

2012

# Extending job embeddedness theory to the family domain: development of a construct and measure for family embeddedness and integration through a work-family balance perspective

Tatiana H. Toumbeva

Louisiana State University and Agricultural and Mechanical College, ttoumbeva@gmail.com

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EXTENDING JOB EMBEDDEDNESS THEORY TO THE FAMILY DOMAIN:  
DEVELOPMENT OF A CONSTRUCT AND MEASURE FOR FAMILY EMBEDDEDNESS  
AND INTEGRATION THROUGH A WORK-FAMILY BALANCE PERSPECTIVE

A Thesis

Submitted to the Graduate Faculty of the  
Louisiana State University and  
Agricultural Mechanical College  
in partial fulfillment of the  
requirements for the degree of  
Masters of Arts

in

The Department of Psychology

by

Tatiana H. Toumbeva

B.S., University of South Florida, 2008

M.A., Boston University, 2010

August 2012

## ACKNOWLEDGEMENTS

I would like to thank my academic advisor Dr. Russell Mathews for his guidance, hard work, and endurance while helping me put this project together. I would also like to thank Drs. Tracey Rizzuto and Katie Cherry for serving on my committee and providing valuable feedback and advice from the initiation of my thesis project to its completion. Thanks to all the professors, instructors, and students who assisted during data collection and played a role in making this study possible. I am grateful for your time and effort. Last but not least, I thank my family and friends for their unwavering and tireless support. I could not have done it without you.

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## ABSTRACT

The goal of this study was to extend theory and research on job embeddedness by conceptualizing a parallel phenomenon that also exists in the family domain, referred to here as family embeddedness. Work-family balance perspective was utilized to argue that job and family embeddedness facilitate successful role functioning by guiding the resource allocation process in both the work and family domains. There were two parts to this study. In Phase 1, a measure was developed and a nomological network was established for family embeddedness. In Phase 2, a model was tested to understand the process through which two types of social support – leader-member exchange and family social support – affect satisfaction with work-family balance via job and family embeddedness, respectively. Phase 1 results suggested the expected three-factor structure for the family embeddedness measure, and provided initial evidence for convergent, concurrent, and incremental validity. In Phase 2, the family embeddedness measure was refined, and a higher-order factor structure with three latent indicators loading on an overall family embeddedness measure was confirmed. Results from the proposed structural equation model indicated that leader-member exchange and family social support enhance satisfaction with work-family balance by embedding individuals more extensively in the work and family domains. Interestingly, the indirect effects through job embeddedness appeared stronger than those through family embeddedness. Potential explanations for this finding are provided. Implications, limitations, and suggestions for future research are discussed.

## INTRODUCTION

Job embeddedness is a recently developed concept reflecting a broad constellation of perceptual and contextual forces that are conceptualized to enmesh individuals in their jobs and influence employee attitudes (Mitchell, Holtom, Lee, Sablinski, & Erez, 2001; Yao, Lee, Mitchell, Burton, & Sablinski, 2004). Specifically, job embeddedness is a web that keeps an individual within an organization, despite the presence of work stressors or external opportunities (Mitchell et al., 2001). With its inception, job embeddedness has become a variable of particular interest within the retention literature (Ng & Feldman, 2009). More recently, the importance of job embeddedness has extended to the larger organizational psychology literature (Halbesleben & Wheeler, 2008; Ng & Feldman, 2009).

It is necessary to first note the distinction between embeddedness and enmeshment. Although Mitchell et al. (2001) refer to enmeshment in their initial conceptualization of job embeddedness, they do not define or specify how enmeshment applies to the job context. Within the family studies and clinical psychology fields, enmeshment is a negative phenomenon and has been defined as “family patterns that facilitate psychological and emotional fusion among family members, potentially inhibiting the individuation process and the development and maintenance of psychosocial maturity” (Barber & Buehler, 1996, p. 433). Specifically, enmeshed family members exhibit high psychological control, intrusiveness, and dependency on one another (e.g., Anderson & Sabatelli, 1992; Olson, 1982). In the context of the job, however, enmeshment reflects the network of structural ties that create the individual’s web, where the higher the degree of enmeshment, the greater density of ties (e.g., workplace relationships) (Ng & Feldman, 2009), and in effect, the more extensive the resource pool available to the individual. As such, and as proposed in job embeddedness theory (Mitchell et al., 2001), the concept of

embeddedness is a positive phenomenon reflecting favorable work-related characteristics that enhance, rather than compromise, individual functioning.

To that end, multiple empirical studies have provided evidence that job embeddedness predicts a variety of important outcomes (e.g., turnover intentions, actual turnover, job performance, job satisfaction, citizenship behavior, and organizational commitment) above and beyond other antecedents (e.g., job satisfaction, organizational commitment, perceived job alternatives, job search behaviors, labor conditions, absenteeism, and work engagement; Burton, Holtom, Sablinski, Mitchell, & Lee, 2010; Crossley, Bennett, Jex, Burnfield, 2007; Halbesleben & Wheeler, 2008; Holtom, & Inderrieden, 2006; Lee, Mitchell, Sablinski, Burton, & Holtom, 2004; Mitchell et al., 2001; Ng & Feldman, 2009; Tanova & Holtom, 2008). That said though, the notion of embeddedness, as conceptualized by Mitchell et al. (2001), has primarily been studied within the work domain. However, given that family is another broad life domain in addition to work, embeddedness as a phenomenon has the potential to also exist within the family domain.

### **Overview of Purpose**

The purpose of this study is to extend the job embeddedness literature by suggesting that an individual is embedded, to varying degrees, in both the work and family domains. Emerging research on work-family balance is leveraged to help frame this argument (Valcour, 2007).

Work-family balance is defined as an individual's global perception of the overall level of satisfaction with how successfully he or she handles work and family demands (Valcour, 2007).

