work time (+)		

(Continued)

TABLE 1 (continued)

Operationalization	Citation	Key antecedents	Key consequences
Balance satisfaction[b] (Valcour, 2007)	Beham, B., & Drobnic, S. (2010). Satisfaction with work-family balance among German office workers. *Journal of Managerial Psychology, 25*(6), 669–689.	gender (ns) age (ns) job tenure (ns) number of children (ns) supervisor status (ns) type of organization (ns) organizational time expectations (-) psychological job demands (-) job insecurity (-) job control (+) SS (+) WFC (-)	
Balance satisfaction[b] (Valcour, 2007)	Abendroth, A. K., & den Dulk, L. (2011). Support for the work-life balance in Europe: The impact of state, workplace and family support on work-life balance satisfaction. *Work Employment and Society, 25*(2), 234–256.	work pressure (-) work hours (-) care responsibilities (-) children at home (-) job control (+) flexible starting and finishing times (ns) compressed workweek (ns) working from home (ns) supervisor SS (+) colleague SS (+) informal help with domestic tasks (ns) paid help with domestic tasks (ns) having a partner (+) quality relative relationships (+) social life quality (+) household task harmony (+) national level support (+/−)	

(Continued)

TABLE 1 (continued)

Operationalization	Citation	Key antecedents	Key consequences
Balance satisfaction[b] (Valcour, 2007)	Beham, B., Präg, P., & Drobnič, S. (2012). Who's got the balance? A study of satisfaction with the work–family balance among part-time service sector employees in five western European countries. *International Journal of Human Resource Management, 23*(18), 3725–3741.	part time employment (+)	
Balance satisfaction[b] (Valcour, 2007)	McNamara, T. K., Pitt-Catsouphes, M., Matz-Costa, C., Brown, M., & Valcour, M. (2013). Across the continuum of satisfaction with work–family balance: Work hours, flexibility-fit, and work–family culture. *Social Science Research, 42*(2), 283–298.	hours worked (-) sup WF culture (+) flexibility-fit (+)	
Balance satisfaction[b] (Valcour, 2007)	Grawitch, M., Maloney, P., Barber, L, & Mooshegian, S. (2013). Examining the nomological network of satisfaction with work-life balance. *Journal of Occupational Health Psychology, 18,* 276–284.	WLC (-) LWC (-) WFE (+) FWE (+)	JS (+) NWS (+)
Balance satisfaction[b] (Valcour, 2007)	Michel, A., Bosch, C., & Rexroth, M. (2014). Mindfulness as a cognitive–emotional segmentation strategy: An intervention promoting work–life balance. *Journal of Occupational and Organizational Psychology, 87*(4), 733–754.	mindfulness intervention (+)	
Balance satisfaction[b] (Valcour, 2007)	König, C. J. & Caner de la Guardia, M. E. (2014). Exploring the positive side of personal internet use at work: Does it help in managing the border between work and nonwork? *Computers in Human Behavior, 30,* 355–360.	personal internet use at work (ns)	
Balance effectiveness[c] (Carlson et al., 2009)	Carlson, D. S., Grzywacz, J. G., & Zivnuska, S. (2009). Is work-family balance more than conflict and enrichment? *Human Relations, 62*(10), 1459–1486.		JS (+) OC (+) TI (ns) FS (+) fperf (+) ffunc (+)

(Continued)

TABLE 1 (continued)

Operationalization	Citation	Key antecedents	Key consequences
Balance effectiveness[c] (Carlson et al., 2009)	Ferguson, M., Carlson, D., Zivnuska, S., & Whitten, D. (2012). Support at work and home: The path to satisfaction through balance. *Journal of Vocational Behavior, 80*(2), 299–307.	coworker SS (+) partner SS (+)	JS (+) FS (+) partner FS (+)
Balance effectiveness[c] (Carlson et al., 2009)	Krisor, S. M., Diebig, M., & Rowold, J. (2015). Is cortisol as a biomarker of stress influenced by the interplay of work-family conflict, work-family balance and resilience? *Personnel Review, 44*(4), 648–661.	resilience (+)	cortisol release (ns)
Balance effectiveness[c] (Carlson et al., 2009)	Ferguson, M., Carlson, D., Kacmar, K. M., & Halbesleben, J. R. B. (2015). The supportive spouse at work: Does being work-linked help? *Journal of Occupational Health Psychology*. Advance online publication. http://dx.doi.org/10.1037/a0039538	work-related spouse support (+)	FS (+) JS (+) stress transmission within couple (-)

Note. Results reported based on bivariate correlations. WFC = work-to-family conflict, FWC = family-to-work conflict, WFE = work-to-family enrichment, FWE = family-to-work enrichment, pro pers = proactive personality, WLC = work-to-personal life conflict, LWC = personal life-to-work conflict, WLE = work-to-personal life enrichment, LWE = personal life-to-work enrichment, RO = role overload, SS = social support, inv = involvement, JS = job satisfaction, OC = organizational commitment, ability wflex = ability to have flexible work, willing wflex = willingness to have flexible work, wperm = work permeability, ability pflex = ability to have personal life flexibility, willing pflex = willingness to have personal life flexibility, pperm = personal life permeability, WFCSE = work-to-family conflict self-efficacy, FWCSE = family-to-work conflict self-efficacy, FS = family satisfaction, dhelp = domestic helper, fsup = family-supportive, CS = career satisfaction, LS = life satisfaction, NWS = nonwork satisfaction, mhealth = mental health, affbal = positive/negative affective balance, frquality = family relationship quality, sup WF culture = supportive work-family culture, TI = turnover intent, fperf = family performance, ffunc = family functioning, + = positive relationship, - = negative relationship, ns = non-significant relationship.

[a]For spillover approaches, all studies that have used all four spillover constructs specified by Frone (2003), WFC, FWC, WFE, and FWE, are included.

[b]For balance satisfaction, all studies that have used Valcour's (2007) measure are included.

[c]For balance effectiveness, all studies that have used Carlson et al.'s (2009) measure are included.

our knowledge, only one study has adopted this approach by testing the interaction of conflict and enrichment. Gareis, Barnett, Ertel, and Berkman (2009) compared three models (difference score, additive, and interactive) and found that for the family-to-work direction, the interactive model explained more variance in outcomes such as life satisfaction and mental health than did other approaches. In sum, Frone's notion that balance is the synergistic interaction of lower conflict with higher enrichment and tenets of role balance theory (Marks & MacDermid, 1996) suggest:

Hypothesis 1: Multiplicative spillover (lower work-to-family conflict × higher work-to-family enrichment; lower family-to-work conflict × higher family-to-work enrichment interactions) relates to attitudes and performance above and beyond additive spillover.

Global Balance Approaches: Satisfaction and Effectiveness

More recently, scholars have argued that balance is a global construct that captures a gestalt perception of the interplay between work and family that is distinct from conflict and enrichment (Grzywacz & Carlson, 2007; Valcour, 2007; Voydanoff, 2005). Global approaches fundamentally differ from combined spillover approaches in that they do not refer to cross-domain processes nor consider direction (work-to-family, family-to-work) but involve an overall appraisal of combining work and family roles. Emerging evidence suggests that a person's global perception of balance is distinct from conflict and enrichment (Carlson et al., 2009).

Although global balance constructs have been treated as interchangeable, they have meaningful conceptual differences. In their review, Casper et al. (2014) found that balance definitions often included *effectiveness* at and/or *satisfaction* with balancing work and family, suggesting these are two primary ways to define global balance. Grzywacz and Carlson (2007) cautioned against combining balance effectiveness and satisfaction. Further, to develop more innovative theories, Oswick, Fleming, and Hanlon (2011) argued for highlighting discrepancies among concepts because it has the potential to "tease out less obvious and previously unacknowledged attributes and, therefore, to develop new insights" (p. 333). Drawing from these ideas, we conceptually differentiate and empirically examine the unique and relative importance of two global approaches: *balance satisfaction* and *balance effectiveness.* Table 1 summarizes studies using each approach, and Table 2 reviews the conceptual similarities and differences between these global balance approaches.

Balance satisfaction. Valcour (2007) defined "satisfaction with work-family balance" as an attitude that reflects one's judgment that his/her

TABLE 2
Similarities and Differences Between Global Balance Approaches

	Balance satisfaction	Balance effectiveness
Nature of the construct	Attitude Global, nondirectional	Self-evaluation Global, nondirectional
Primary focus	Feelings and thoughts Satisfaction	Thoughts and beliefs Effectiveness
View of the self	Self-centered Independent self-view	Self-other Interdependent self-view
Nature of judgment	Private	Private and public
Target of the judgment	Resource allocation, fit, integration across work-family/personal roles	Work-family expectations shared with role partners

resources are adequate to meet demands across work and family roles. As with other attitudes, there is a cognitive component in the appraisal of resource allocation, fit, and integration across roles, and an affective component that captures the resultant feelings or emotional states (Valcour, 2007). We expand on this approach by drawing parallels from the satisfaction and self-concept literatures.

Satisfaction has been described as an "emotional state" (Locke, 1976) and considered an evaluative mindset that focuses on one's own expectations, experiences, or wishes and thus is characterized by "self-centeredness" (Kjell, Daukantaite, Hefferon, & Silkstrom, 2015). This view closely parallels an *independent* view of the self (Markus & Kitayama, 1991), which focuses on private, internal aspects of a person (e.g., evaluations based on one's own thoughts and feelings) more than those outside the self. Similarly, balance satisfaction focuses on a person's thoughts and emotions about his/her work-family balance from his/her own viewpoint (e.g., based on his/her values, goals, desires, etc.) and, like other attitudes, is a psychological construct based on one's internal, subjective evaluation. Although balance satisfaction may be influenced by what is outside the self, the construct reflects an evaluation of one's internal experiences rather than the social context. Conceptually, balance satisfaction differs from combining satisfaction in work and family roles separately (i.e., an additive measure of job satisfaction plus family satisfaction), as it refers to integration *across* work and family—emphasizing how the roles are combined (Valcour, 2007).

As already noted, several authors argue that high balance leads to positive outcomes such as job satisfaction, marital happiness, job performance, and organizational citizenship behavior (Carlson et al., 2013; Marks & MacDermid, 1996; Voydanoff, 2005). More specifically, we theorize that balance satisfaction uniquely relates to attitudes and

performance. Because balance satisfaction is an attitude (Valcour, 2007), we draw from attitude theories that posit that attitudes give rise to emotional responses and energize and direct behavior (Eagly & Chaiken, 1984). People who hold favorable evaluations of an attitude object engage in behaviors that "approach, support, or enhance the attitude object" (Eagly & Chaiken, 1984, p. 155) or increase positive feelings (Weiss & Cropanzano, 1996), whereas those with unfavorable evaluations engage in behaviors that "avoid, oppose, or hinder the attitude object" (Eagly & Chaiken, 1984, p. 155) or reduce negative feelings (Weiss & Cropanzano, 1996). According to Eagly and Chaiken (1984), positive attitudes toward one attitude object (e.g., satisfaction with integration across work and family) relate to emotional responses toward similar classes of attitude objects (e.g., satisfaction within work and family). Similarly, greater balance satisfaction should relate to other positive feelings and cognitions toward one's organization (e.g., commitment and fewer intentions to quit). Also, when attitudes (e.g., balance satisfaction across work and family) and behaviors (e.g., performance within work and family) are defined at comparable levels of specificity, attitudes and behaviors are related (Ajzen & Fishbein, 1977).

