ABSTRACT
We use broaden and build theory (Fredrickson, 1998; 2001) to examine the relationship between work-family balance and organizational citizenship behaviors (OCB), and the extent to which these relationships are mediated by positive affect. Using a sample of 205 supervisor-subordinate dyads, we found that subordinate work-family balance predicted supervisors’ appraisals of subordinate’s engagement in both organization and individual OCB and was fully mediated by positive affect rated by the subordinate. Additionally, we found that these fully mediated relationships held when positive affect was measured by the supervisor.

Keywords: work-family balance, organizational citizenship behaviors, broaden and build theory, positive affect, work-family interface
Work-Family Balance and Supervisor Appraised Citizenship Behavior: 
The Link of Positive Affect

Work-family balance is the synergistic integration of work-family conflict and work-family enrichment such that balance is obtained when an individual’s work and family lives experience little conflict while enjoying substantial enrichment (Frone, 2003). Recent advances have been made in furthering the conceptual rigor and empirical attention given to work-family balance (e.g., Grzywacz & Carlson, 2007; Valcour, 2007) as this construct provides an assessment of the interrelationships between workers’ work and family lives. Further, research has recently begun to establish the organizational and employee benefits of work-family balance policies and practices demonstrating desired results such as reduced absenteeism, improved retention, and higher productivity (Lazar, Osoian, & Ratiu, 2010). This study is designed to expand our knowledge of balance and determine if it has benefits beyond the separate constructs of work-family conflict and work-family enrichment. In addition, we extend our understanding of balance by examining whether work-family balance fosters organizational citizenship behavior (OCB) through the experience of positive affect.

Organ (1997) defined OCB as “contributions to the maintenance and enhancement of the social and psychological context that supports task performance” (p. 91). OCB is an important outcome to consider because it contributes to the organization by increasing efficiency and enhancing production (Bolino, Turnley, & Bloodgood, 2002; Organ, Podsakoff, & MacKenzie, 2006). Researchers have begun to link work-family conflict (Beham, 2011; Bolino & Turnely, 2005) and work-family enrichment with OCB (Baral & Bhargava, 2010; Bhargava & Baral, 2009); but our focus on work-family balance allows us to distinguish our research from the extant literature. We accomplish this by moving beyond examining either conflict (the negative aspects of the work-family interface) or enrichment (the positive aspects of the work-family interface). Rather, we explore work-family balance, which highlights the synergistic effect of the negative and positive aspects of the work-family interface simultaneously. Exploring work-family balance provides a more comprehensive characterization of the work-family interface and allows us to explore whether balance is truly more than conflict and enrichment as espoused by recent research (Carlson, Grzywacz, Zivnuska, 2009).

Although the empirical research focusing on work-family balance is limited, we are beginning to see support for the link between balance and several employee work outcomes. For instance, balance has been found to be positively related to job satisfaction, organizational commitment, and career accomplishment (Aryee, Srinivas, & Tan, 2005; Carlson, Grzywacz, & Zivnuska, 2009; Marcinkus, Whelan-Berry, Gordon, 2007). However, what is missing, and the gap our paper is designed to fill, is a mechanism through which work-family balance may affect behavior-based outcomes. The goal of this research is important because it helps us understand if the work-family interface, when taken as a whole, shapes an individuals’ decision to engage in work behaviors not required by the job. Extant research has clearly shown that OCB is critical for the success of today’s organization (Podsakoff, MacKenzie, Paine & Bachrach, 2000). Our research sheds light on whether balance can impact the demonstration of OCB.

Furthermore, theory is needed to understand how and why experiences such as work-family balance may contribute to valued organizational outcomes, such as OCB. Unfortunately, a major gap in the work-family literature is the absence of a strong theoretical foundation for linking work-family balance to organizational outcomes. We propose to fill this gap by applying and extending broaden and build theory (Fredrickson, 1998; 2001) to better understand the process by which work-family balance impacts OCB. A core proposition of broaden and build theory is that positive emotions lead to outward-oriented thoughts and actions. We directly map the main premise of this theory to our study by arguing that work-family balance results in positive emotions that promote more outward-oriented thoughts and actions that become manifest within organizations in various ways, including engaging in citizenship behavior (see Figure 1). Thus, we hypothesize that work-family balance is associated with greater OCB, and that this association is mediated by state-based positive affect. We frame the mediator, positive affect, from the viewpoint of both the subordinate and the supervisor to establish that positive affect, in whatever form, is a path through which the work-family balance-OCB relationship occurs.
Conceptualization

Work-Family Balance

Work-family balance is an underdeveloped and poorly understood concept in the work-family literature having no agreed upon definition nor a widely accepted measure (Grzywacz & Carlson, 2007; Maertz & Boyar, 2011; Valcour, 2007). Historically, work-family balance was narrowly conceptualized as the absence of work-family conflict (incompatibility of roles in two domains) (Greenhaus & Beutell, 1985). More recent definitions of work-family balance suggest viewing conflict alone is not enough as it does not accurately represent work-family balance (Grzywacz & Carlson, 2007; Valcour, 2007). Instead, the concept of work-family enrichment, or the ability of one role to improve the experience in the other role, also must be considered (Greenhaus & Powell, 2006). Kalliath and Brough (2008) provide a review of six conceptualizations of balance found in the literature, one of which was espoused by Frone (2003). This study builds from the conceptual foundation created by Frone (2003) when he argued that work-family balance emerges from both positive and negative aspects of the work-family interface. Specifically he indicated that work-family balance is characterized by low levels of work-family conflict and high levels of work-family enrichment.