In parallel to Mitchell et al.'s (2001) conceptualization of job embeddedness described above, family embeddedness is defined as a web consisting of a combination of family forces that keeps people enmeshed within their families to varying degrees. As already stated,

enmeshment is viewed as a positive notion that is based on availability of valuable resources within the family domain rather than on compromising family functioning. Family embeddedness is important as it helps explain why people continue to invest resources (e.g., time and energy) in the family domain despite the presence of negative factors (e.g., family dissatisfaction and stressors). Similarly to job embeddedness, family embeddedness has the potential to move beyond family satisfaction, and recognize that individuals may choose to devote resources to their families even if they are dissatisfied. As such, examining job and family embeddedness in conjunction facilitates our understanding of the process through which work- and family-related forces influence individuals' decisions, perceptions, attitudes, and behavior.

To accomplish the goals of this research, a two-part study was conducted. In the first phase, a measure to operationalize family embeddedness was developed, based on the notion of job embeddedness, and initial evidence was provided for its psychometric viability in terms of its resulting factor structure, as well as by examining issues of convergent, concurrent, and incremental validity. In the second phase, job embeddedness theory was extended by merging it with work-family balance to help understand the process through which resources generated in the work and family domains are allocated by way of job and family embeddedness to enhance perceptions of role balance. To do this, a set of job and family embeddedness hypotheses were proposed and tested as part of an overall conceptual model (see Figure 1).

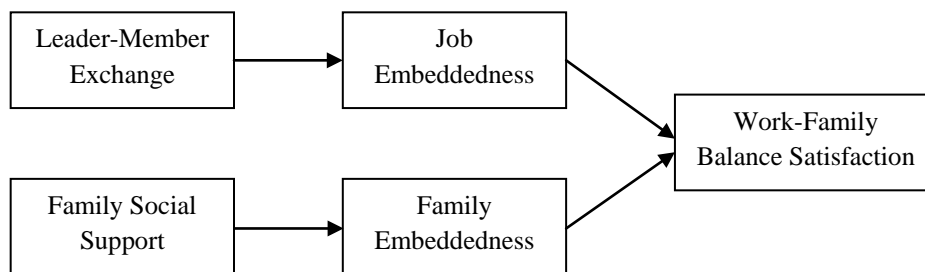


Figure 1 – Proposed Conceptual Model of Embeddedness Nomological Network

To that end, the manuscript is arranged as follows. First, past research on job embeddedness is reviewed. Second, job embeddedness literature is utilized to conceptualize and define family embeddedness. Third, family embeddedness is differentiated from other major constructs in the work-family literature. Finally, theoretical and empirical support is provided for the proposed relationships in the conceptual model.

### **Job Embeddedness**

Mitchell et al. (2001) posit that individuals who are embedded are immersed in their backgrounds and become tied to their surroundings. Drawing on field theory (Lewin, 1951), they argue that since aspects of individuals' perceptual life space are interconnected, job embeddedness can similarly be illustrated by a web in which individuals can become immersed. The level of embeddedness is determined by the density of connections (e.g., social, material), which can aggregate in a variety of combinations. As such, the denser the web, the more immersed the individual is into his or her surroundings, and the more difficult it becomes to separate.

Job embeddedness has been conceptualized to consist of two dimensions: on-the-job (organizational) embeddedness and off-the-job (community) embeddedness (Mitchell et al., 2001). On-the-job embeddedness refers to the degree to which individuals are immersed in their organizations, while off-the-job embeddedness represents the degree to which individuals are immersed in their communities. Each embeddedness dimension is composed of three facets: fit, links, and sacrifice. Fit refers to the individuals' perceived compatibility or comfort with their work and non-work environments. In other words, organizational fit is the degree of similarity or compatibility between the individual and organizational culture, overlap between the individual abilities and organizational demands, and match between individual interests and organizational

rewards. Community fit is the degree of match, similarity, or compatibility between the individual and his or her community. Links refers to the formal or informal connections of individuals with other people, projects, locations, activities, and groups in their organizations and communities (e.g., friendships, task interdependence). The third facet, sacrifice, refers to the ease with which the links can be broken upon quitting work or moving to another home or community (e.g., giving up benefits). Specifically, it is grounded in the perceived cost of material and psychological benefits that would be given up upon leaving the job or community (Mitchell et al., 2001; Ng & Feldman, 2009).

Interestingly, job embeddedness has been conceptualized as a less affective construct compared to other workplace attitudes such as organizational commitment, and thus reflects primarily work environment-based factors that drive perceptions of job stability or motility (Lee et al., 2004; Mitchell et al., 2001; Sekiguchi, Burton, & Sablynski, 2008). However, job embeddedness moves beyond job satisfaction and availability of external opportunities, and recognizes that individuals may choose to remain in their jobs even if they are dissatisfied or the labor market offers job vacancies (Rosenfeld, 1992) and permits job mobility (Rusbult & Farrell, 1983).

As previously mentioned, the initial conceptualization of job embeddedness includes organizational and community dimensions. However, as the literature has progressed over the last decade, studies have consistently begun to focus on organizational embeddedness as the primary metric of job embeddedness since it has been shown to better predict work attitudes and outcomes (Allen, 2006; Lee et al., 2004). As a result, organizational embeddedness has subsumed the domain of job embeddedness, and across multiple studies job embeddedness has been used to represent organizational embeddedness (e.g., Burton et al., 2010; Harris, Wheeler &

Kacmar, 2010; Hom, Tsui, Wu, Lee, Zhang, Fu, & Li, 2009; Ng & Feldman, 2010; Sekiguchi et al., 2008). Consistent with past literature, the focus herein is on the organizational aspect of job embeddedness. As such, this conceptualization allows for the drawing of parallels from the work to family domain, where embeddedness may also exist based on a similar structure and processes as job embeddedness and with shared antecedents and outcomes.

**Job Embeddedness Construct Comparison.** Researchers have sought to systematically differentiate job embeddedness from similar constructs in the attachment and turnover literature (Crossley, et al., 2007; Mitchell et al., 2001); some of the primary constructs include organizational identification and organizational commitment.