To date, eight published studies have examined balance satisfaction, and all but one has focused on its antecedents (see Table 1). These studies suggest having fewer demands and having greater resources are associated with greater balance satisfaction. Only one study investigated outcomes and found that balance satisfaction relates to greater work and nonwork satisfaction (Grawitch, Maloney, Barber, & Mooshegian, 2013). Thus, to adequately test role balance theory's premise that balance generates positive attitudes and performance (Marks & MacDermid, 1996), it is necessary to examine balance satisfaction's relationship with job attitudes and performance. Together, work-family balance theorizing (Marks & MacDermid, 1996; Voydanoff, 2005), attitude theory (Ajzen & Fishbein, 1977; Eagly & Chaiken, 1984), and initial empirical findings suggest that people satisfied with their work-family balance will engage in behaviors that enhance performance and promote positive attitudes in work and family roles.

Balance effectiveness. Grzywacz and Carlson (2007) argue that satisfaction-based views do not adequately capture the fundamental meaning of balance. In line with the theme of balance as effectiveness (Casper et al., 2014), Grzywacz and Carlson (2007) defined balance as the "accomplishment of role-related expectations that are negotiated and shared between an individual and his/her role-related partners in the work and family domains" (p. 458). This view, where balance is inextricably linked to the social context, does not dictate that one believes s/he is a "superstar" but meets basic expectations across work and family roles.

Below, we elaborate on Carlson and colleagues' (2009) ideas, incorporating theory on social cognition and the interdependent self.

Following the attributes of balance as defined and operationalized by Carlson et al. (2009), we view balance effectiveness as a self-evaluative construct. Self-evaluations refer to how people evaluate their own capabilities and worth across different life domains (Chen, Goddard, & Casper, 2004). Self-evaluation encompasses both private (i.e., judgments of one's own performance or attributes) and public performance (i.e., beliefs about an audience's judgments of one's performance or attributes; Tesser & Paulhus, 1983). This is consistent with an *interdependent* view of the self, where one's view of the self is intertwined with others (Markus & Kitayama, 1991). Similarly, the self-expansion model argues that close relationships can lead to including another person in one's sense of self (Aron & Aron, 1996). Like these perspectives, balance effectiveness focuses on the self in relation to others. The self-evaluation that occurs in judging one's balance effectiveness involves one's thoughts and beliefs about expectations that are negotiated and shared with work and family role partners.

Aligning with the idea of balance effectiveness as an interdependent self-evaluation, research generally indicates that self-evaluations influence goals, motivations, behavioral intentions, and behaviors, and as such, balance effectiveness should uniquely relate to attitudes and performance. Self-evaluations facilitate allocation of effort and persistence (Chen et al., 2004) and play a role in the emotions people experience and the meaning they attach to situations (Teunissen & Bok, 2013). Negative self-evaluations can be emotionally distressing, even debilitating (Higgins, 1987). Low balance effectiveness reflects a person's belief that he/she does not meet role partners' expectations. Such violations of self- or other-prescribed obligations are associated with negative emotional-motivational states including poorer performance and dissatisfaction (Higgins, 1987). Conversely, when people believe they effectively balance work and family, they perform better and experience more pleasurable role attitudes.

Empirically, the four studies that have examined balance effectiveness found that balance effectiveness was related to more positive attitudes in work and home domains as well as self-rated role performance and reduced stress transmission between home partners (e.g., Ferguson, Carlson, Kacmar, & Halbesleben, 2015; Ferguson, Carlson, Zivnuska, & Whitten, 2012). Thus, based on our theoretical elaboration and prior empirical work, we predict:

Hypothesis 2: Balance satisfaction and balance effectiveness uniquely relate to attitudes and performance, above and beyond additive and multiplicative spillover.

The Relative Importance of Global Balance Approaches

Prior research has examined how one balance approach relates to outcomes (e.g., additive spillover or balance satisfaction) or the incremental effect of one approach above and beyond another (e.g., balance effectiveness above and beyond additive spillover). Because no study has examined all four approaches simultaneously, it is not clear which approach(es) are most important to work and family outcomes. Relative importance (cf. LeBreton, Ployhart, & Ladd, 2004; Tonidandel & LeBreton, 2011) conveys the impact of a variable on a criterion relative to other predictors and allows for a more accurate interpretation of the importance of one balance approach to outcomes relative to other approaches.

To advance theoretical understanding, we investigate the *differential* relationships of balance satisfaction and effectiveness with outcomes, as valuable insights may be highlighted by divergent findings. Several theoretical perspectives suggest balance satisfaction relates more strongly to work and family attitudes, whereas balance effectiveness relates more strongly to performance. For one, the attitude literature supports the compatibility principle: the idea that relationships are strongest when constructs are conceptually matched (Ajzen & Fishbein, 1977). Thus, evaluations of a certain type (e.g., affective) elicit a similar type of response (e.g., affective outcomes). Because balance satisfaction is an attitude with an affective component, it should relate more strongly to other attitudes, which have affective components, than to performance, which is behavioral in nature. Similarly, because balance effectiveness reflects beliefs about how well one meets shared expectations across work and family, it focuses on perceptions of behaviors and is more conceptually compatible with behavioral outcomes like role performance. Further, because balance satisfaction reflects an independent self and balance effectiveness an interdependent self (Markus & Kitayama, 1991), balance satisfaction should associate more strongly with independent constructs (i.e., those that represent private, internal views such as attitudes), whereas balance effectiveness should associate more strongly with interdependent constructs (i.e., those that are both privately and publicly held such as performance). We predict:

Hypothesis 3: Balance satisfaction is a relatively more important predictor than balance effectiveness in accounting for the variance associated with attitudes.

Hypothesis 4: Balance effectiveness is a relatively more important predictor than balance satisfaction in accounting for the variance associated with performance.

Thus far, we have argued that global balance approaches explain unique variance in attitudes and performance, above and beyond combined spillover approaches. Because research on global approaches is less well-developed, another relevant question is whether global approaches importantly predict outcomes *relative* to the more established combined spillover approaches. As such, we explore the relative importance of the two global balance approaches compared to additive and multiplicative spillover in predicting attitudes and performance.

Research Question: When considered together, are balance satisfaction and balance effectiveness relatively more important than additive and multiplicative spillover in accounting for the variance associated with attitudes and performance?

The Mediating Role of Global Balance

Maertz and Boyar (2011) suggest examining relationships among conflict, enrichment, and global balance as an important direction for research. Moreover, these constructs may link together in ways that generate positive outcomes. According to the JD-R model (Bakker & Demerouti, 2007), when work and family demands are low and employees experience low conflict and/or resources are high and employees experience high enrichment, they in turn experience less strain, more positive attitudes, motivation, performance, and well-being (Kossek & Ozeki, 1998; McNall, Nicklin, & Masuda, 2010; Shockley & Singla, 2011). Several scholars have posited that conflict and enrichment are antecedents of global balance (Greenhaus & Allen, 2011; Maertz & Boyar, 2011) and that global balance is a key variable driving work and family outcomes (Maertz & Boyar, 2011). Thus, the unique relationships typically found between conflict and enrichment with outcomes may be explained by perceptions of global balance. Drawing from the JD-R model and Maertz and Boyar (2011), we propose that global balance mediates the unique relationships of bidirectional conflict and enrichment with attitudes and performance. In support of this, Grawitch et al. (2013) found that balance satisfaction mediated the relationship of some forms of conflict and enrichment with life satisfaction and domain-specific satisfaction.

In addition to mediated effects through balance satisfaction and balance effectiveness for additive spillover, we propose mediated effects

for multiplicative spillover. As stated previously, tenets of role balance theory (Marks & MacDermid, 1996) and Frone's balance typology (2003) suggest that the synergistic effects of lower conflict combined with higher enrichment (rather than one or the other), signifies greater role integration. As such, a person who experiences synergy, such that demands in one role do not interfere with the other role (i.e., lower conflict), *and* resources from one role improve the other role (i.e., higher enrichment) is likely to be most satisfied with his/her allocation of resources across work and family roles (i.e., balance satisfaction). Also, to the extent that performance is improved by low demands combined with high resources (JD-R; Bakker & Demerouti, 2007), the simultaneous experience of lower conflict and higher enrichment should enhance one's self-evaluation of how well he or she meets expectations shared with role partners. Thus, lower conflict coupled with higher enrichment should relate to balance satisfaction and effectiveness, and in turn, global balance relates to attitudes and performance.

Hypothesis 5: Balance satisfaction and balance effectiveness mediate the relationships between additive and multiplicative spillover with attitudes and performance.

Method

Pilot Study

Because balance satisfaction (Valcour, 2007) and balance effectiveness (Carlson et al., 2009) have not been previously examined together, we conducted a pilot study to assess their distinctiveness. Employees enrolled as professional MBAs at two universities in the US completed surveys. At one university, surveys were placed in campus mailboxes and returned to locked mailboxes and entered in a drawing for gift cards. Of 62 surveys distributed, 37 were returned (response rate = 60%). At the other university, surveys were administered in two classes, with extra credit offered for completing surveys and recruiting coworkers to complete surveys. Of 300 surveys distributed, 204 surveys were returned (response rate = 68%). To be included in analyses, participants had to work at least 30 hours per week; 212 of the 241 participants met this requirement. The resulting sample was 65% Caucasian, 57% male, 62% were married/living with a partner, 44% had children, worked an average of 45 hours per week, and were an average of 36 years old.

Balance satisfaction was measured with Valcour's (2007) five-item scale. Respondents reported how satisfied they were from 1 = *extremely*

dissatisfied to 5 = *extremely satisfied* with items such as "the way you divide your time between work and personal or family life" ($\alpha = .95$).

Balance effectiveness was measured with Carlson et al.'s (2009) six-item scale (e.g., "I am able to accomplish the expectations that my supervisors and family have for me," $\alpha = .88$).