Whereas other concepts such as work-family conflict or enrichment focus on the effect of one role on another (either positive or negative), work-family balance acknowledges the simple fact that both positive and negative experiences emerge from engagement in the work and family domains of life. This is consistent with role theory and the notion that individuals seek to fully engage in different life domains (Marks & MacDermid, 1996), but in doing so, opportunities will arise for work and family to benefit each other, as well as conflict with each other. Thus, work-family conflict and enrichment are important elements that give shape to individuals’ experiences of work-family balance.

Grzywacz and Carlson (2007) suggested researchers could use established measures of work-family conflict and enrichment as indirect measures of work-family balance. Based on Frone’s (2003) comments and other theoretical and empirical evidence, balance is believed to capture something more than conflict and enrichment separately (Carlson et al., 2009; Grzywacz & Bass, 2003; Grzywacz & Carlson, 2007; Tetrick & Buffardi, 2006). This is consistent with prior theoretical models (e.g., role boundaries, spillover, congruence, resource, segmentation, integrative, and compensation) suggesting that work-family balance emerges, in part, from experiences of work-family conflict and work-family enrichment (for a review of theoretical models see Frone, 2003; Edwards & Rothbard, 2000; Voydanoff, 2005). Therefore, combining conflict and enrichment is a useful strategy to capture the experience of balancing work and family roles (Carlson et al., 2009; Frone, 2003; Tetrick & Buffardi, 2006). This integration of work and family allows for the use of existing validated measures of conflict and enrichment (i.e., Carlson, Kacmar & Williams, 2000; Carlson, Kacmar, Wayne, & Grzywacz, 2006). Moreover, this approach captures a variety of types of conflict and enrichment, as well as the empirical reality that both work-family conflict and enrichment are bidirectional (i.e., work-to-family and family-to-work), which helps provide more comprehensive coverage of the experiences that contribute to work-family balance (Grzywacz & Carlson, 2007). Therefore, we conceptualize balance as the synergistic integration of work-family conflict and work-family enrichment such that balance is obtained when an individual’s work and family lives experience little conflict while enjoying substantial enrichment (Frone, 2003).

Organizational Citizenship Behavior

Organizational citizenship behavior (OCB) is extra-role behavior not explicitly required by the job, but that supports core task behaviors of the job. OCB is of interest to organizations because it has been shown to enhance organizational effectiveness and account for similar levels of variance in employee performance such as task behaviors (Dunlop & Lee, 2004; Sun, Aryee, & Law, 2007; Whiting, Podsakoff, & Pierce, 2008). Researchers argued that the different types of OCB can be classified according to their focus to yield two broad categories (Williams & Anderson, 1991). The first is
organization-focused citizenship behavior (OCB-O) which encompasses behaviors that directly benefit the organization. OCB-O includes actions such as adhering to informal rules designed to maintain order, not taking extended work breaks, and demonstrating above average work attendance. The second type is individual-focused citizenship behavior (OCB-I) which encompasses behaviors that benefit specific individuals. OCB-I includes actions such as assisting others who have been absent, taking a personal interest in the well-being of co-workers, and helping colleagues who have heavy workloads. These two categories of OCB have been shown to be both empirically and conceptually distinct from each other, and from task performance (Organ & Ryan 1995; Williams & Anderson, 1991). OCB is more likely than task performance to be directly influenced by attitudinal and dispositional factors because they are not job requirements (Borman & Motowidlo, 1993; Organ & Ryan, 1995).

**Broaden and Build Theory**

Broaden and build theory (Fredrickson, 1998; 2001), originally designed to explain the evolutionary and developmental value of positive emotions, has recently made its way into the management literature to explain the work-family interface and related behaviors (Bakker, Demerouti, & Dollard, 2008; Carlson, Ferguson, Kacmar, Grzywacz, & Whitten, 2011). Bakker (2008) argues that broaden and build theory provides a useful framework for understanding generative employee behaviors, such as worker engagement. Consistent with this focus on engagement, de Lange and colleagues (2003) found support for hypotheses informed by broaden and build theory. Specifically, they found that autonomy contributed to positive growth spirals in worker engagement that were, in turn, associated with employee retention whereas similar spirals were not observed among workers who left the organization.