First, organizational identification reflects the degree to which individuals have integrated organizational membership into their self-concept and have a sense of oneness with the organization, as illustrated by an incorporation of organizational perspectives, goals, values, successes, and failures as their own (Albert & Whetten, 1985; Ashforth & Mael, 1989; Cheney, 1983; Shamir & Kark, 2004; Van Knippenberg, 2000). With respect to job embeddedness, the internalization of organizational goals, values, and perspectives is not a prerequisite for embeddedness to occur. Specifically, one may not identify with his or her organization and internalize its perspectives, goals, values, successes, and failures. And yet, this individual may simultaneously perceive a high degree of compatibility between his or her skills and abilities and organizational demands, have a high interdependence with coworkers, and perceive a high degree of sacrifice upon losing the job. Empirical evidence for the distinction between organizational identification and job embeddedness comes from a study by Johnson, Sachau, and Englert (2010) who have demonstrated that job embeddedness fully mediates the relationship between organizational identification and turnover intentions.

Another construct that requires differentiation from job embeddedness is organizational commitment. According to Maertz and Campion (2004) individuals have specific affective, calculative, alternatives-based, and normative reasons that determine why they are attached to organizations and guide their decision process about staying or leaving the organization. Three main types of commitment have been identified (Allen & Meyer, 1996). Affective commitment represents the extent of identification with, involvement in, and emotional attachment to the organization based on acceptance of organizational goals, desire for organizational membership, and willingness to exert effort for the benefit of the organization (Mowday, Steers, & Porter, 1979). Continuance commitment is defined as the identified costs associated with leaving the organization, such as availability of opportunities elsewhere or forfeited benefits and rewards. Lastly, normative commitment refers to a sense of obligation and moral or ethical reasons to stay with the organization that are grounded in family and culturally-based experiences.

Crossley et al. (2007) have differentiated job embeddedness from organizational commitment on the basis of the following conceptual reasons: 1) it is primarily cognitive in nature rather than affective, 2) it is driven by past- and future-based appraisals, 3) identification is not necessary for job embeddedness to occur, 4) it does not reflect willingness to exert effort on the organization's behalf, 5) it is not dictated by presence of opportunities elsewhere, 6) it does not depend on the perception of how right or wrong it is to be attached to the organization, and 7) it does not provide explanations as to why, how much the individual likes the job or organization, or whether the individual chooses to be attached.

In addition to conceptual differences, organizational commitment and job embeddedness have been shown to be empirically distinct (Mitchell et al., 2001) such that job embeddedness negatively predicts voluntary turnover above and beyond organizational commitment.



Furthermore, job embeddedness has been positioned as an antecedent to organizational commitment in past studies to reveal that embeddedness mediates the positive impact of mutual investment employee-organization relationships and organizational commitment (Hom et al., 2009).

### **Conceptualizing Family Embeddedness**

Although Mitchell et al. (2001) utilize field theory to conceptualize job embeddedness, ecological systems theory (Bronfenbrenner, 1979) is also leveraged to help conceptualize family embeddedness. Systems theory posits that work, family, and community are microsystems that are composed of relational ties, and encompass structural and psychological aspects of individuals and their environment. People exist within multiple life domains that interact to influence all aspects of their development and functioning. That said, the organizational and community dimensions of job embeddedness (Mitchell et al., 2001) map well to the work and community microsystems, as proposed within systems theory. A family dimension that captures the family microsystem, however, is absent from job embeddedness theory. Given that the family is the most proximal aspect of an individual's immediate environment within which he or she functions (Bronfenbrenner, 1979), expanding the concept of embeddedness to also encompass the family microsystem would provide a more complete picture of all forces that shape individual decisions, attitudes, perceptions, and behaviors.

Ramesh and Gelfand (2010) have taken the first step toward expanding the concept of job embeddedness, albeit in a different direction than that of the present study. Specifically, these authors have recognized the importance of expanding the job embeddedness model to include normative family influences when studying turnover decisions, and establish a construct that captures the extent to which the employee's family members are embedded in his/her (i.e., the

employee's) job and organization. For instance, an individual may endorse a high family embeddedness if his/her family members frequently interact with his/her coworkers, his/her family is proud that he/she works for the organization, and it would harm the family's reputation if he/she leaves the organization. Ramesh and Gelfand have demonstrated that the degree to which the employee's family is embedded in his or her work explains variance in turnover above job satisfaction, organizational commitment, perceived job alternatives, and job search, and after controlling for job and community embeddedness.<sup>1</sup>

Even with Ramesh and Gelfand's (2010) contribution, however, investigations of Mitchell et al.'s (2001) notion of embeddedness remain largely focused on the work domain. As such, the goal of the present research is to broaden the phenomenon of embeddedness by proposing that individuals may be embedded not only within the organization and community but also within the family.

Aside from providing a conceptualization of family embeddedness, it is also important to create a working operationalization of 'family.' Gelfand, Raver, and Ehrhart's (2002) recommendation is followed to increase the comprehensiveness of family constructs, as that may capture a wider variety of cultures, contexts, and individuals.

**Defining 'Family.'** To help move the work-family field forward, scholars (Aldrich & Cliff, 2003; Rothausen, 1999) have urged other researchers to specify how they operationalize 'family.' As a result, issues that may arise when comparing across family measures would be resolved (Blegen, Mueller, & Price, 1988). Some studies have conceptualized family as

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<sup>1</sup> Ramesh and Gelfand's (2010) three family embeddedness dimensions were also created in parallel to those of job embeddedness, such that family fit refers to the family members' perception of how well the organization fits the individual, family links are the extent to which the family members are connected to the individual's organization, and family sacrifice is defined as what the family would have to give up if they moved. My conceptualization of family embeddedness fundamentally differs from that of Ramesh and Gelfand, as it captures the extent to which the individuals themselves are embedded within their families.

encompassing the immediate nuclear family (e.g., Cramton, 1993), although others (e.g., Aldrich, Renzulli, & Langton, 1998) have focused on the family of origin (i.e., family into which the individual was born) and extended and step family members (Aldrich & Cliff, 2003). Given the changing socio-economical and family structure trends in the composition and the complexity of family and housing situations, lifestyles, diversity of cultures, and the existence of kin networks across cities, states, and countries (Aldrich & Cliff, 2003; Bogan, 1991; Rothausen, 1999), it may not be appropriate to define family by household or in the traditional nuclear sense.