We followed recommendations (i.e., Edwards, 2001; Mallard & Lance, 1998) to use structural equation modeling (SEM) to test three nested confirmatory factor analysis (CFA) models: two correlated factors, two orthogonal factors, and one general factor ($N = 212$). The correlated factors model adequately fit the data, $\chi^2(43, N = 212) = 186.64, p < .01$, Comparative Fit Index (CFI) = .92, NonNormed Fit Index (NNFI) = .90, Standardized Root Mean Square Residual (SRMR) = .08, and better than both the orthogonal factors model ($\chi^2(44, N = 212) = 251.70, p < .01$; CFI = .89; NNFI = .86; SRMR = .26; $\chi^2\Delta(1, N = 212) = 65.06, p < .01$) and the general factor model ($\chi^2(44, N = 212) = 537.70, p < .01$; CFI = .73; NNFI = .67; SRMR = .15; $\chi^2\Delta(1, N = 212) = 351.06, p < .01$). The intercorrelation between balance satisfaction and effectiveness was significant ($r = .56, p < .01$), suggesting they are distinct but related, so we treated them as separate constructs in hypothesis testing.

Primary Study

Sample and procedure. Participants were from an engineering consulting firm of 1,506 employees in the US. Researchers sent an email with a survey link to employees, indicating that $1 would be donated to the firm's charity for each survey returned, up to $500. Employees were asked to complete the survey and forward the email with the survey link to their supervisor and partner, if married or cohabitating. The email contained an identification number to match employee, supervisor, and partner surveys. Each respondent reported whether he/she was an employee, supervisor, or partner and the survey branched to appropriate items. In total, 1,044 employees (69.32% response rate), 509 supervisors (48.75% response rate), and 470 partners (58.53% response rate) responded. After excluding surveys with incomplete data and part-time employees (less than 30 hours/week), our final sample included 954 employees, 492 supervisors, and 453 spouses.

Employees were primarily Caucasian (91%), male (69%), and married/cohabiting (81%); 57% had children and they were, on average, 37 years old with 8 years of firm tenure. Supervisors were also mostly male (77%), Caucasian (95%), and were on average 43 years old with 12 years of tenure. They supervised four employees on average and had supervised the employee for whom they completed the survey for an average

of four years. Spouses were mostly female (69%), Caucasian (91%), on average 37 years old, and 80% had a college or graduate degree. Most spouses (73%) were employed with an average of 6 years of tenure.

Employee Survey. All items used a 5-point Likert scale from 1 = *strongly disagree* to 5 = *strongly agree*, unless noted. These data were part of a larger survey; below, we report scales used in this study. As our sponsoring organization was concerned about survey length, we shortened some scales, and we conducted a validity study of shortened measures, discussed below.

Combined spillover. *Work-to-family* and *family-to-work conflict* were measured by Netemeyer, Boles, and McMurrian's (1996) scale, with five items for each direction (work-to-family, $\alpha = .90$; family-to-work, $\alpha = .83$; e.g., "The amount of time my job takes up makes it difficult to fulfill family responsibilities"). *Work-to-family enrichment* was measured with six items from Carlson et al. (2006), with two items each for affect (e.g., "My involvement in my work makes me feel happy and this helps me be a better family member"), development (e.g., "helps me to acquire skills"), and capital (e.g., "provides me with a sense of accomplishment"; $\alpha = .91$). *Family-to-work enrichment* was measured with the same four items for affect and development with two items for efficiency (e.g., "My involvement in my family causes me to be more focused at work, which helps me be a better worker"; $\alpha = .81$).

Global balance. The same items from the pilot study were used to measure *balance satisfaction* (Valcour, 2007; $\alpha = .95$) and *balance effectiveness* (Carlson et al., 2009; $\alpha = .89$).

Work attitudes. *Organizational commitment* was measured with 4 of the 6 affective commitment items from Meyer and Allen (1991; e.g., "[Name of organization] has a great deal of personal meaning for me," ($\alpha = .81$). *Job satisfaction* was measured with the three items from Camman, Fichman, Jenkins, and Klesh (1979) such as "All in all, I am satisfied with my job" ($\alpha = .92$). *Turnover intent* was measured with three items including two from Mowday, Koberg, and McArthur (1984) (e.g., "All things considered, I would like to find a comparable job in a different organization" and "I will probably look for a new job in the near future", $\alpha = .93$).[1]

Family attitudes. Following others (e.g., Brough, O'Driscoll, & Kalliath, 2005; Carlson et al., 2009), we revised two job satisfaction items

[1]With regard to the third item, Mowday et al. (1984) asked participants how much longer they intended to work for the organization on a scale that ranged from 6 months to 10 years; those planning to work less than a year were classified as intending to quit and others as intending to stay. Their scale had average internal consistency reliability of $\alpha = .64$ across two samples. To use the same format as the other items and to improve reliability, we adapted this item ("I will actively look for a different organization to work for within the next year").

to measure *family satisfaction* (e.g., "All in all, I am satisfied with my family life," $\alpha = .92$). We omitted a third item ("In general, I like working here") because its parallel did not transfer well to the family domain.

Control variables. Because individual differences may relate to perceptions of balance (Byron, 2005), we controlled for age, gender, marital status, parental status, job level, and positive and negative affect. Eight job levels (i.e., hierarchical positions) were treated as a continuous variable. To assess positive and negative affect, we used the 10-item short form of the Positive and Negative Affectivity Scale (PANAS), developed and validated by Thompson (2007). Participants rated each adjective regarding how they normally feel on a scale from 1 = *never* to 5 = *always* (positive affect $\alpha = .73$, negative affect $\alpha = .71$).

Supervisor and Spouse Surveys. Supervisors rated *job performance* using 4 of 7 items from Williams and Anderson (1991). They rated how frequently the employee performed in-role behaviors from 1 = *never* to 5 = *always* such as "adequately completes assigned duties" ($\alpha = .90$). These items were selected from the original scale because they had the highest factor loadings (.83–.88). Spouses rated *family performance* with a parallel three-item adapted scale (e.g., "My spouse/partner performs well in the family tasks that are expected of him/her", $\alpha = .87$). We did not include the item "meets formal performance requirements of the job" because it did not adapt well to the family domain.

Validation Study

We conducted a validation study to examine the psychometrics of the shortened scales. Participants, recruited from Mechanical Turk, reported their employment, relationship, and job status. Only those who worked at least 30 hours a week, were married or cohabitating, and supervised employees continued. To ensure data quality, only U.S. participants with 95% of their prior tasks approved who previously completed at least 1,000 tasks could participate. Participants were paid $1.75.

A total of 359 people completed the survey. Five validation questions were embedded to ensure effortful responding (e.g., "Respond by marking 'strongly disagree'") and respondents who missed two or more validation questions were excluded (21 participants), resulting in a final sample of 338: 55% were male, 67% had children at home, and 77% were Caucasian. On average, they were 35 years old and were primarily first- (48%) and mid-level (42%) supervisors who worked an average of 42 hours per week in various occupations including technology, sales, education and training, and administrative support.

Participants completed all 18 enrichment items from Carlson et al. (2006), the six-item organizational commitment scale (Meyer & Allen, 1991), the three-item family satisfaction scale (Brough et al., 2005), and

14 items for job and family performance (Williams & Anderson, 1991). Alphas for full scales ranged from .86 to .93. The six-item work-to-family enrichment measure was highly correlated with the nine-item scale (r = .99), as was the family-to-work scale (r = .98). The four items measuring organizational commitment were highly correlated with the Meyer and Allen (1991) six-item scale (r = .96). The two-item family satisfaction scale was highly correlated with the three-item version (r = .93). Also, the four- and three-item job and family performance scales were highly correlated with their seven-item versions (rs = .93 and .91, respectively). In short, results suggest the shortened scales adequately represent the full scales.

Results

Incremental Variance Predicted by Multiplicative Spillover and Global Balance

Table 3 provides means, standard deviations, and correlations for all primary study variables. We conducted hierarchical regression analyses in five steps to test the extent to which multiplicative spillover and global balance uniquely predict attitudes and performance (Hypotheses 1 and 2). We entered covariates in Step 1 (gender, age, marital and parental status, job level, positive and negative affect), bidirectional conflict and enrichment (additive spillover) in Step 2, and two interaction terms, one for each direction of conflict and enrichment with centered variables (multiplicative spillover), in Step 3. Step 4 was performed two ways: once with balance satisfaction entered and once with balance effectiveness entered. The global balance variable that was not included at Step 4 was entered in Step 5. This allowed us to test (a) the unique contribution of global balance approaches and (b) the incremental contribution of each global approach above and beyond the other (ΔR^2 from Step 4 to Step 5, see Table 4).

Hypothesis 1 predicts that multiplicative spillover (i.e., lower conflict and higher enrichment) uniquely relates to attitudes and performance, above and beyond additive spillover. As shown in Table 4, the interaction between work-to-family conflict and enrichment displayed a significant regression weight and explained unique variance above and beyond bidirectional conflict and enrichment for job satisfaction (β = .13, ΔR^2 = .01, $p < .01$), turnover intent (β = –.07, ΔR^2 = .01, $p < .05$), and family satisfaction (β = .08, ΔR^2 = .01, $p < .01$). Interactions were plotted per Aiken and West (1991). As shown in Figures 1 and 2, job satisfaction was highest and turnover intent lowest under conditions of higher enrichment combined with lower conflict, supporting our predictions. Conversely, job satisfaction was lowest and turnover intent highest

TABLE 3

Means, Standard Deviations, and Correlations Among Primary Study Variables

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Gender [a]	.69	.46	—																		
2. Age	37.28	10.22	.02	—																	
3. Marital status [b]	.81	.39	.09**	.25**	—																
4. Parental status [c]	.57	.50	.12**	.49**	.38**	—															
5. Job level	5.07	1.81	.19**	−.20**	.05	−.01	—														
6. Positive affect	3.88	.47	.02	.12**	.03	.07*	−.01	(.72)													
7. Negative affect	2.26	.49	.00	−.08	.01	.02	.07*	−.36**	(.71)												
8. Work-to-family conflict	3.56	1.00	.04	−.12**	.14**	.02	.12**	−.19**	.31**	(.90)											
9. Family-to-work conflict	2.03	.85	.13**	−.06	.10**	.20**	.15**	−.24**	.19**	.25**	(.83)										
10. Work-to-family enrichment	3.01	.90	−.15	.10**	−.01	.06	−.06	.31**	−.30**	−.49**	−.11**	(.91)									
11. Family-to-work enrichment	3.69	.70	−.11	−.06	.06	.08*	.01	.24**	−.11**	−.26**	−.06	.48**	(.81)								
12. Balance satisfaction	2.95	1.06	.00	.11**	−.07*	.05	−.09**	.26**	−.38**	−.78**	−.18**	.59**	.34**	(.95)							
13. Balance effectiveness	3.57	.82	−.07*	.02	−.09**	−.01	−.09**	.28**	−.37**	−.65**	−.27**	.51**	.37**	.74**	(.89)						
14. Organizational commitment	4.05	.81	.05	.17**	.07*	.18**	.03	.26**	−.17**	−.13**	−.01	.43**	.13**	.27**	.14**	(.81)					
15. Job satisfaction	3.93	.96	−.01	.14**	.00	.10**	−.02	.31**	−.35**	−.47**	−.10**	.67**	.27**	.60**	.47**	.61**	(.92)				
16. Turnover intent	2.12	1.12	−.05	−.23**	−.08*	−.19**	.00	−.23**	.28**	.37**	.03	−.50**	−.19**	−.46**	−.30**	−.63**	−.75**	(.93)			
17. Family satisfaction	3.63	1.12	−.05	.05	.01	.01	−.05	.20**	−.28**	−.55**	−.20**	.39**	.38**	.63**	.65**	.09**	.39**	−.28**	(.92)		
18. Job performance [d]	4.57	.49	−.02	−.07	.07	−.02	.01	.02	−.01	−.05	−.08	.04	.00	.04	.14**	.09*	.11**	−.10*	.05	(.90)	
19. Family performance [e]	4.01	1.01	.02	.04	.05	.08	−.13**	.03	−.08	−.32**	−.09	.19**	.21**	.35**	.39**	.05	.18**	−.14**	.35**	.00	(.87)

Note. *Ns* range from 453 to 954. Coefficient alphas reported along the diagonal.