Broaden and build theory fundamentally argues that positive emotions have both developmental and evolutionary value because they shape the way individuals interact with and engage in their physical and social world (Fredrickson, 1998; 2001). More formally, the theory suggests that specific emotions do not contribute to specific behavioral manifestations; rather, broaden and build argues that classes of emotions (e.g., positive versus negative) are linked with classes of behaviors which are referred to as “thought-action repertoires.” Thought-action repertoires are, in essence, the cognitions and behaviors an individual is capable of performing. Basically, the theory argues that emotional states enable certain types of behavior. Therefore, positive emotions have developmental and evolutionary value because they equip individuals with the ability to engage in outward-oriented behaviors that frequently result in deepened social relationships and the acquisition of new skills and resources.

With our theoretical foundation in place, we apply broaden and build theory to the more specific research question of the relationship between employees’ experiences of work-family balance and their involvement in OCB. Like previous researchers, we conceptualize OCB as manifestations of outward-oriented thought-action repertoires because they enhance relationships among coworkers and they strengthen the employee-organization relationship (Mossholder, Settoon, & Henagan, 2005). According to broaden and build theory, positive emotions such as joy or excitement, as well as more enduring states such as contentment, fuel outward-oriented thought-action repertoires, such as OCB (Fredrickson, 1998; 2001; Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008). Moving one step backward in the theoretical sequence, the theory would argue that individual, contextual, or organizational factors that elicit or sustain positive emotions will enable outward-oriented thoughts and behaviors. Consistent with research in the OCB literature suggesting that positive organizational and supervisor support leads to greater engagement in OCBs (Podsakoff, MacKenzie, Paine, & Bachrach, 2000), we suggest that work-family balance contributes to OCBs by creating a context that enables and maintains positive emotions.

**Work-Family Balance and OCB**

Previous research has yet to link work-family balance with OCB. Thus, it is not clear if work-family balance is of value to organizations attempting to create an environment conducive to the exhibition of OCB. The lack of empirical evidence linking work-family balance with OCB creates a gap
in the work-family arena. Previous research has considered the impact of some of the separate elements of work-family balance on OCBs. On the negative side of the work-family interface, researchers have found that greater role demands lead individuals to withhold discretionary work-related behaviors thus linking elevated work-family conflict with lower OCB (Beham, 2011; Bolino & Turnley, 2005; Bragger, Srednicki, Kutscher, Indovino, & Rosner, 2005; Tompson & Werner, 1997). On the positive side of the work-family interface, enrichment has been examined as a resource upon which individuals could draw to engage in behaviors such as citizenship. A recent study found the work-to-family direction of enrichment played a mediating role in the relationship between job characteristics and organizational citizenship behaviors (Baral & Bhargava, 2010). Further, both directions of work-to-family enrichment have been demonstrated to link to OCBs (Bhargava & Baral, 2009). While these studies may shed some light on the relationship of unique work-family experiences and OCB they only provide narrow glimpses of the larger phenomenon of interest to workers: their ability to meet role-related expectations in both the work and family domains. However, they do pave the way for a more comprehensive examination of the putative effects of the work-family interface on the demonstration of OCB-I and OCB-O.

We use broaden and build theory as the theoretical foundation to explore this path. Broaden and build theorists contend that favorable environmental circumstances, that are persistent and have sufficient force, elicit a broaden and build effect (Fredrickson, 2003). Indeed, Fredrickson specifically argues that positive emotions are best targeted by creating circumstances, events, or environments that are valued by individuals or have personal meaning and significance. We submit that work-family balance is such a circumstance because it is a highly desired but rarely obtained outcome for a substantial proportion of workers (Keene & Quadagno, 2004). Indeed, some researchers suggest that work-family balance plays a substantial role in organizing and shaping individuals’ lives (Newhall-Marcus, Halpern & Han, 2008). The basic argument from the theory is that work-family balance generates or sustains a level of positive emotion that stimulates outward seeking behaviors, such as OCB. Accumulated over time, the positive emotions that accompany work-family balance and the resulting pattern of broadened outlooks likely build cognitive (e.g., skills) and psychological (e.g., mastery) resources that enable regular engagement in OCB (Fredrickson et al., 2008). Therefore, individuals who experience work-family balance will engage in citizenship behaviors.

**Hypothesis 1a:** Work-family balance and OCB-I are positively related.

**Hypothesis 1b:** Work-family balance and OCB-O are positively related.

**Mediating Effects of Positive Affect**

The core proposition of broaden and build theory is that positive emotions are the most proximal determinant of outward-oriented behavior. When applied to the current study, this suggests that the mechanism through which work-family balance leads to greater OCB is positive affect. Positive affect is a positive emotional response to situational cues or circumstances (Fredrickson, 2001). In applying broaden and build theory to organizational science, Fredrickson (2003) argued that both high arousal positive affect, such as joy and excitement, and low arousal positive affect, such as contentment, contribute to an expanded behavioral repertoire that produces better organizational dynamics.