In the present study, an inclusive definition of family is established that is bound by the notion of kinship based on marriage, biology, or adoption (Rothausen, 1999), and requires that the family is built on obligation or duty at a minimum. Specifically, in this operationalization of family, a broader notion of family is encompassed. This is consistent with previous researchers (Booth & Matthews, 2012) who argue that restricting the definition of family solely to parental or spousal roles would place artificial constraints, such that the generalizability of the results would be decreased. That said, the following are included in the conceptualization of family: nuclear or extended family, dependents of all ages, related by marriage, biology, adoption, living in the household with the individual or not, and spouse, partner, or significant other of either gender. When limited social and legal restrictions are placed on what can be considered family, individuals are given the freedom to establish an idiosyncratic and functional concept of family (Bala, 1994; Patterson, 1996). As a result, a greater variety of family realities is captured (Burton & Stack, 1993; Rothausen, 1999), and in effect, the generalizability of the results is enhanced.

**Dimensions of Family Embeddedness.** As previously noted, job embeddedness is defined on the basis of three dimensions (Mitchell, et al., 2001). These dimensions are mirrored to define and conceptualize the three facets of family embeddedness: fit-to-family, links-to-

family, and family-related sacrifice. The three dimensions are forces that act in synergy to keep an individual immersed in the family. For instance, if an individual fits well with the family, has a high degree of connection and interdependence with family members, and perceives a high cost of restricting or weakening family links by restricting resource allocation to the family, he/she is extensively embedded in the family domain. As a result, the deliberation to act on any feelings of dissatisfaction, for instance, would be difficult to make. In the above sections, an overall definition of family embeddedness was provided. Next, using Mitchell et al.'s (2001) conceptualization of job embeddedness as a guide, the three underlying facets are examined in greater depth.

Fit-to-Family. Existing definitions of fit in the work domain (Cable, & DeRue, 2002; Caplan, 1987; Kristof-Brown, Jansen, & Colbert, 2002; Mitchell et al., 2001; Ng & Feldman, 2009; Van Vianen, 2000) are mirrored and integrated to conceptualize fit-to-family as individuals' perceptions of (1) compatibility or comfort with their families, and family environment or culture, (2) degree of match or similarity between individual characteristics (e.g., values, norms, goals, beliefs, motives, interests, plans for the future) and those of the family, (3) the extent of overlap between family role demands or expectations and individual skills and abilities (e.g., fit between what the individual can provide the family and what the family requires), and (4) the extent to which individual psychological or biological needs are being met by the family. Individuals may generate a perception of fit based on a global cognitive appraisal of balance in demands-abilities and needs-supplies within overall past and anticipated family experiences (e.g., shared expectations; plans or goals for the future). As such, and similar to job embeddedness, perceptions of fit are not established solely on events and experiences in the past but also encompass future points in time.

Links-to-Family. Based on Mitchell et al.' (2001) conceptualization of links, links-to-family refers to the connections of individuals with other members of the family. Extending Ng and Feldman's (2009) interpretation of links, links-to-family reflects interdependence and interpersonal relationship with other family members. The individual is tied to other family members by varying quantity of links that differ in magnitude and quality depending on the nature of the interpersonal relationships and the number of individuals comprising the family unit. These links are the building blocks of a social, psychological, and material web that encompasses an individual's family environment. The more numerous, stronger, and higher quality of interpersonal relationships, the more tightly the individual is immersed in the family. Following in the footsteps of Mitchell et al., links are conceptualized broadly due to individual, cultural, and contextual differences that may exist in determining the importance placed on some family links over others.

Family-Related Sacrifice. The third dimension of job embeddedness is job sacrifice. Drawing from the definition of job sacrifice by Mitchell et al. (2001), family-related sacrifice is operationalized as the ease with which family links can be weakened or broken (i.e., what individuals have to lose if they reduce or discontinue allocation of resources to the family domain). This is determined by individuals' perceptions of the extent of personal losses or costs (e.g., forfeited material or psychological benefits; psychological, social, or material support) associated with leaving or distancing themselves from their families. The more individuals perceive would be lost or sacrificed if ties to the family were severed or weakened, the greater the family-related sacrifice, and in turn, the more enmeshed individuals feel with their families.

In the work domain, the more individuals believe they would lose by leaving the organization (e.g., financial costs, new health care or pension plans, organization-related

benefits, opportunities for job stability and advancement, rank, prestige, lack of external opportunities) the more difficult the turnover (Shaw, Delery, Jenkins, & Gupta, 1998). Parallel psychological and material factors (e.g., family stability, security, comfort, habit) may be involved when an individual makes the decision to continue allocating resources to the family domain despite the presence of negative factors.

**Family Embeddedness Construct Comparison.** Due to the presence of other related family constructs in the existing literature, it is important to consider how family embeddedness is distinct and unique. On the whole, it is important to keep in mind that, in parallel to job embeddedness, family embeddedness is primarily a cognitively-based construct, and is relatively non-affective with respect to other family-related constructs that are discussed in this section. Specifically, cognitive appraisals and evaluations are primarily what drive embeddedness, rather than emotional and affective factors.