[a] 0 = female, 1 = male.

[b] 0 = single, divorced, or widowed, 1 = married or living with partner.

[c] 0 = no children, 1 = has children.

[d] Supervisor-reported.

[e] Spouse-reported.

** $p < .01$.

* $p < .05$.

TABLE 4
Hierarchical Regression Results

Variables	Attitudinal outcomes				Performance outcomes	
	Organizational commitment	Job satisfaction	Turnover intent	Family satisfaction	Job performance	Family performance
Step 1 – Control variables						
Gender [a]	.03	−.02	−.03	−.06	−.02	.03
Age	.10**	.08*	−.16**	.00	−.10	−.03
Marital status [b]	−.02	−.05	.01	.01	.09	.03
Parental status [c]	.13**	.07**	−.11**	.00	−.01	.07
Job level	.05	.02	−.04	−.02	−.01	−.13*
Positive affect	.20**	.20**	−.12**	.12**	.02	.01
Negative affect	−.08*	−.27**	.23**	−.24**	.00	−.07
R^2	**.11****	**.17****	**.14****	**.09****	**.01**	**.03**
Step 2 – Additive spillover						
WFC	.11**	−.17**	.16**	−.45**	−.06	−.28**
WFE	.50**	.58**	−.40**	.02	.04	.01
FWC	.02	.03	−.05	−.07*	−.10	−.06
FWE	−.11**	−.08**	.05	.23**	−.06	.14**
ΔR^2	**.15****	**.34****	**.18****	**.29****	**.02**	**.11****
Step 3 – Multiplicative spillover						
WFC X WFE	.00	.13**	−.07*	.08**	.04	.11*
FWC X FWE	−.02	−.04	.05	.03	.07	−.01
ΔR^2	**.00**	**.01****	**.01***	**.01****	**.01**	**.01**

(Continued)

TABLE 4 (continued)

Variables	Attitudinal outcomes								Performance outcomes			
	Organizational commitment		Job satisfaction		Turnover intent		Family satisfaction		Job performance		Family performance	
Step 4 – Global balance												
Balance satisfaction	.17**	–	.29**	–	.19**	–	.47**	–	.03	–	.29**	–
Balance effectiveness	–	−.07	–	.08*	–	.03	–	.46**	–	.22**	–	.32**
ΔR^2	**.01****	**.00**	**.03****	**.01***	**.01****	**.00**	**.07****	**.10****	**.00**	**.02****	**.02****	**.05****
Step 5 – Unique contribution												
Balance satisfaction	.24**	.24**	.30**	.30**	−.24**	−.24**	.30**	.30**	−.08	−.08	.17*	.17*
Balance effectiveness	−.15**	−.15**	−.01	−.01	.11*	.11*	.37**	.37**	.24**	.24**	.28**	.28**
ΔR^2	**.01****	**.02****	**.00**	**.02****	**.01***	**.02****	**.05****	**.02****	**.02****	**.00**	**.04****	**.01***
Total R^2	**.28****		**.55****		**.35****		**.51****		**.06***		**.21****	

Note. *Ns* range from 928 to 954 for attitudinal outcomes and 453 to 488 for performance outcomes. Standardized estimates are reported for each step in the analysis. The entry of the global balance measures was alternated in Step 4, once with balance satisfaction entered first and once with balance effectiveness entered first. The ΔR^2 at Step 5 represents the unique contribution of the balance measure not included in Step 4. WFC = Work-to-family conflict, WFE = Work-to-family enrichment, FWC = Family-to-work conflict, FWE = Family-to-work enrichment.

[a]0 = female, 1 = male.

[b]0 = single, divorced, or widowed, 1 = married or living with partner.

[c]0 = no children, 1 = has children.

**$p < .01$.

*$p < .05$.

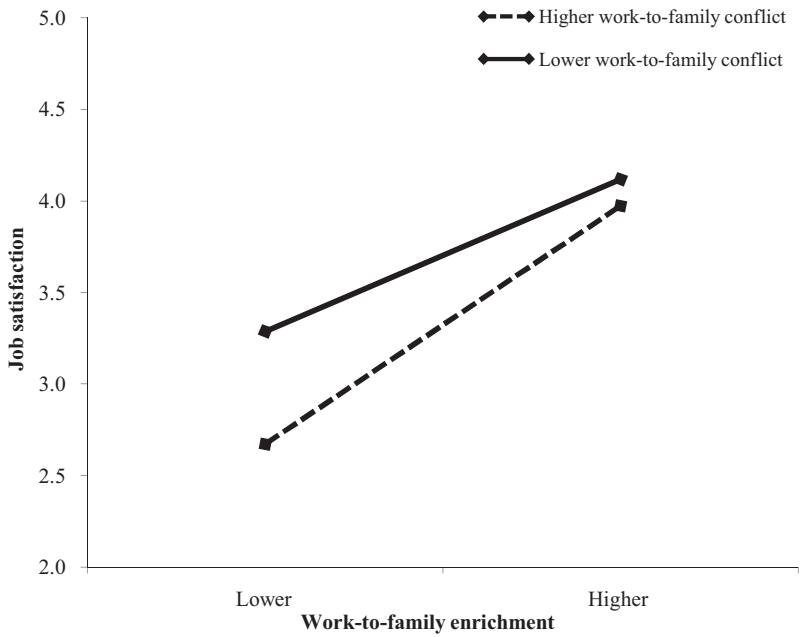

Figure 1: **Interaction Between Work-to-Family Conflict and Enrichment in Predicting Job Satisfaction.**

when there was higher conflict and lower enrichment. Figure 3 shows that family satisfaction was highest when work-to-family conflict was lower rather than higher (as expected), but work-to-family enrichment had little effect on family satisfaction. No other interactions were significant; thus, Hypothesis 1 was partially supported.

Hypothesis 2 proposes that global balance approaches uniquely relate to attitudes and performance, above and beyond additive and multiplicative spillover. Supporting Hypothesis 2, balance satisfaction was uniquely associated with organizational commitment ($\beta = .17$, $\Delta R^2 = .01$, $p < .01$), job satisfaction ($\beta = .29$, $\Delta R^2 = .03$, $p < .01$), turnover intent ($\beta = –.19$, $\Delta R^2 = .01$, $p < .01$), and family satisfaction ($\beta = .47$, $\Delta R^2 = .07$, $p < .01$), beyond additive and multiplicative spillover (see Table 4), and accounted for significant incremental variance ($\Delta R^2 = .02$, $p < .01$) in all attitudes above and beyond balance effectiveness (see Step 5, Table 4). Balance satisfaction was also uniquely related to family performance above and beyond additive and multiplicative spillover ($\beta = .29$, $\Delta R^2 = .02$, $p < .01$), and accounted for significant incremental variance above and beyond balance effectiveness ($\beta = .17$, $\Delta R^2 = .01$, $p < .05$). However, balance satisfaction was neither uniquely related to

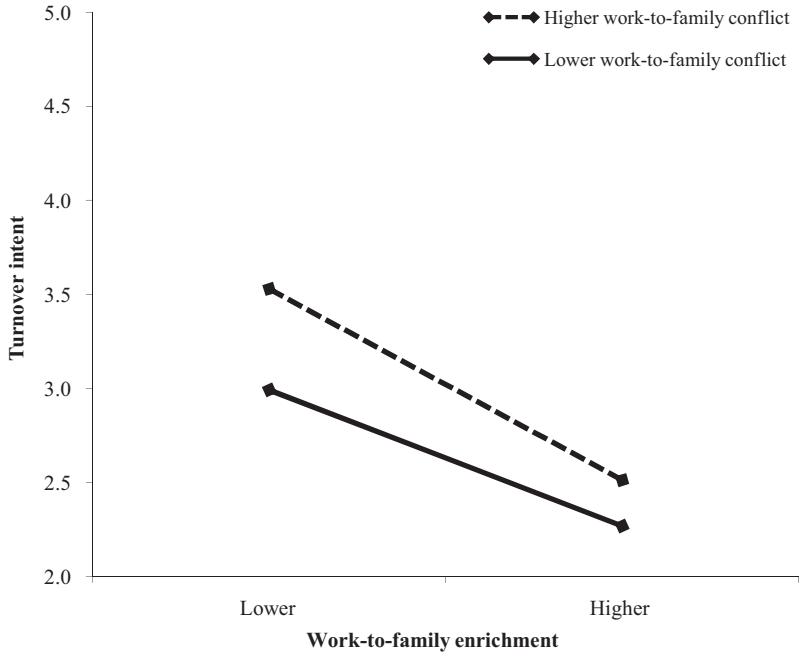

Figure 2: **Interaction Between Work-to-Family Conflict and Enrichment in Predicting Turnover Intent.**

job performance after controlling for additive and multiplicative spillover ($\beta = .03$, $\Delta R^2 = .00$, $p > .05$) nor explained incremental variance above and beyond balance effectiveness ($\beta = –.08$, $\Delta R^2 = .00$, $p > .05$).