Work-family balance represents a contextual circumstance wherein the inter-relationship between work and family is synergistic in a way that individuals are able to meet responsibilities and expectations in both domains (Frone, 2003; Grzywacz & Carlson, 2007). Presumably, individuals experience heightened levels of positive affect when their work and home lives are in balance (Grzywacz & Carlson, 2007; Valcour, 2007). Although this basic idea has not yet been tested directly, it is consistent with the model of work-family enrichment (Greenhaus & Powell, 2006), as well as evidence indicating that work-family enrichment is associated with indicators of positive psychological well-being (Grzywacz, 2000), and evidence indicating that individuals with low work-family conflict and high work-family enrichment are more resilient to daily stressors (Grzywacz, Butler, & Almeida, 2008).

Positive emotions have the potential to contribute to valued organizational outcomes through a variety of mechanisms. Importantly, some of these mechanisms involve other individuals and contribute
to the creation of positive spirals whereby one individual’s thoughts and actions affect others and reverberate throughout the organization (Fredrickson, 2003). Although, in theory, a positive spiral can be launched by any type of positive emotion, those that are observable to others within the organization likely have the greatest potential to initiate and sustain themselves long enough to maintain a positive spiral that benefits the organization (Fredrickson, 1998; 2001).

Furthermore, research has demonstrated that individuals who experience more positive affect also tend to engage in more OCB (Bateman & Organ, 1983; Ilies, Scott & Judge, 2006; Organ & Ryan, 1995; Rioux & Penner, 2001; Williams & Shiaw, 1999). Spector and Fox (2002) argued that positive emotions play a central role in predicting citizenship behaviors because emotional responses determine action tendencies. In addition, Bachrach and Jex (2000) found that positive affect leads people to define their jobs more broadly which in turn, makes them more likely to perform OCB.

Broaden and build theory suggests that positive affect leads to more willingness to perform OCB, a tool which may be used to maintain or prolong good feelings (Isen & Baron, 1991). Further, people who feel good have a more positive world view and see others as more deserving of discretionary assistance through a variety of mechanisms (George, 1991; George & Brief, 1992; Carlson, Charlin, & Miller, 1988; Isen, Shalker, Clark, & Karp, 1978). Not surprisingly, positive affect currently experienced by an employee significantly impacts his or her expressed intentions of performing OCB (Williams & Shiaw, 1999) and actual engagement in OCB (c.f., Borman, Penner, Allen & Motowidlo, 2001; Ilies et al., 2006; Organ & Ryan, 1995). Therefore, we predict:

*Hypothesis 2a: The work-family balance to OCB-I relationship is mediated by positive affect.*

*Hypothesis 2b: The work-family balance to OCB-O relationship is mediated by positive affect.*

**Method**

**Sample**

The sample consists of individuals from a broad range of organizations. Potential participants were garnered from lists of business school alumni from two universities in the southern U.S. To qualify for inclusion in our study, participants needed to work full time, supervise individuals who held jobs that allowed the incumbents to interact frequently with others to ensure there was ample opportunity for them to engage in OCB, be willing to evaluate their direct reports, and be willing to recruit their subordinates to participate in the study. We sent letters explaining the study and the requirements for inclusion to 565 alumni. Those interested in participating and who met the requirements sent us the names and contact information for their direct report subordinates. A total of 125 supervisors agreed to participate making the response rate for our initial survey 22% (125/565). Supervisors were asked to complete a questionnaire on each employee who reported to them, up to a maximum of six. A total of 75 supervisors returned their completed questionnaires directly to the researchers, which equates to a 60% (75/125) response rate.

Questionnaires were sent to the 396 subordinates identified by supervisors. The subordinates were told the survey was about work and life and were asked to return completed questionnaires directly to the researchers. The subordinates were guaranteed confidentiality and were informed that their bosses would not know whether they had completed the survey. The supervisor and subordinate questionnaires were matched using names provided by each. We received 268 subordinate (response rate of 68% 268/396) responses. Of those responses, we were able to match 205 (52% response rate 205/396) subordinates to a supervisor.

**Supervisor.**

The sample included 75 supervisors of whom 63% were male and who had an average age of 46.28 years. Nearly 88% of supervisors were married or living as married and 73% had at least one child living at home. Supervisors averaged 8.98 years in their current job and 90% were Caucasian. On average, supervisors provided evaluations of 2.27 subordinates.
Subordinate.
The sample consisted of 205 subordinates who were 44% male and had an average age of 41.84 years. Eighty-five percent of the subordinate sample was married or living as married and 76% had at least one child living at home. Subordinates averaged 6.98 years in their current job, 3.90 years with their current supervisor, and 80% were Caucasian.