In her review of family constructs and measures, Rothausen (1999) concludes that perceptual family measures fall into two main categories depending on the phenomenon being captured: (1) “measures of how important or pervasive the family is to the individual,” and (2) “attitudes toward or about family” (p. 821). In her study, she has classified the following as belonging to the first category: family involvement and family role salience (indicative of family commitment and identification), family stressors (reflecting parental workload, lack of spousal support, family tension, and role juggling), family expectations (measuring role pressures and responsibilities), having a sick family member, and having work to do at home. In the second category, Rothausen has classified family satisfaction, family well-being, and quality of family life, which measure individuals’ feelings of satisfaction with family life or degree to which they find the family role rewarding, fulfilling, and free of stress.

Although neither category accurately reflects family embeddedness in its entirety, the former – degree of importance or pervasiveness of family – is conceptually closer than the latter based on the notion of pervasiveness. Thus, family embeddedness is differentiated from similar constructs that are categorized as representing the degree of family importance or pervasiveness – psychological involvement to the family and psychological commitment to the family. Also, family embeddedness is compared to a construct that is not present in Rothausen’s (1999) study but has received substantial attention from work-family researchers – family centrality. In addition to discussing the conceptual differences between family embeddedness and family psychological involvement, commitment, and centrality, the empirical distinctiveness of family embeddedness against these constructs are examined as part of the present research.

#### **Conceptual Differences between Family Embeddedness and Related Constructs.**

Family centrality, or family salience, has been defined as the degree to which an individual places importance and priority on the family domain (Carlson & Kacmar, 2000; Paullay, Alliger, & Stone-Romero, 1994; Stryker & Burke, 2000). It is an enduring and stable representation of one’s identity and self-concept (Katz & Kahn, 1978; Posner & Munson, 1979; Rokeach, 1973) that guides attitudes, decisions, and behaviors across a variety of family or work contexts (Meglino & Ravlin, 1998; Schwartz, 1994). Individuals who consider the family to be more salient perform their roles in a way that verifies and maintains the family as a central part of their identity (Stryker & Burke, 2000). Stryker and Burke (2000) argue that individuals perform multiple roles (e.g., spouse, parent) and, therefore, endorse multiple identities that comprise their self-concept. These identities are ranked with respect to the degree of ascribed salience. In order for an identity to be perceived as salient, its role expectations and functioning must be internalized, valued, found meaningful, and in line with the person’s identity standards.

Three main aspects differentiate family embeddedness from family centrality. First, family embeddedness is a multidimensional concept that represents enmeshment in the family domain on the basis of the three forces – fit-to-family, links-to-family, and family-related sacrifice. Second, the internalization of role expectations into the person’s self-concept is not required for an individual to experience high degree of fit with the family, links to other family members, and perceived sacrifice upon weakening of family bonds.

The third main difference between family embeddedness and centrality is based on the following line of reasoning. Stryker (2000) points out that the individual’s multiple identities are often in conflict or competition with one another depending on their level of ascribed salience. For instance, if an individual perceives work and family to have equivalent salience, the distribution of necessary resources to perform well in both domains becomes difficult and stressful (Burke, 1991). Conversely, an individual may experience equivalent level of embeddedness in the work and family domains without the generation of conflict or competition. Specifically, a high degree of fit, links, and perceived sacrifice in one domain are not created at the expense of degree of fit, links, and sacrifice in the other domain. It is possible that family centrality influences the extent to which an individual is embedded in the family such that one who views family to be highly salient may experience a greater degree of fit and links to other family members and higher perception of family-related sacrifice as a result of directing more time or cognitive energies toward the family.

Additionally, family involvement is another construct that needs differentiation from family embeddedness. Family involvement has been originally defined by Yogev and Brett (1985) and further conceptualized by Carlson and Frone (2003) in terms of psychological and behavioral involvement. Behavioral involvement reflects the investment of time and physical



resources to the family role. Scholars have argued that salience gives rise to behavioral involvement (Matthews, Swody, & Barnes-Farrell, 2011). Conversely, psychological involvement reflects the investment of emotional and cognitive resources, and is characterized by the degree to which individuals identify with, or assign importance to, their domain role. Yogev and Brett have also included the individual's level of commitment to family roles (i.e., spouse, parent) as a way to conceptualize family involvement.

Globally, family embeddedness is primarily cognitively-based and does not specifically address level of investment in, or commitment to, the family; rather, it assesses level of enmeshment or immersion within the family. Individuals may feel invested and committed to their family roles, and yet, still experience a low level of enmeshment in the family on the basis of fit, links, and sacrifice. Take, for example, an individual who is behaviorally involved by working long hours in order to support his or her family. This individual, however, may perceive him/herself as being incompatible with other family members (i.e., no overlap in interests, values), may not have a strong interpersonal connection to other family members, and may not believe that much would be lost upon weakening or breaking bonds with the family.

Lastly, family embeddedness is differentiated from psychological commitment to the family role. Amatea, Cross, Clark, & Bobby (1986) has defined family commitment as individuals' intention or willingness to allocate or commit personal resources to developing or achieving success in the family role. Psychological commitment to the family has been measured in the past via family role salience (Aryee, 1992; Bielby & Bielby, 1989). Family embeddedness is a much broader phenomenon than commitment, and although the degree of embeddedness is not determined by investment of, or willingness/intention to invest, resources, it may guide the resource allocation process. It may be expected that psychological commitment is most strongly

related to the links component of family embeddedness. Specifically, if an individual strives to successfully function as a spouse, he or she will allot sufficient time, energy, and attention to perform that role. As a result, he/she fosters a strong relationship with the spouse, thus perceiving a high degree of links to the family.

## PRESENT STUDY

To achieve the goals of this research, a two-phase study was conducted. In Phase 1, a measure for family embeddedness was generated by using Ng and Feldman's (2009) job embeddedness scale as blueprint. The measure was then examined via exploratory factor analysis. Furthermore, initial evidence was provided for the psychometric viability of the family embeddedness measure by examining scale properties and convergent and incremental validity with respect to family centrality, and concurrent validity with respect to family functioning (i.e., family cohesion and family disengagement) and family satisfaction. Thus, a nomological network for family embeddedness was presented.