Supporting Hypothesis 2, balance effectiveness was uniquely related to job satisfaction above and beyond additive and multiplicative spillover ($\beta = .08$, $\Delta R^2 = .01$, $p < .05$). However, it did not account for significant incremental variance in job satisfaction above and beyond balance satisfaction ($\beta = –.01$, $\Delta R^2 = .00$, $p > .05$). Further, balance effectiveness was not uniquely related to organizational commitment ($\beta = –.07$, $\Delta R^2 = .00$, $p > .05$) or turnover intent ($\beta = .03$, $\Delta R^2 = .00$, $p > .05$) after controlling for additive and multiplicative spillover.[2] However, balance effectiveness was uniquely associated with family satisfaction ($\beta = .46$,

[2]Although the ΔR^2 associated with Step 5 in the regression analysis was significant for the incremental variance accounted for in organizational commitment and turnover intent by balance effectiveness, the reversed standardized regression estimate (compared to the zero-order correlations) suggests suppressor effects are present and the results should be interpreted cautiously (Cohen & Cohen, 1983). In separate regression analyses, when entering only balance effectiveness in the step after control variables, suppressor effects were no longer present and the relationships were significant in the direction expected for organizational commitment ($\beta = .07$, $p < .05$) and turnover intent ($\beta = –.23$, $p < .01$).

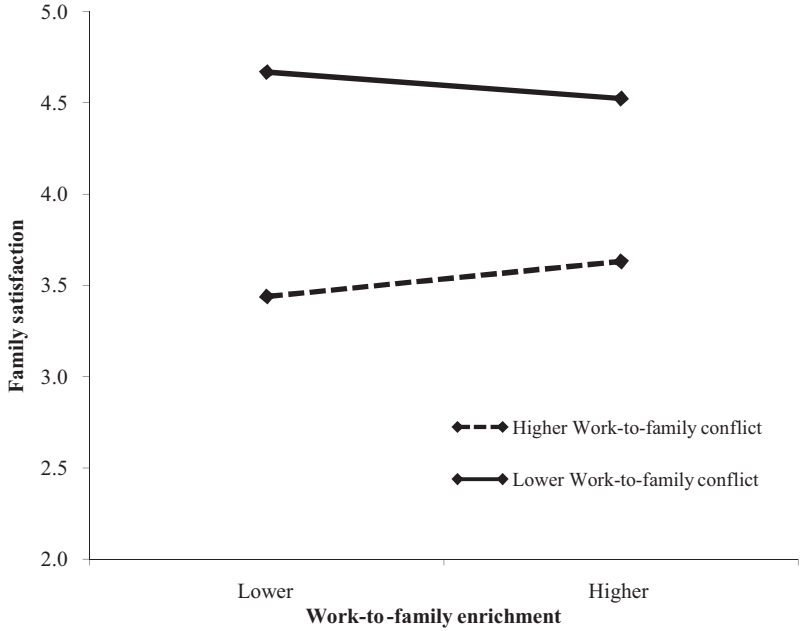

Figure 3: **Interaction Between Work-to-Family Conflict and Enrichment in Predicting Family Satisfaction.**

$\Delta R^2 = .10, p < .01$), job performance ($\beta = .22$, $\Delta R^2 = .02, p < .01$), and family performance ($\beta = .32$, $\Delta R^2 = .05, p < .01$), beyond the spillover approaches. Moreover, balance effectiveness accounted for incremental variance in family satisfaction ($\Delta R^2 = .05$, $p < .01$), job performance ($\Delta R^2 = .02$, $p < .01$), and family performance ($\Delta R^2 = .04$, $p < .01$) above and beyond balance satisfaction (see Step 5, Table 4). All in all, Hypothesis 2 was partially supported.

Relative Importance of Global Balance Approaches

Relative weights analysis (RWA; Johnson, 2000) was used to assess the relative importance of balance satisfaction versus balance effectiveness in predicting attitudes and performance as well as their relative importance compared to additive and multiplicative spillover (Hypotheses 3, 4, and 5). RWA accounts for intercorrelations among predictors by using orthogonally transformed variables that are maximally similar to the original predictors to predict the criterion. Results yield a relative weight for each predictor that represents its relative contribution to predicting the criterion, more accurately reflecting variance explained by each predictor (Johnson

& LeBreton, 2004). Variance associated with covariates was residualized from the criteria before conducting RWA. We also residualized lower-level simple effects from the bidirectional conflict × enrichment interactions to appropriately decompose variance associated with higher-order effects (cf. LeBreton, Tonidandel, & Krasikova, 2013).

Hypothesis 3 proposes that balance satisfaction is a more important predictor than balance effectiveness of attitudes. As shown by RWA (see Table 5), balance satisfaction was the stronger predictor of organizational commitment (15.15% vs. 6.09% of the total variance explained), job satisfaction (21.24% vs. 7.66% of total variance explained), and turnover intent (22.40% vs. 5.83% of the total variance explained), but not family satisfaction (25.85% vs. 33.83% of total variance explained), partially supporting Hypothesis 3. Fully supporting Hypothesis 4, RWA results showed that balance effectiveness was the stronger predictor of job performance (47.73% vs. 7.60% of total variance explained) and family performance than was balance satisfaction (37.41% vs. 20.45% of total variance).

To evaluate the research question, we examined the relative importance of global balance approaches together compared to the combined spillover approaches. Results (see Table 5) showed that across all work attitudes (organizational commitment, job satisfaction, and turnover intent), additive spillover was the most important predictor, with conflict and enrichment accounting for 64.00% to 78.28% of explained variance. Global balance approaches followed next, with balance satisfaction and balance effectiveness together accounting for 21.24% to 28.90% of explained variance and then multiplicative spillover accounting for .48% to 7.10% of explained variance. For family satisfaction, job performance, and family performance, global balance was the most important predictor, with balance satisfaction and effectiveness together accounting for 55.33% to 59.68% of explained variance. Additive spillover was next, accounting for 31.41% to 38.90% of explained variance, followed by multiplicative spillover with 1.42% to 13.26% of explained variance.

Tests of Indirect Effects

Hypothesis 5 predicts that the global balance approaches mediate the relationships of additive and multiplicative spillover with attitudes and performance. To test this, we specified a latent SEM model using Mplus 7.3 (Muthén & Muthén, 2012) that included relationships between bidirectional conflict and enrichment as well as interactions of work-family conflict × work-family enrichment and family–work conflict × family–work enrichment with all outcomes via indirect effects through balance satisfaction and balance effectiveness, including covariates. Interactions

TABLE 5
Summary of Relative Weights Analysis

Predictor	Outcome					
	Organizational commitment	Job satisfaction	Turnover intent	Family satisfaction	Job performance	Family performance
Raw relative weights						
WFC	.01	.04	.03	.08	.00	.03
WFE	.11	.19	.09	.02	.00	.01
FWC	.00	.00	.00	.00	.01	.00
FWE	.01	.01	.01	.05	.00	.02
WFC X WFE	.00	.02	.01	.01	.00	.01
FWC X FWE	.00	.00	.00	.00	.00	.00
Balance satisfaction	.03	.08	.05	.10	.00	.03
Balance effectiveness	.01	.03	.01	.13	.02	.06
Relative weights as % of R^2						
WFC	5.80	10.36	14.54	20.04	6.36	17.44
WFE	66.89	48.91	46.09	4.72	2.83	4.01
FWC	1.23	.99	1.76	1.24	14.10	2.09
FWE	4.36	3.74	3.81	12.90	8.12	10.09
WFC X WFE	.21	6.29	3.70	1.35	3.18	8.33
FWC X FWE	.27	.81	1.87	.07	10.08	.18
Balance satisfaction	15.15	21.24	22.40	25.85	7.60	20.45
Balance effectiveness	6.09	7.66	5.83	33.83	47.73	37.41

Note. Before conducting the relative weights analyses, outcome variables were residualized to account for variance associated with the control variables. Interaction variables were residualized to account for lower-order simple effects. *Ns* range from 928 to 954 for attitudinal outcomes and 453 to 488 for performance outcomes. WFC = Work-to-family conflict, WFE = Work-to-family enrichment, FWC = Family-to-work conflict, FWE = Family-to-work enrichment.

were formed using Klein and Moosbrugger's (2000) latent moderated structural (LMS) approach. Because of model complexity, we employed a three-item parceling strategy per Landis, Beal, and Tesluk (2000). We created three parcels of randomly assigned items for work-to-family conflict and enrichment as well as family-to-work conflict and enrichment before specifying latent interactions. Per Hayes and colleagues (Preacher & Hayes, 2008; Preacher, Rucker, & Hayes, 2007), we included all direct effects from conflict and enrichment to outcomes in our indirect effects model and used a Monte Carlo bootstrapping approach with 95% confidence intervals (CIs) to test for the significance of indirect effects through balance satisfaction and effectiveness [Correction added on August 24, 2016, after first online publication: the phrase "95% bias-corrected confidence intervals" was changed to "95% confidence intervals" in the preceding sentence.]. Latent residuals were allowed to correlate for balance satisfaction and balance effectiveness to reflect the multidimensional nature of global balance, and latent residuals among attitudes and among performance outcomes were allowed to correlate so the model would converge. We used the sample size of 954 with full information maximum likelihood (FIML) estimation to deal with missing data.[3]

Figure 4 presents results from our SEM indirect effects model. For clarity, we omitted nonsignificant paths, factor loadings, path estimates for covariates, and direct effects of bidirectional conflict, enrichment, and their interactions on all outcomes. As shown by the significant unstandardized parameter estimates (*b*s) in Figure 4, all four bidirectional conflict and enrichment variables and the interactions were related to balance effectiveness. However, only work-to-family conflict, work-to-family enrichment, and work-to-family conflict × work-to-family enrichment were related to balance satisfaction (*b*s = –.86, .31, and .13, respectively; $p < .01$). In turn, balance satisfaction was positively related to organizational commitment ($b = .18$, $p < .05$), job satisfaction ($b = .22$, $p < .05$), and family satisfaction ($b = .29$, $p < .01$), whereas balance effectiveness related to family satisfaction ($b = .63$, $p < .01$), job performance ($b = .18$, $p < .01$), and family performance ($b = .42$, $p < .01$). Balance effectiveness also related to organizational commitment ($b = –.19$, $p < .05$); however, the reversed parameter estimate compared to the correlation indicates suppression, suggesting cautious interpretation. Neither balance satisfaction nor balance effectiveness was related to turnover

[3]Because of discrepancies in employee ($N = 954$), supervisor ($N = 492$), and spouse ($N = 453$) sample sizes, we used the full sample of 954 and created two missing data dummy variables to treat as controls that represented whether supervisor (1 = yes, 0 = no) and spouse (1 = yes, 0 = no) data were present (Cohen & Cohen, 1983). We estimated the SEM model using FIML to deal with missing data. Because there is complete correspondence between the missing data dummy control variable and the FIML estimation, this further accounted for any possible biasing of parameter estimates.