Scales measured from the subordinate

Work-family Balance.
Due to the lack of a validated measure for work-family balance we followed Frone’s (2003) nominal definition of work-family balance and Grzywacz and Carlson’s (2007) recommendation to operationalize work-family balance using existing measures of work-family conflict and work-family enrichment. In the spirit of their recommendation, we operationalized work-family balance as a factor score created from the results of an exploratory factor analysis (EFA) using a principal axis factoring method and an oblimin rotation. This approach was used because it captures the observed association between these distinct but related constructs (Grzywacz & Marks, 2000). Further, this approach allowed us to account for the correlation often found between conflict and enrichment suggesting they are independent but related to one another (Carlson, Kacmar, Wayne, & Grzywacz, 2006; Grzywacz & Butler, 2008). This approach also allowed us to more accurately reflect the relative weighting of the individual items prior to combining them as the individual’s responses were weighted (multiplied) by the factor loading for each item. As input into the EFA for the conflict component, we used the 18-item work-family conflict scale by Carlson et al. (2000). A sample item is “My work keeps me from my family activities more than I would like.” We reverse coded these items so that they would reflect low conflict to be consistent with our definition of balance (low conflict and high enrichment). For enrichment we used the 18-item enrichment scale developed and validated by Carlson et al. (2006). A sample item from this scale is “My involvement in my work helps me acquire skills and this helps me be a better family member.”

To compute the factor score the standardized score on each item was multiplied by the corresponding factor loading of the item for the given factor and these products were averaged. This approach treats the responses in a way that captures the unique experiences from each individual, and it circumvents the assumption that a one-unit change in one work-family experience (say work-to-family conflict) has identical implications for work-family balance as another work-family experience (say family-to-work enrichment). The resulting factor score is a numerical value that indicates a person’s relative spacing or standing on a formative, general latent factor (Grice, 2001). Consistent with Frone’s nominal definition of work-family balance and Grzywacz and Carlson’s (2007) contention that work-family balance emerges from experiences of conflict and enrichment, higher values on the latent factor represent more balance (e.g., high enrichment and low conflict) while lower scores represent less balance (low enrichment and high conflict). The Cronbach alpha for the items comprising the balance score was 0.91.

Positive Affect.
Positive affect was measured with four items (e.g., happy) on the PANAS (Watson, Clark, & Tellegen, 1988). Our objective was to measure positive affect as a state (rather than a trait) so we asked respondents to focus on how they felt during a specified time period at work. This modification has been established as a reliable and valid way to assess affect as a state rather than a trait (e.g., George & Zhou, 2007; Watson, 2000; Watson, Clark, & Tellegen, 1988). The subordinate was asked to “Think of your day-to-day experiences at work. Are you...” The Cronbach alpha for this scale was .83.
Scales Measured from the Supervisor

**Positive Affect.**

The supervisor assessed the positive affect of each subordinate. Supervisor appraisal of subordinate positive affect was selected on both theoretical and methodological grounds. Theoretically, based on arguments forwarded by Fredrickson (2003), we contend that observable signs of positive emotion have the greatest potential for initiating and sustaining positive spirals within organizations. Methodologically, concern has been expressed that measures of work-family experiences, such as those used in this study, are confounded by respondent emotional well-being (MacDermid, 2005). We therefore selected supervisor appraisals of positive affect to avoid the potential confound. The supervisor was asked to “Think of your day to day experiences at work with this subordinate. Does this subordinate appear…” We inserted six dimensions (e.g., attentive, excited) from the the PANAS (Watson, Clark, & Tellegen, 1988) in the blank. The Cronbach alpha for this scale was .86.

**Organizational Citizenship Behavior.**

Citizenship behaviors were supervisor ratings of both OCB-I (toward the individual) and OCB-O (toward the organization). The scale we used was developed by Williams and Anderson (1991) and consisted of 7 items for OCB-I ($\alpha = .88$) and 6 items for OCB-O ($\alpha = .79$). An example item for OCB-I is “On average, how often do you feel your subordinate helps others who have been absent?” An example item from OCB-O is “On average, how often do you feel your subordinate conserves and protects organizational property?”

**Control Variables**

In order to eliminate potential alternative explanations for our results, we included six control variables in our analyses, all supplied by the subordinate. The variables that were demographic in nature included subordinate gender, tenure with supervisor, job tenure, and marital status. Each of these variables has been found to impact supervisor ratings of OCB in past research (Bolino & Turnley, 2005; Kidder, 2002; Morrison, 1994; Organ et al., 2006). For instance, tenure may contribute to employees’ feelings of obligation to demonstrate OCB, and thus impact supervisory ratings of their incidence (Morrison, 1994; Zellars, Tepper, & Duffy, 2002). We also controlled for work-family conflict and work-family enrichment. We used the 18-item work-family conflict scale developed by Carlson et al. (2000). An example item is, “My work keeps me from my family activities more than I would like.” The Cronbach alpha for this scale was .88. We used the 18-item work-family enrichment scale developed by Carlson et al. (2006). An example item is “My involvement in my work helps me to acquire skills and this helps me to be a better family member.” The Cronbach alpha for this scale was .90.