As discussed earlier in this manuscript, family embeddedness and centrality are related because an individual who endorses high levels of family centrality internalizes and prioritizes his or her family role (Carlson & Kacmar, 2000; Katz & Kahn, 1978), which may facilitate the development of stronger links to the family due to the greater amount of time and energy devoted to the family domain. However, family embeddedness and centrality do not reflect the same phenomenon since internalization and prioritization of the family domain is not necessary for immersion to occur by way of fit, links, and sacrifice. That said, it is expected that family embeddedness is positively related to family centrality. In addition, since family embeddedness is considered a favorable phenomenon, it is also expected that family embeddedness positively predicts family cohesion and family satisfaction, and negatively predicts family disengagement.

In Phase 2, additional empirical evidence for the distinction of family embeddedness is provided against two additional constructs examined earlier in the manuscript – family involvement and commitment. In line with the argument that family embeddedness captures unique rather than redundant aspects of individuals' family realities, is the notion that family

embeddedness, involvement, and commitment may function independently from one another. Specifically, an individual who is very emotionally and cognitively invested in the family role (psychological involvement; Carlson & Frone, 2003), dedicates many hours to meet family demands (behavioral involvement; Carlson & Frone, 2003), and exhibits high intention or willingness to allocate resources to successfully fulfill his/her role as a parent or spouse (family commitment; Amatea et al., 1986), may not necessarily endorse a high degree of family-related fit, links, and sacrifice. An alternative scenario also exists where an individual perceives high degrees of fit, links, and sacrifice but is not highly invested in the family role. However, it is also plausible that an individual is highly committed, highly involved, and highly embedded within the family domain simultaneously. As such, it is expected that family embeddedness is positively related to family involvement and family commitment. Additional research is necessary to determine if family embeddedness is an antecedent or outcome to involvement and commitment.

Also as part of Phase 2, job embeddedness theory (Mitchell et al., 2001) is integrated with work-family balance perspective (Valcour, 2007) to extend literature on job embeddedness and understand the process by which resources generated via domain-specific types of social support affect work-family balance perceptions through job and family embeddedness. To do this, a set of job and family embeddedness hypotheses were proposed and tested as part of an overall conceptual model (see Figure 1). In addition, it was examined whether job and family embeddedness add incremental variance in how successful individuals perceive they are in balancing work and family above and beyond the antecedents to embeddedness.

### **Theoretical Framework**

Valcour (2007) has suggested that investigating the overall contentment about how well individuals believe they are balancing the work and family domains, and addressing the

fundamental human desire to be engaged in both work and family areas of life are important in explaining employee attitudes and outcomes. This argument is based on a belief that individuals want to be able to effectively fulfill their work and family roles and feel satisfaction from being able to do so successfully (Friedman & Greenhaus, 2000). Satisfaction with work-family balance occurs when individuals perceive that they have the necessary resources to effectively meet work and family role demands.

Valcour's (2007) concept of work-family balance is distinct from work-family conflict, facilitation, enrichment, and spillover (Greenhaus & Beutell, 1985; Greenhaus & Powell, 2006; Grzywacz & Butler, 2000; Rothbard, 2001), as it is a unitary, holistic construct that captures the overall perceived level of satisfaction with how successfully one handles the sum of all work and family role demands. Work-family balance is characterized by a cognitive aspect – the individuals' appraisal of degree to which they successfully fulfill multiple work and family roles, – and an affective aspect – positive feelings or emotional states that are brought about from the cognitive appraisal (Valcour, 2007).

Valcour's (2007) perspective on work-family balance is utilized to argue that job and family embeddedness guide the resource allocation process, and as such, aid individuals in successfully balancing their work and family lives. In the next section, the proposed hypotheses are introduced as part of an overall conceptual model, and additional rationale behind the posited relationships is provided through a work-family balance framework.

### **Conceptual Model and Hypotheses**

Past studies (Lee et al., 2004; Mitchell et al., 2001) have found evidence that job embeddedness reflects "...processes through which decisions to perform and to participate..." (Lee et al., 2004, pp. 711-712) are made. This is in line with findings by Hom et al. (2009) who

have provided empirical evidence that job embeddedness mediates the relationship between mutual investment employee-organization relationships and outcomes (organizational commitment, turnover intentions). In a similar vein, Allen (2006) has demonstrated that job embeddedness mediates the effects of socialization tactics on turnover.

As such, job and family embeddedness may serve as a mechanism through which resources are distributed to the work and family domains. In other words, the experience of embeddedness may influence the manner in which individuals choose to allocate accumulated resources to either domain as needed. Since satisfaction with work-family balance (Valcour, 2007) arises when individuals perceive that they possess the necessary resources to successfully manage their work and family lives, it is plausible that job and family embeddedness enhance satisfaction with work-family balance, potentially by guiding existing resources to the domain that they perceive as lacking. To test this proposition, two parallel, domain-specific sources of social support – leader-member exchange and perceived family social support – are examined as antecedents to job and family embeddedness, respectively.

**Leader-Member Exchange and Job Embeddedness.** Within the work domain, the supervisor-subordinate relationship has been considered a prime source of support and is often viewed through a leader-member exchange lens (Halbesleben, 2006). The leader-member exchange framework supports the notion that leaders establish unique relationships with each of their subordinates by choosing to invest or withhold resources from the subordinate (Bauer & Green, 1996; Cropanzano, Prehar, & Chen, 2002; Graen & Scandura, 1987; Graen & Uhl-Bien, 1995). Leader-member exchange has been identified as an antecedent to global job embeddedness (Harris, et al., 2011). Harris et al. (2011) argue that leader-member exchange is positively related to job embeddedness. Individuals who have high-quality leader-member

exchanges generate resources (e.g., valuable knowledge and information, support, enhanced self-esteem, mentoring, guidance, opportunities, job autonomy and flexibility, positive affect arising from mutual respect, and liking) that help the employee achieve goals in the workplace. Based on the above, a goal of the present study is to replicate Harris et al.'s hypothesis by using a composite, rather than global, measure of job embeddedness.