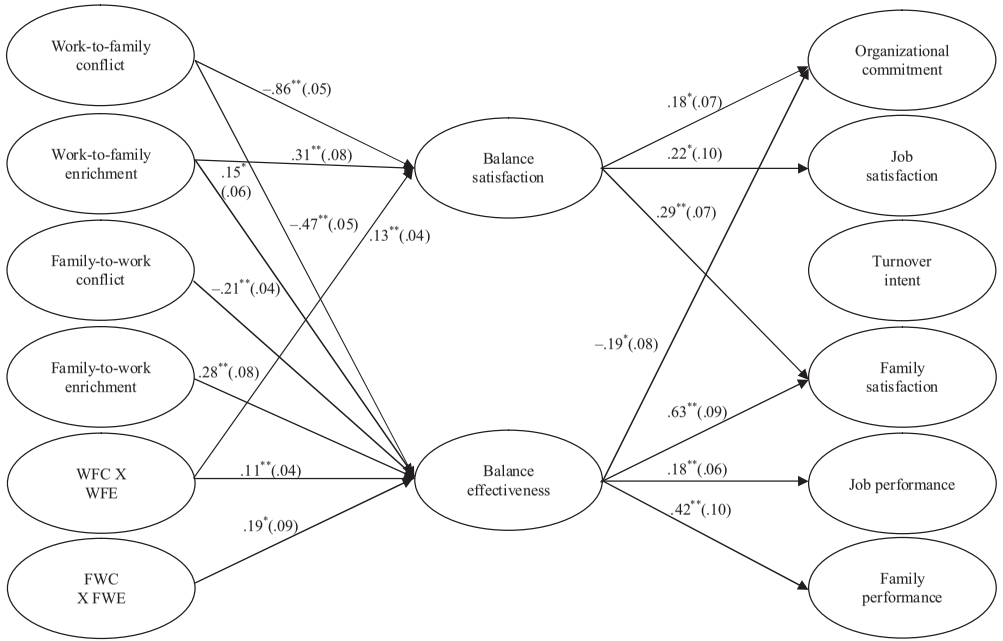

Figure 4: **SEM Model Results.**

Note. $N = 954$. Values shown are unstandardized parameter estimates, with standard errors in parentheses. Factor loadings, control variables, nonsignificant path estimates, and direct path estimates from bidirectional work-family conflict, enrichment, and their interactions to outcomes are omitted for parsimony. Due to the suppression effect suggested by the reversed parameter estimate from balance effectiveness to organizational commitment ($b = -.19$) compared to the zero-order correlation, this parameter estimate should be interpreted with caution. WFC = Work-to-family conflict, WFE = Work-to-family enrichment, FWC = Family-to-work conflict, FWE = Family-to-work enrichment.

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

intent. Regarding the additive spillover variables, Monte Carlo bootstrapped CIs indicated significant indirect effects for all relationships in Figure 4 (see Table 6 for the significant indirect effects and 95% CIs). Because the indirect effects of work-to-family conflict × work-to-family enrichment and family-to-work conflict × family-to-work enrichment constitute mediated moderation effects (cf. Muller, Judd, & Yzerbyt, 2005), we only examined the indirect effects for the three significant interactions found in the earlier hierarchical regression analyses (i.e., work-to-family conflict × work-to-family enrichment on job satisfaction, turnover intent, and family satisfaction). As reported in Table 6, significant indirect effects were found for the work-to-family conflict × work-family-enrichment interaction regarding the relationship with job satisfaction and family satisfaction through balance satisfaction and regarding the relationship with family satisfaction through balance effectiveness. Altogether, results partially support Hypothesis 6.

Discussion

Work-family balance is a burgeoning literature that suffers from significant definitional ambiguity (Maertz & Boyar, 2011). It is critical to address this ambiguity because theory and research cannot advance without greater clarity and consensus around the balance concept. To this end, our study advances understanding of balance in four ways. First, we synthesize existing conceptualizations, identify and label four approaches (additive spillover, multiplicative spillover, balance satisfaction, balance effectiveness), and elaborate on their conceptual nature. Second, we demonstrate that multiplicative spillover, which best reflects Frone's (2003) view of balance, explains variance in outcomes above and beyond additive effects of conflict and enrichment. Third, we apply tenets from attitude, social-cognitive, and self-concept theories to make theoretically based predictions about how two global approaches—balance satisfaction (Valcour, 2007) and balance effectiveness (Carlson et al., 2009)—differentially relate to outcomes, helping build their nomological networks. Finally, we examine relationships among distinct conceptualizations of balance in a single model predicting work and family outcomes. Our mediation results provide insight into the role of global balance in the process by which additive and multiplicative spillover relate to outcomes. Thus, this research provides a theoretical and empirical foundation on which theory and research on work-family balance can develop.

Implications for Theory and Research

Our results support a central, largely untested proposition of past work-family balance frameworks (i.e., Marks & MacDermid, 1996, Voydanoff,

TABLE 6
Significant Indirect Effects Through Balance Satisfaction and Balance Effectiveness

Mediator = Balance satisfaction			
	Outcome		
Predictor	Organizational commitment	Job satisfaction	Family satisfaction
WFC	–.150 [–.271, –.034]	–.188 [–.349, –.025]	–.247 [–.374, –.120]
WFE	.055 [.010, .114]	.069 [.009, .149]	.090 [.033, .166]
WFC X WFE		.028 [.003, .063]	.037 [.012, .070]

Mediator = Balance effectiveness				
	Outcome			
Predictor	Organizational commitment	Family satisfaction	Job performance	Family performance
WFC	.087 [.018, .159]	–.295 [–.399, –.203]	–.085 [–.142, –.031]	–.195 [–.298, –.100]
WFE	–.027 [–.064, –.002]	.092 [.018, .178]	.027 [.003, .060]	.061 [.010, .129]
FWC	.039 [.008, .077]	–.132 [–.202, –.072]	–.038 [–.069, –.012]	–.087 [–.147, –.039]
FWE	–.052 [–.112, –.008]	.176 [.072, .293]	.051 [.013, .101]	.116 [.040, .213]
WFC X WFE		.072 [.022, .128]		

Note. Monte Carlo bootstrap $N = 10{,}000$. Unstandardized indirect effects are reported, along with 95% CIs in brackets. CIs without zero included are significant at $p < .05$. Due to the likely suppression effect for the relationship between balance effectiveness and organizational commitment, the indirect effects for organizational commitment through balance effectiveness should be interpreted with caution. Indirect effects for WFC X WFE represent moderated mediation effects. WFC = Work-to-family conflict, WFE = Work-to-family enrichment, FWC = Family-to-work conflict, FWE = Family-to-work enrichment.

2005) in finding that employees who were more balanced (as captured by at least one of the four approaches), were more committed to their organizations, were more satisfied with their jobs and families, were less likely to intend to leave their employer, and performed better in job and family roles. This is the first study to test the relation between global balance approaches and supervisor-rated job performance or spouse-rated family performance. As work-family balance has significant explanatory prediction for key work and family outcomes, it is clearly a topic worthy of continued investigation.

A compelling feature of our research is the degree to which both our conceptual review and empirical findings emphasize the uniqueness of these four balance approaches. As future work on balance progresses, labeling them all "work-family balance" is problematic and will contribute to continued confusion about this construct. Accordingly, we argue that researchers should specify whether their theoretical interest lies in balance as a type of combined spillover (i.e., the combination of conflict and enrichment) or as a global evaluation (i.e., general appraisals of satisfaction or effectiveness across roles), and apply the labels we have provided, as appropriate. A careful choice of the balance approach and use of consistent terminology will provide more clarity and precision to advance accumulation of research.

Historically, scholars began studying balance by equating it with established constructs, typically measuring it with the unique effects of low conflict and high enrichment; this additive spillover approach has been a primary approach to studying balance (Casper et al., 2014). As expected, we found unique effects of conflict and enrichment on outcomes. Work-to-family enrichment accounted for 46.09% to 66.89% of explained variance in organizational commitment, job satisfaction, and turnover intent. These results are consistent with the source attribution perspective (Carlson, Hunter, Ferguson, & Whitten, 2014; Shockley & Singla, 2011; Wayne, Musisca, & Fleeson, 2004), which suggests that when one domain enriches the other (i.e., work-to-family enrichment) people attribute the enrichment to and thereby experience better attitudes in the domain seen as causing the enrichment (i.e., work). In contrast, work-to-family conflict, the most commonly studied work-family construct (Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005), accounted for only 5.80% to 14.54% of explained variance in work attitudes. Thus, in terms of their unique effects, enrichment is more strongly linked to work attitudes than is conflict.

We also found some support that the multiplicative effects of lower conflict with higher enrichment (Frone, 2003) predicted additional variance above and beyond additive spillover. Employees who experienced higher work-to-family enrichment *combined with* lower work-to-family

conflict reported higher job satisfaction and lower turnover intent. Because the multiplicative spillover approach best captures Frone's (2003) conceptualization of balance, we recommend that the unique effects of conflict or enrichment (i.e., additive spillover) be treated as individual constructs, as originally formulated (Greenhaus & Beutell, 1985; Greenhaus & Powell, 2006), and not equated with work-family balance. Researchers interested in Frone's balance conceptualization should examine the interactive effects above and beyond the additive effects of conflict and enrichment.

Consistent with arguments that balance is best conceived of as a global construct distinct from conflict and enrichment (e.g., Carlson et al., 2009; Valcour, 2007), our results underscore the value of global balance approaches. Whereas the relative importance of conflict, enrichment, and their interaction varied depending on the domain (work or family) and nature of the outcome (attitude or performance), global balance approaches together were consistently important predictors of outcomes–accounting for 21.24% to 28.90% of explained variance in work attitudes, 55.33% to 59.68% of explained variance in family satisfaction, and 55.33% to 57.86% of explained variance in performance. Although global balance approaches accounted for less of the explained variance in work attitudes than did work-to-family enrichment, the two global balance approaches together may provide better understanding of family phenomena and job performance than has been garnered by studying additive spillover. Thus, global balance approaches coupled with multiplicative spillover might provide the most utility for researchers wishing to understand the relation of balance to attitudinal and performance outcomes.

As expected, the two global approaches have critical conceptual differences that generate differential relationships with outcomes. These findings are important to understanding the construct of balance, as the "logic of construct validation" (p. 290, Cronbach & Meehl, 1955) involves establishing constructs within a nomological network of relationships to other constructs such as the outcomes we examined in this research. Consistent with the compatibility principle (Ajzen & Fishbein, 1977), balance satisfaction, an attitudinal construct, was more strongly associated with work attitudes whereas balance effectiveness, an interdependent self-evaluation, was more strongly associated with work and family performance. The exception was that balance effectiveness exhibited a relatively stronger relationship with family satisfaction (an attitude) than did balance satisfaction (an attitude). This provides evidence that global approaches are more than a part-whole phenomenon (Erdogan, Bauer, Truxillo, & Mansfield, 2012); that is, balance satisfaction is not more strongly associated with other attitudes merely because one attitude (e.g., family satisfaction) is part of the larger whole (e.g., balance satisfaction). Future research might examine why balance effectiveness relates

more strongly to family outcomes. One possibility is that when evaluating balance effectiveness, people more heavily weight meeting family than work expectations such that this global evaluation is more relevant to family than to work attitudes.