**Plan of Analysis**

We tested the hypotheses using MacKinnon, Lockwood, Hoffman, West, and Sheets’ (2002) framework for analyzing mediation models. The design of our study created a nesting effect. Specifically, subordinates were nested within supervisors because supervisors provided ratings of positive affect and OCB for more than one subordinate. To account for the non-independence in our data, we used hierarchical linear modeling (HLM; Raudenbush, Bryk, Cheong, & Congdon, 2004) to perform our analyses. We ran a series of HLM analyses using grand-centered means and Snijders and Bosker's (1999) formula to calculate our variance explained. In the first analysis, we used positive affect as the dependent variable and work-family balance as the independent variable. We also included the control variables in this step. We performed this analysis four times, once with each form of positive affect serving as the dependent variable and then once for each form of OCB serving as the dependent variable. In the next analysis, we entered our control variables, positive affect rated by the subordinate, and used OCB-I as the dependent variable. We repeated this analysis with OCB-O serving as the dependent variable. Finally, we reran these final two analyses substituting positive affect as rated by the supervisor.
Results

Descriptive statistics for and correlations among the variables of interest in our study are presented in Table 1. Work-family balance, our independent variable, was significantly related to both OCB measures, our dependent variables, and both positive affect measures, our mediators. As some of our correlations between variables provided by the same data source approached .60, we decided to explore the discriminant validity of our scales. To do this we estimated a 6-factor measurement model using LISREL 8.80 that included work-family conflict, work-family enrichment, the two forms of positive affect, and the two forms of OCB. The fit for this model was acceptable (e.g., CFI = .90 and RMSEA = .064) and all of the path loadings were significant. We compared this model to an alternative 2-factor model in which the source of the data served as the factors. Specifically, work-family conflict and enrichment and subordinate rated positive affect loaded on a subordinate factor and supervisor rated positive affect and the two OCB measures loaded on a supervisor factor. The alternative 2-factor model fit was not as strong as the 6-factor model (CFI = .85 and RMSEA = .089) and the chi-square difference test between these two models was significant ($\chi^2_{\text{diff}} (14) = 1029, p < .001$). We also compared our hypothesized model to a 1-factor model. Once again the 1-factor did not fit as well as the hypothesized model (CFI = .82 and RMSEA = .11) and the chi-square difference test was significant ($\chi^2_{\text{diff}} (15) = 1892, p < .001$). These results suggest that the scales used are independent and that the source of the data is not a significant factor in our analyses.

Before running the full HLM analyses, we estimated a null model with no predictors for each of our dependent variables. The results of these analyses demonstrated that there is between-leader variation in OCB-I ($\chi^2 = 542.31, p<.001$, ICC=.72) and OCB-O ratings ($\chi^2 = 300.48, p<.000$, ICC=.54) lending support for our use of HLM.

Table 2 shows the HLM results for positive affect rated by the subordinate. In Step 1, the mediator, subordinate rated positive affect, served as the dependent variable. Results for this step indicated that both work-family conflict and work-family balance were significant predictors and explained 14% of the variance. In Steps 2 and 3 in the top half of the table, the dependent variable was OCB-I. Step 2 demonstrates that tenure with supervisor (i.e., those with longer tenure engaged in more OCB-I) and work-family balance were significant predictors and explained 1% of the variance. These results offer support for Hypothesis 1a as work-family balance and OCB-I are positively related. Finally, Step 3 demonstrates full mediation as the relationship between work-family balance and OCB-I dropped to non-significant while the mediator, subordinate rated positive affect, was significant. Once again, the control variable of tenure with supervisor (i.e., those with longer tenure engaged in more OCB-I) was significant. This step explains 7% of the variance in OCB-I.

We used Preacher and Hayes (2004) bootstrapping methodology to determine the indirect effect of balance on OCB-I through subordinate rated positive affect and whether this effect was significant. Following the recommendations of Mooney and Duval (1993) and Shrout and Bolger (2002) we evaluated the indirect effects by constructing bias corrected confidence intervals using the bootstrapped estimates from 10,000 samples. Results indicate a significant indirect effect of .23 (CI: .05 to .63). These results offer support for Hypothesis 2a which predicted positive affect as a mediator of the work-family balance-OCB-I relationship.

The bottom half of Table 2 displays the results for OCB-O. The first step is identical to the top half of Table 2 because we are utilizing the same mediating variable, positive affect as rated by the subordinate. Step 2 demonstrates support for Hypothesis 2b. Specifically, there is a significant and positive relationship between work-family balance and OCB-O with subordinate rated positive affect as the mediator. This step also shows that gender (i.e., women demonstrate significantly more OCB-O than men) was a significant predictor of OCB-O and that together with work-family balance explained 5% of the variance. Finally, Step 3 illustrates full mediation. This can be seen by the fact that the gamma for work-family balance became non-significant when positive affect rated by the subordinate was entered into the equation. In addition, the control variable of gender (i.e., women demonstrate significantly more
OCB-O than men) remained significant. This step explained 6% of the variance in OCB-O. The indirect effect was .17 and it was significant (CI: .04 to .43) providing support for Hypothesis 2b.