Hypothesis 1: Leader-member exchange is positively related to job embeddedness.

**Family Social Support and Family Embeddedness.** Within the family domain, social support from family members is considered a prime source of social support, and is defined as the availability and quality of helping relationships (Beehr, 1985; Leavy, 1983). Past research posits that social support aids in the protection and accumulation of resources (Sekigushi et al., 2008). The availability of family as social support provides resources that enrich work role functioning through the generation of positive affectivity at home (Grzywacz & Marks, 2000). Resources may reflect instrumental and emotional support and include guidance, understanding, attention, positive regard, positive affect, encouragement, assistance with daily family and household demands, and display of accommodation with regard to the individual's work schedule and duties (King, Mattimore, King, & Adams, 1995).

In parallel to the work domain, those individuals who receive resources from the family may endorse an enhanced degree of embeddedness in the family domain. The availability of resources cultivate perceptions of being loved or cared for (Hobfoll & Stokes, 1988), and are accumulated in the form of fit, links, and sacrifice within the family domain. As such, individuals perceive a good fit with the family, have strong connections with other family members, and endorse a high level of perceived sacrifice upon loss of accumulated resources. Thus, high levels of perceived social support from the family may act to boost or replenish

individuals' resources to the point that they feel embedded in the family domain. As such, the following hypothesis is proposed:

Hypothesis 2: Family social support is positively related to family embeddedness.

**Embeddedness and Work-Family Balance Satisfaction.** Scholars have argued that job embeddedness is a state of resource overabundance (Gorgievski & Hobfoll, 2008; Halbesleben & Wheeler, 2008; Harris et al., 2011). In parallel, family embeddedness may also be conceptualized as a state of resource overabundance within the family domain. Thus, individuals may accumulate resources in both work and family realms in the form of fit (e.g., sense of belonging, positive affect from being able to utilize one's skills and abilities to meet the needs and demands of the family or the organization), links (e.g., strong interpersonal relationships), and sacrifice (e.g., loss of benefits, rewards, gains), thus contributing to an overall perception of security and stability.

Since satisfaction with work-family balance (Valcour, 2007) arises when individuals perceive that they possess the necessary resources to successfully manage their work and family lives, it is plausible that job embeddedness may act to enhance satisfaction with work-family balance, potentially through the provision of resources. This line of reasoning is supported by previous research which has revealed that reporting to a family-friendly supervisor enhances role functioning by creating employee work-to-family facilitation (Lu, Siu, Spector, & Shi, 2009) – a component of Frone's (2003) four-fold taxonomy of work-family balance. In a similar vein, extant literature posits that the availability of family as social support provides resources that enrich work role functioning (Grzywacz & Marks, 2000). Similarly to leader-member exchange, perceived family social support, specifically spousal support, has been linked to the family-to-work facilitation component of work-family balance (Lu et al., 2009). Based on the above



theoretical and empirical support, job and family embeddedness are positioned as antecedents to work-family balance satisfaction, and the following hypotheses are posed:

Hypothesis 3: Job embeddedness is positively related to satisfaction with work-family balance.

Hypothesis 4: Family embeddedness is positively related to satisfaction with work-family balance.

**Job and Family Embeddedness as Mediators.** Increasing the quality of leader-member exchange and family social support may act on work-family balance through embedding individuals more extensively into a web of work and family forces. The increased fit, links, and sacrifice foster a sense of certainty and security in the respective domain, as embeddedness represents the phenomenon where individuals become immersed in their work (Mitchell et al., 2001) and family domains. Being embedded may guide affective, cognitive, or material resources, accumulated by way of leader-member exchange and family social support, to the respective domain to aid with role functioning and enhance one's satisfaction with how well he or she balances work and family roles. In other words, domain embeddedness and its identified antecedents – leader-member exchange and family social support – establish a network of resources that are available to help individuals successfully meet both work and family role demands.

Based on the above, the following mediational hypotheses are proposed:

Hypothesis 5: Job embeddedness mediates the relationship between leader-member exchange and satisfaction with work-family balance.

Hypothesis 6: Family embeddedness mediates the relationship between family social support and satisfaction with work-family balance.

## PHASE 1: DEVELOPMENT AND INITIAL VALIDATION OF FAMILY EMBEDDEDNESS MEASURE

The purpose of Phase 1 was to develop a measure for family embeddedness, and examine convergent, concurrent, and incremental validity of the measure with respect to other family-related constructs. As such, a nomological network for family embeddedness and initial evidence for the psychometric viability of the scale can be established.

### Method

**Procedure.** Participants were recruited using a peer-nomination methodology. Trained undergraduate student recruiters were instructed to send a provided e-mail invitation (see Appendix A for recruitment e-mail invitation template) to working adults with whom they were personally acquainted and who met the eligibility criteria for the study (working at least 15 hours per week and at least 18 years old). Participants were asked to follow a web-link supplied in the e-mail to complete the anonymous online survey. Student recruiters received nominal course extra credit for their involvement. Participation was voluntary, and the survey took approximately 20 minutes to complete. Due to the nature of the recruitment methodology, a survey response rate could not be calculated.

**Participants.** Of the 395 total participants who completed the survey, individuals were removed on the basis of working fewer than 30 hours per week ( $n = 31$ ), having missing data within a core construct ( $n = 24$ ), living outside of the United States ( $n = 2$ ), identifying themselves as a non-working student ( $n = 9$ ), homemaker ( $n = 5$ ), business owner ( $n = 6$ ), or retired ( $n = 1$ ), and failing to report their work hours and job title ( $n = 11$ ).