Our findings also highlight the fact that a researcher's choice of global balance approach has a meaningful impact on the results obtained. Researchers interested in explaining variance in work and family performance should find balance effectiveness most relevant. Also, because balance effectiveness is an interdependent self-evaluation that incorporates both private and public judgments, it may be more observable by role partners and of interest to scholars studying crossover effects among role partners. In contrast, for researchers interested in explaining work attitudes, balance satisfaction may be more relevant.

Given the differential relationships of the two global balance approaches with outcomes, balance satisfaction and balance effectiveness are best conceptualized as distinct but related constructs, each with its own place in the nomological network of balance. We argue that both global approaches are important for an integrative theory of balance. Future research might build on the conceptual principles provided here to uncover how balance satisfaction and balance effectiveness perceptions are formed. Attitude formation theory suggests that attitudes, such as balance satisfaction, are a function of beliefs and values (Bagozzi & Burnkrant, 1979), such as values and personal beliefs about how time and attention should be allocated across work and family roles. In contrast, given its interdependent nature, the social context, rather than personal beliefs and values, may drive the formation of balance effectiveness. Drawing from adaptive self-regulation theory (Tsui & Ashford, 1994), which posits ways that people actively manage role partners' expectations, balance effectiveness is likely formed through standard setting (e.g., identifying expectations in work and family), discrepancy detection (e.g., determining whether one is meeting expectations across roles), and discrepancy reduction (e.g., actions for balancing work and family to better meet shared expectations). Research that aligns with but expands our findings would contribute to building a comprehensive theory of balance.

Finally, our results provide insight into how different conceptualizations of balance relate to one another, which is critical to understanding the balance construct. Construct validation involves examining associations with related constructs in the nomological network (Cronbach & Meehl, 1955). Although our methodology does not allow testing causal effects, our mediation findings suggest that conflict and enrichment uniquely and interactively contribute to global balance (i.e., balance satisfaction and effectiveness; e.g., Maertz & Boyar, 2011) and, as suggested by the JD-R model, that global balance may be a mechanism linking conflict and

enrichment to outcomes. These findings are also consistent with Greenhaus and Allen's (2011) view that combined spillover approaches are antecedents to rather than indicators of balance.

Also important to construct validation and theory development are findings of unique antecedents for balance satisfaction and effectiveness. Whereas each direction of conflict and enrichment related to balance effectiveness, only the work-to-family direction related to balance satisfaction. Findings suggest that balance satisfaction is largely determined by the degree to which work spills over to family. This is not surprising given work-to-family conflict has been found to be more related to role satisfaction than the family-to-work direction (Kossek & Ozeki, 1998). Future theoretical developments should take into account their unique antecedents.

Valuable knowledge might also be gained by considering the possible causal relationship between balance satisfaction and balance effectiveness. Attitude theory, particularly self-perception theory (Bem, 1972), suggests people infer their attitudes from their behaviors or beliefs about their behavior. That is, when people believe they meet role partner expectations (i.e., balance effectiveness), this can affect their attitude (i.e., balance satisfaction) such that balance effectiveness may temporally precede balance satisfaction. Future research adopting a cross-lagged or longitudinal mediation design (Cole & Maxwell, 2003) would be useful in exploring this proposed causal relationship.

Practical Implications

Our findings have practical implications for employees' firms and families. Findings suggest that promoting employee balance can reap benefits for a firm, and as such, studying balance is important to management practice. Practices that promote balance satisfaction and, in turn, positive job attitudes may differ from those that promote balance effectiveness and, in turn, better job performance. Ensuring that employees experience work and family in accordance with their life values (Greenhaus & Allen, 2011) and hold positive beliefs about supervisor and organizational support for family (Hammer, Kossek, Yragui, Bodner, & Hanson, 2009) may promote balance satisfaction and, in turn, enhance organizational attachment and work attitudes. To foster balance satisfaction, managers might talk to employees about what they value at work and outside of work, and provide support that matches employees' needs. Importantly, firms should foster employee perceptions of balance effectiveness because it may promote job performance. To do so, managers might clarify expectations and provide regular feedback (Tsui & Ashford, 1994). As managers play an active role in negotiating expectations at

work, they may be better able to affect balance effectiveness than balance satisfaction.

Work-family balance also has implications for families. When people are more satisfied with their balance or better meet expectations across work and family, they experience more family satisfaction and their spouses report they perform better in their family. Given these potential benefits, spouses may consider how to maximize each other's balance, particularly balance effectiveness. For instance, spouses might discuss mutual expectations, whether expectations are met, and how to provide mutual support in accomplishing expectations.

Limitations and Conclusion

Our findings should be interpreted in the context of study limitations. First, as a single firm was used, further research with other samples is warranted. Although we would expect the same pattern of results, replication is needed to ensure our findings generalize. Second, use of cross-sectional data leads to concerns about reverse causality. Although reverse causality is unlikely for some relationships (e.g., high turnover intent is not likely to predict balance), it is possible for others (e.g., job satisfaction may foster perceptions of balance). However, our theoretical rationale for these relationships suggests the ordering is tenable. Nevertheless, investigations of conflict, enrichment, global balance, and employee outcomes using episodic and multilevel approaches over time can help substantiate the temporal ordering of these constructs. Third, beyond affective disposition, we did not account for individual differences that might relate to perceptions of global balance. For example, people with high achievement striving might evaluate their balance effectiveness more stringently than others. Similarly, people with independent rather than interdependent self-construals (cf. Singleis, 1994) may report greater balance satisfaction. Future research might examine these and other individual differences as correlates of global balance.

Finally, although performance data were collected from supervisors and spouses, other measures were perceptual. Thus, to examine common method bias, we conducted a series of CFAs using all self-report measures ($N = 954$). First, a single-factor CFA was performed, which showed poor fit with the data ($\chi^2(945, N = 954) = 15{,}941.56$, $p < .01$; CFI = .53; NNFI = .51; SRMR = .12), providing initial evidence that common method bias is not a major concern (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Second, to examine bias due to positive or negative valence of constructs, per Podsakoff, MacKenzie, Jeong-Yeon, and Podsakoff (2003), we compared a baseline model of all substantive trait factors along with uncorrelated positive affect (PA) and negative affect (NA) method factors

to an alternative model allowing items to load on PA and NA factors. Although the model that included PA and NA method loadings fit the data better than the baseline model ($\chi^2\Delta(90, N = 954) = 687.04$, $p < .01$), the average proportion of variance attributable to substantive traits (49%) was much higher than that due to PA (2%) or NA (12%) method variance. Taken together, results suggest that substantive relationships, rather than common method bias, are likely responsible for observed relationships.

Despite these limitations, this study expands our understanding of work-family balance, setting the foundation for future theory development and research. Our study suggests that the four balance approaches are conceptually and empirically distinct, and global balance approaches are particularly valuable for predicting a wide range of work and family attitudes and performance as well as serving as key mediating mechanisms of relationships. Finally, our study emphasizes the importance of conceptual clarity, consistent labeling, and appropriate operationalization to foster greater consensus in the meaning of work-family balance so that theory and research can move forward in a cohesive way.

REFERENCES

Abendroth AK, den Dulk L. (2011). Support for the work-life balance in Europe: The impact of state, workplace and family support on work-life balance satisfaction. *Work, Employment, and Society*, *25*, 234–256.

Aiken LS, West SG. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks: Sage.

Ajzen I, Fishbein M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, *84*, 888–918.

Aron A, Aron EN. (1996). Self and self-expansion in relationships. In GJO Fletcher & J Fitness (Eds.), *Knowledge structures in close relationships: A social psychological approach* (pp. 325–344). Mahway, NJ: Erlbaum.

Aryee S, Srinivas ES, Tan HH. (2005). Rhythms of life: Antecedents and outcomes of work-family balance in employed parents. *Journal of Applied Psychology*, *90*, 132–146.

Bagozzi RP, Burnkrant RB. (1979). Attitude measurement and behavior change: A reconsideration of attitude organization and its relationship to behavior. *Advances in Consumer Research*, *6*, 295–302.

Bakker AB, Demerouti E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, *22*, 309–328.

Beham B, Drobnič S. (2010). Satisfaction with work-family balance among German office workers. *Journal of Managerial Psychology*, *25*, 669–689.

Beham B, Präg P, Drobnič S. (2012). Who's got the balance? A study of satisfaction with the work–family balance among part-time service sector employees in five western European countries. *International Journal of Human Resource Management*, *23*, 3725–3741.

Bem D. (1972). Self-perception theory. *Advances in Experimental Social Psychology*, *6*, 1–62.

Brough P, O'Driscoll MP, Kalliath TJ. (2005). The ability of family-friendly organizational resources to predict work–family conflict and job and family satisfaction. *Stress and Health*, *21*, 223–234.

Buffardi LC, Smith JI, O'Brien AS, Erdwins CJ. (1999). The impact of dependent care responsibility and gender on work attitudes. *Journal of Occupational Health Psychology*, *4*, 356–367.

Bulger CA, Matthews RA, Hoffman ME. (2007). Work and personal life boundary management: Boundary strength, work/personal life balance, and the segmentation-integration continuum. *Journal of Occupational Health Psychology*, *12*, 365–375.

Byron K. (2005). A meta-analytic review of work-family conflict and its antecedents. *Journal of Vocational Behavior*, *67*, 169–198.

Cammann C, Fichman M, Jenkins D, Klesh J. (1979). *The Michigan organizational assessment questionnaire*. Ann Arbor, MI: University of Michigan.

Carlson DS, Grzywacz JG, Zivnuska S. (2009). Is work-family balance more than conflict and enrichment? *Human Relations*, *62*, 1459–1486.

Carlson DS, Hunter EM, Ferguson M, Whitten D. (2014). Work–family enrichment and satisfaction: Mediating processes and relative impact of originating and receiving domains. *Journal of Management*, *40*, 845–865.

Carlson DS, Kacmar K, Wayne J, Grzywacz JG. (2006). Measuring the positive side of the work-family interface: Development and validation of a work-family enrichment scale. *Journal of Vocational Behavior*, *68*, 131–164.

Carlson DS, Kacmar KM, Grzywacz JG, Tepper B, Whitten D. (2013). Work-family balance and supervisor appraised citizenship behavior: The link of positive affect. *Journal of Behavioral and Applied Management*, *14*, 87–106.