Table 3 repeats the analyses described above after positioning positive affect rated by the supervisor as the mediator. Step 1 in Table 3 shows that marital status (i.e., those not married had more positive affect), job tenure (i.e., those with longer tenure had more positive affect), work-family enrichment, and work-family balance all predicted positive affect rated by the supervisor. Together these variables explained 12% of the variance. Step 2 in Table 3 is identical to the results presented in Table 2 as this step tests the IV-DV relationship, which remained the same across all analyses. Step 3 in Table 3 on the top half once again shows full mediation as the gamma for balance became non-significant while the mediator, supervisor rated positive affect was significant. Both tenure with supervisor (i.e., those with longer tenure engaged in more OCB-I), and supervisor rated positive affect explained 22% of the variance. The indirect effect was .50 and it was significant (CI: .14 to .99). These results supply support for Hypothesis 2b.

Finally, full mediation is demonstrated by the results in Step 3 in the bottom half of Table 3. Gender (i.e., women engaged in more OCB-O), tenure with supervisor (i.e., those with shorter tenure engaged in more OCB-O), and supervisor rated positive affect were all significant and explained 21% of the variance. The indirect effect was .30 and it was significant (CI: .11 to .59). These results supply support for Hypothesis 2b. In total, these results demonstrate that positive affect, regardless of the rater, serves as a mediator of the relationship between work-family balance and both forms of OCB.

Discussion

The goal of this research was to evaluate the relationship between work-family balance and organizational citizenship behavior via positive affect. To accomplish this goal we tested hypotheses derived from broaden and build theory using data obtained from a nested sample of supervisors and subordinates. As hypothesized, the results of this study indicated that greater work-family balance was associated with higher supervisor reported OCB-Is and OCB-Os, and these associations were mediated by positive affect. Further, these results were supported beyond the effects of work-family conflict and work-family enrichment. In addition, these results held for both supervisor and subordinate rated positive affect. This provides strong support for the utility of broaden and build theory, particularly in light of the fact that subordinates reported work-family balance and supervisor reported OCB. Collectively, these findings make several contributions to the literature.

Our results extend previous work-family research focused on OCB. Whereas others have reported a negative relationship between work-family conflict and OCB (Bragger et al., 2005) and a positive link between one direction of enrichment and OCB (Baral & Bhargava, 2010), this study links work-family balance which captures both conflict and enrichment in both directions to OCB while controlling for work-family conflict and work-family enrichment. This extension is important to the work-family literature as researchers and practitioners are increasingly recognizing that neither work-family conflict nor work-family enrichment alone can capture or characterize the extent to which individuals are meeting both their work and family responsibilities (Grzywacz & Butler, 2008; Grzywacz & Carlson, 2007). Previous studies have considered these constructs separately providing a partial picture of the process. However, it is critical to examine the role of the entire synergistic work-family interface as captured in balance to see how it relates to OCB. The results of this study provide evidence of the potential value of organizational initiatives to promote work-family balance as balance is linked with supervisor’s evaluation of OCB. That is, our results add support to the extensive literature suggesting that work-family initiatives go beyond good will offer to a systematic management strategy that benefits workers and organizations by supporting generative behaviors within the organization, such as OCB.

Our direct test of ideas and propositions from broaden and build theory also contributes to the literature. The management literature focused on the work-family interface is dominated by models that are implicitly or explicitly informed by stress theory. Although stress theory is valuable for making sense of work-family conflict, in large part because it is easily conceptualized as a stressor, it is less clear how
stress theories inform concepts such as work-family balance which are not easily construed as a “stressor.” Like Frone (2003), we do not believe that theories used to understand work-family conflict can be overlaid on concepts such as work-family enrichment or work-family balance. Our results indicating that work-family balance may contribute to OCB is consistent with broaden and build theory, as are the results suggesting that positive affect mediates these associations. These results provide strong support for the potential utility of this theory for studying the putative antecedents and outcomes of work-family balance, particularly organizational behaviors that are generative in nature such as OCB, worker engagement, and perhaps even performance (Bakker, 2008).

Further, the focus on work-family balance also extends the literature because it considers new antecedents to critical behaviors in organizations (i.e., OCB). As researchers continue to study why people engage in certain behaviors and perform in specific ways within an organization, examining the function of a wide range of potential variables will provide a more complete view of this complex process. Further, and more practically, by understanding the role of work-family balance in shaping OCB, this study provides concrete guidance for potential management practices that reinforce employee behaviors that contribute to organizational success beyond those devoted specifically to performing the job.