Casper WJ, DeHauw S, Wayne JH, Greenhaus J. (2014). *A review of the meaning and measurement of work-life balance*. Paper presentation at the 29th Annual Conference of the Society for Industrial-Organizational Psychology, Honolulu, HI.

Chen G, Goddard T, Casper W. (2004). Examination of the relationships among general and work-specific self-evaluations, work-related control beliefs, and job attitudes. *Applied Psychology: An International Review*, *53*, 349–370.

Cohen J, Cohen P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences*. Hillsdale, NJ: Erlbaum.

Cole DA, Maxwell SE. (2003). Testing mediational models with longitudinal data: Questions and tips in the use of structural equation modeling. *Journal of Abnormal Psychology*, *112*, 558–577.

Cronbach LJ, Meehl PE. (1955). Construct validity in psychological tests. *Psychological Bulletin*, *52*, 281–302.

Eagly AH, Chaiken S. (1984). *The psychology of attitudes*. Orlando, FL: Harcourt Brace Jovanovich.

Eby LT, Casper WJ, Lockwood A, Bordeaux C, Brinley A. (2005). Work and family research in IO/OB: Content analysis and review of the literature (1980-2002). *Journal of Vocational Behavior*, *66*, 124–197.

Edwards JR. (2001). Multidimensional constructs in organizational behavior research: An integrative analytical framework. *Organizational Research Methods*, *4*, 144–192.

Erdogan B, Bauer TN, Truxillo DM, Mansfield LR. (2012). Whistle while you work: A review of the life satisfaction literature. *Journal of Management*, *38*, 1038–1083.

Ferguson M, Carlson D, Kacmar KM, Halbesleben JB. (2015). The supportive spouse at work: Does being work-linked help? Advance online publication. *Journal of Occupational Health Psychology*, doi:10.1037/a0039538

Ferguson M, Carlson D, Zivnuska S, Whitten D. (2012). Support at work and home: The path to satisfaction through balance. *Journal of Vocational Behavior*, *80*, 299–307.

Frone MR. (2003). Work-family balance. In J Quick & L Tetrick (Eds.), *Handbook of occupational health psychology* (pp. 143–162). Washington, DC: American Psychological Association.

Gareis KC, Barnett RC, Ertel KA, Berkman LF. (2009). Work-family enrichment and conflict: Additive effects, buffering, or balance? *Journal of Marriage and Family*, *71*, 696–707.

Grawitch MJ, Maloney PW, Barber LK, Mooshegian SE. (2013). Examining the nomological network of satisfaction with work–life balance. *Journal of Occupational Health Psychology*, *18*, 276–284.

Greenhaus JH, Allen T. (2011). Work-family balance: A review and extension of the literature. In L Tetrick & JC Quick (Eds.), *Handbook of occupational health psychology* (2nd ed.). (pp. 165–183). Washington, DC: American Psychological Association.

Greenhaus JH, Beutell NJ. (1985). Sources and conflict between work and family roles. *Academy of Management Review*, *10*, 76–88.

Greenhaus JH, Collins KM, Shaw JD. (2003). The relation between work–family balance and quality of life. *Journal of Vocational Behavior*, *63*, 510–531.

Grzywacz JG, Carlson DS. (2007). Conceptualizing work–family balance: Implications for practice and research. *Advances in Developing Human Resources*, *9*, 455–471.

Greenhaus JH, Powell GN. (2006). When work and family are allies: A theory of work-family enrichment. *Academy of Management Review*, *31*, 72–92.

Hammer LB, Kossek E, Yragui NL, Bodner TE, Hanson GC. (2009). Development and validation of a multidimensional measure of family-supportive supervisor behaviors (FSSB). *Journal of Management*, *35*, 837–856.

Hennessy KD. (2007). Work-family balance: An exploration of conflict and enrichment for women in a traditional occupation. *Dissertation Abstracts International Section A: Humanities and Social Sciences*, *68*(8-A), 3295.

Higgins ET. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Bulletin*, *94*, 319–340.

Johnson JW. (2000). A heuristic method for estimating the relative weight of predictor variables in multiple regression. *Multivariate Behavioral Research*, *35*, 1–19.

Johnson JW, LeBreton JM. (2004). History and use of relative importance indices in organizational research. *Organizational Research Methods*, *7*, 238–257.

Kjell O, Daukantaite D, Hefferon K, Silkstrom S. (2015). The harmony in life scale complements the satisfaction with life scale: Expanding the conceptualization of the cognitive component of subjective well-being. *Social Indicators Research*. Retrieved from http://dx.doi.org/10.1007/s11205-015-0903-z.

Klein A, Moosbrugger H. (2000). Maximum likelihood estimation of latent interaction effects with the LMS method. *Psychometrika*, *65*, 457–474.

König CJ, Caner de la Guardia ME. (2014). Exploring the positive side of personal Internet use at work: Does it help in managing the border between work and nonwork? *Computers in human Behavior*, *30*, 355–360.

Kossek EE, Ozeki C. (1998). Work-family conflict, policies, and the job-life satisfaction relationship: A review and directions for organizational behavior-human resources research. *Journal of Applied Psychology*, *83*, 139–149.

Krisor SM, Diebig M, Rowold J. (2015). Is cortisol as a biomarker of stress influenced by the interplay of work-family conflict, work-family balance and resilience? *Personnel Review*, *44*, 648–661.

Landis RS, Beal DJ, Tesluk PE. (2000). A comparison of approaches to forming composite measures in structural equation models. *Organizational Research Methods*, *3*, 186–207.

Lazarus RS, Folkman S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer

LeBreton JM, Ployhart RE, Ladd RT. (2004). A Monte Carlo comparison of relative importance methodologies. *Organizational Research Methods*, *7*, 258–282.

LeBreton JM, Tonidandel S, Krasikova D. (2013). Residualized relative importance analysis: A technique for the comprehensive decomposition of variance in higher-order regression models. *Organizational Research Methods*, *16*, 449–473.

Locke EA. (1976). The nature and causes of job satisfaction. In MD Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297–1343). Chicago, IL: Rand McNally.

Lu J, Siu O, Spector PE, Shi K. (2009). Antecedents and outcomes of a four-fold taxonomy of work-family balance in Chinese employed parents. *Journal of Occupational Health Psychology*, *14*, 182–192.

Maertz CR, Boyar SL. (2011). Work-family conflict, enrichment, and balance under "levels" and "episodes" approaches. *Journal of Management*, *37*, 68–98.

Mallard A. G. C, Lance CE. (1998). Development and evaluation of a parent-employee interrole conflict scale. *Social Indicators Research*, *45*, 343–370.

Marks SR, MacDermid SM. (1996). Multiple roles and the self: A theory of role balance. *Journal of Marriage and the Family*, *58*, 417–432.

Markus HR, Kitayama S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*, 224–253.

McNall LA, Nicklin JM, Masuda AD. (2010). A meta-analytic review of the consequences associated with work–family enrichment. *Journal of Business and Psychology*, *25*, 381–396.

McNamara TK, Pitt-Catsouphes M, Matz-Costa C, Brown M, Valcour M. (2013). Across the continuum of satisfaction with work–family balance: Work hours, flexibility-fit, and work–family culture. *Social Science Research*, *42*, 283–298.

Meyer JP, Allen NJ. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, *1*, 61–90.

Michel A, Bosch C, Rexroth M. (2014). Mindfulness as a cognitive–emotional segmentation strategy: An intervention promoting work–life balance. *Journal of Occupational and Organizational Psychology*, *87*, 733–754.

Mowday RT, Koberg CS, McArthur AW. (1984). The psychology of the withdrawal process: A cross-validation test of Mobley's intermediate linkages model of turnover in two samples. *Academy of Management Journal*, *27*, 79–94.

Muller D, Judd CM, Yzerbyt VY. (2005). When mediation is moderated and moderation is mediated. *Journal of Personality and Social Psychology*, *89*, 852–863.

Muthén LK, Muthén BO. (2012). *Mplus user's guide* (7th ed.). Los Angeles, CA: Muthén & Muthén.

Netemeyer RG, Boles JS, McMurrian R. (1996). Development and validation of work–family conflict and family–work conflict scales. *Journal of Applied Psychology*, *81*, 400–410.

Oswick C, Fleming P, Hanlon G. (2011). From borrowing to blending: Rethinking the processes of organizational theory building. *Academy of Management Review*, *36*, 318–337.

Podsakoff PM, MacKenzie SB, Jeong-Yeon L, Podsakoff NP. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*, 879–903.

Preacher KJ, Rucker DD, Hayes AF. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, *42*, 185–227.

Preacher KJ, Hayes AF. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, *40*, 879–891.

Shockley KM, Singla N. (2011). Reconsidering work–family interactions and satisfaction: A meta-analysis. *Journal of Management*, *37*, 861–886.

Singelis TM. (1994). The measurement of independent and interdependent self-construals. *Personality and Social Psychology Bulletin*, *20*, 580–591.
Suddaby R. (2010). Editor's comments: Construct clarity in theories of management and organization. *Academy of Management Review*, *35*, 346–357.
Tesser A, Paulhus D. (1983). The definition of self: Private and public self-evaluation management strategies. *Journal of Personality and Social Psychology*, *44*, 672–682.
Teunissen PW, Bok HJ. (2013). Believing is seeing: How people's beliefs influence goals, emotions and behaviour. *Medical Education*, *47*, 1064–1072.
Thompson ER. (2007). Development and validation of an internationally reliable short-form of the Positive and Negative Affect Schedule (PANAS). *Journal of Cross-Cultural Psychology*, *38*, 227–242.
Tonidandel S, LeBreton JM. (2011). Relative importance analysis: A useful supplement to regression analysis. *Journal of Business and Psychology*, *26*, 1–9.
Tsui AS, Ashford SJ. (1994). Adaptive self-regulation: A process view of managerial effectiveness. *Journal of Management*, *20*, 93–122.
Valcour M. (2007). Work-based resources as moderators of the relationship between work hours and satisfaction with work–family balance. *Journal of Applied Psychology*, *6*, 1512–1523.
Voydanoff P. (2005). Toward a conceptualization of perceived work-family fit and balance: A demands and resources approach. *Journal of Marriage & Family*, *67*, 822–836.
Wayne JH, Musisca N, Fleeson W. (2004). Considering the role of personality in the work-family experience: Relationships of the big five to work-family conflict and facilitation. *Journal of Vocational Behavior*, *64*, 108–130.
Weiss HM, Cropanzano R. (1996). Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. In BM Staw, LL Cummings, (Eds.), *Research in organizational behavior: An annual series of analytical essays and critical reviews*, (Vol. 18, pp. 1–74). US: Elsevier Science/JAI Press.
Williams LJ, Anderson SE. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, *17*, 601–617.
Zajonc RB. (1984). On the primacy of affect. *American Psychologist*, *39*, 117–123.