**Strengths, Limitations, and Future Research**

There are a number of strengths of this study. We used a sample that included responses from both supervisors and subordinates which may provide a more accurate picture of the organizational setting. A recent critical review noted that only 8% of work-family studies triangulated measures by having multiple individuals provide data (Casper, Eby, Bordeaux, Lockwood, & Lambert, 2007). This suggests that approximately 92% of all work-family research exclusively employs self-report data that is subject to common method variance problems. Our study builds on the 8% rather than the 92%. Second, while others have used broaden and build theory to explain work-family phenomenon, none directly tested the linking mechanism of emotions specified by the theory. Our hypothesized model lays out the process and specifically measures the emotional mediation process via positive affect. In addition, we test this mediation using a measure of positive affect from the supervisor as well as the subordinate thus demonstrating the veracity of this finding. Third, we offer a constructive replication by using multiple measures of OCB which demonstrates the link between balance and OCB is positive regardless of its form, organizational or individual.

As with all research there are several limitations which generate potential opportunities for future research. First, we do not have a direct measure of work-family balance. Currently there is debate in the literature as to the best way to both define and measure work-family balance (Grzywacz & Carlson, 2007). However we believe that empirical work in this area should not wait until a measure is developed. Thus, we view our latent measure of work-family balance that combines two established scales that represent the components of work-family balance as a viable measure. Additional support for our approach can be found in the fact that our measure of balance explained variance in both OCB-I and OCB-O above and beyond that explained by work-family conflict and enrichment. Future research could benefit from examining different conceptualizations and operationalizations of balance with respect to key organizational outcomes. Second, our model was merely a first step in applying broaden and build theory and could be expanded further. Future research could consider the impact of positive emotion on the regulation of negative emotions as a coping mechanism and how that impacts both psychological and behavioral outcomes (Fredrickson, 2001). Now that positive emotion is shown to play a role, future research could examine different types of emotion and study more specific, discrete emotions (Brief & Weiss, 2002) or different mechanisms by which positive affect may promote OCB to extend the knowledge of this process (Carlson et al., 1988; George & Brief, 1992). Recent evidence suggests, for example, that positive emotions accumulated over time may build basic cognitive and psychological resources such as interpersonal skills, enhanced interpersonal relationships, and a sense of environmental
mastery (Fredrickson et al., 2008); all of which are likely to be supportive of OCB. Finally, we measured two broad forms of OCB that dominate extant research: individual and organizational. However, there are others. Only future research will be able to determine if the relationships we report generalize to other forms of OCB.

Practical Implications and Conclusion

Recent organizational studies have demonstrated that work-life balance practices can improve organizational performance (Lazar et al., 2010). Building on these findings, the bottom line is that work-family balance appears to promote workers’ engagement in organizational citizenship behaviors that benefit the organization through positive affectivity (Organ et al., 2006). Thus, results from this study suggest strategies to promote positive affectivity and work-family balance can be useful tools for building desirable behaviors within the workplace. Strategies, for example, such as implementation or expansion of workplace flexibility initiatives, or launching training programs to ensure supervisors are sufficiently supportive of workers activities outside the workplaces as well as training programs designed to enhance employee skill sets to help them achieve balance could prove valuable by reinforcing OCBs (Carlson, Grzywacz, & Kacmar, 2010).

In conclusion, our research empirically supports the relationship between work-family balance and more engagement in OCB as mediated by positive affect and that this relationship exists even after controlling for work-family conflict and enrichment. Our study is a solid first step in offering a better understanding of the work-family balance construct and expands the theoretical and empirical foundations of the work-family interface to help organizations more effectively utilize their human capital resources.
References


## Table 1

**Correlations, Means, and Standard Deviations**

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<thead>
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<th>Variable</th>
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<th>3</th>
<th>4</th>
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<th>6</th>
<th>7</th>
<th>8</th>
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<td>10. Work-Family Conflict</td>
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<td>-0.34**</td>
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Listwise N=205. * p < .05. ** p < .01. OCB-I = Organizational Citizenship Behavior – Individual. OCB-O = Organizational Citizenship Behavior – Organization.
### Table 2

**HLM Analysis Results for Subordinate rated Positive Affect as Mediator**

#### DV: OCB-I

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<td>-.00 (.09)</td>
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<td>-.09 (.08)</td>
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<td>Tenure with supervisor</td>
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<td>.02*.01</td>
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<td>Subordinate rated PA</td>
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<td>.22**.06</td>
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$R^2 = .14$  

#### DV: OCB-O

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<thead>
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<th>Step 2: IV→DV</th>
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$R^2 = .14$  


*aListwise N=205. * $p < .05. ** p < .01.
### Table 3

**HLM Analysis Results for Supervisor rated Positive Affect as Mediator.**

<table>
<thead>
<tr>
<th>Variable</th>
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</table>

**R²**                      | .12            | .05           | .21               |


*a* Listwise N=205.  *p < .05.  **p < .01.  ***p < .001.
Figure 1 – Hypothesized Model