Within the final sample ( $N = 306$ ), 58.8% was female, 44.4% was married or living with a partner, 31.2% reported at least one child living at home 18 years old or younger, and 16% reported caring for a dependent adult. The majority of the sample was Caucasian (75.4%),

including 11.8% African American, 3% American Indian/Alaskan Native, 2.6% Hispanic/Latino, 1.6% Asian/Pacific Islander, and 3.9% reported a mixed race. Furthermore, 48.9% reported having a bachelor's degree or higher, 25.5% reported their income was less than \$30,000, 28.1% reported an income between \$30,000 and \$75,000, and 34.8% reported \$75,000 and above.

A variety of occupations were represented. The most frequent were professional and related occupations (17.6%), management, business, and financial operations (16.9%), sales and related occupations (14.3%), educator (13%), and office and administrative support (10.3%). The mean age of the sample was 32.87 ( $SD = 13.14$ ), mean total work hours (includes both primary and secondary jobs) was 48.21 ( $SD = 7.92$ ), and mean tenure for the primary job was 6.55 years ( $SD = 7.97$ ).

**Measures.** For consistency, participants responded using a 5-point scale on all measures (1 = strongly disagree, to 5 = strongly agree). All scales, with the exception of family embeddedness, have been previously validated and shown to demonstrate acceptable internal consistency ( $\alpha > .58$ ).

Family embeddedness. A multi-step process was used to develop the family embeddedness measure. Pertinent information regarding the development of this measure is presented in the Results section (see Appendices B through D).

Family centrality. Family centrality was assessed with five items adapted by Carr et al.'s (2007) from Paullay et al.'s (1994) work centrality measure (see Appendix E). Sample items included "Overall, I consider family to be more central to my existence than work" and "The major satisfaction in my life comes from family rather than work."

Family cohesion. Family cohesion was assessed using five items from the family cohesion facet of the Family Adaptability and Cohesion Evaluation Scales III (FACES III) from

Olson, Portner, and Lavee (1985) (see Appendix F). Sample items included “The members of my family really help and support one another” and “There is a feeling of togetherness in my family.”

Family disengagement. Family disengagement was assessed using five items from the family disengagement facet of the Family Adaptability and Cohesion Evaluation Scales III (FACES III) from Olson et al. (1985) (see Appendix G). Sample items included “It is difficult to keep track of what other family members are doing” and “Family members are extremely independent.”

Family satisfaction. Family satisfaction was assessed with a scale adapted by Breugh and Frye (2007) based on by Kopelman, Greenhaus, and Connolly (1983) job satisfaction measure. Sample items included “I am happy with my family just the way it is” and “I am deeply committed to my family” (see Appendix H).

## Results

**Family Embeddedness Scale Development Process.** To develop the proposed measure for family embeddedness, mirror items were first created to Ng and Feldman’s (2007) previously validated job embeddedness measure. Additional items were also generated based on the conceptual definitions of fit-to-family, links-to-family, and family related sacrifice. Appendix B shows all 60 items created (22 fit, 20 links, and 18 sacrifice items). To guide the item selection strategy for the scale, a method proposed by Stanton, Sinar, Balzer, and Smith (2002) was utilized which involves consideration of judgmental, internal, and external item qualities.

Once a bank of items was created, and prior to collecting data for the first phase of the study, Q-sort and content analysis techniques were used to examine judgmental item qualities. First, 22 undergraduate students were instructed to sort the 60 items into the three dimensions of

family embeddedness based on provided theoretical definitions. The accuracy with which the items were sorted into the corresponding dimensions served as an indicator of the face validity and facet representativeness of the items. Nineteen items were removed due to consistent sorting into the incorrect embeddedness facet. Only those items that were accurately sorted into their corresponding facets by all 22 students were retained.

The second technique with which judgment item qualities were examined was content analysis by subject matter experts. Five industrial-organizational psychology graduate students who were familiar with the conceptualization of family embeddedness and the theoretical definition of each embeddedness facet provided feedback on the content, clarity, and degree to which each item accurately represented the respective dimension. Subject matter experts provided ratings for each of the remaining 41 items on a scale of 1- not at all representative to 5- very representative. Items that consistently received ratings of 1 and 2 were removed resulting in a total of 30 items (Fit-to-family = 10 items, links-to-family = 11 items, family-related sacrifice = 9 items) (see Appendix C). These 30 items were administered to participants as part of the Phase 1 data collection.

**Initial Factor Structure of Family Embeddedness Measure.** Based on data collected from participants as part of Phase 1, Stanton et al.'s (2002) second recommendation was implemented, and internal item qualities were examined. Item-level descriptive statistics revealed a negatively skewed sample distribution. Items were deleted on the basis of having both a high standard deviation ( $SD > .95$ ) and mean ( $M > 4.35$ ) in order to reduce the skewness of the data and approximate a normal distribution. However, items with high theoretical relevance to the conceptual definition of the respective embeddedness facet were retained. This step resulted in the removal of four of 30 items.

Internal item qualities (Stanton et al., 2002) were further considered by focusing on factor loadings. Principal components analysis was conducted to examine the scale's factor structure. Oblimin rotation was utilized since the three embeddedness facets were expected to be non-orthogonal. Upon entering the remaining 26 items, a five-factor structure emerged; however, the first three factors were highly consistent with the anticipated three-factor structure. To reduce the structure to the expected three factors, the item with the highest loadings was removed from the fifth factor, which yielded a four-factor structure. Again, the item with the highest loading on the fourth factor was removed, which resulted in a three-factor structure. Five items that did not have a factor loading higher than .4 on any facet were also removed.

To help guide the item reduction strategy further, the 19-item scale's reliability was examined. The scale demonstrated a Cronbach's alpha of .97, which was indicative of multicollinearity. Thus, items were removed with the purpose of maximizing parsimony. Two items were identified as being highly redundant and were removed, resulting in an alpha of .89.

A re-examination of the factor structure demonstrated that the remaining 17 items loaded above .7 on its representative facet, such that all fit-to-family items loaded on the first factor, all links-to-family items loaded on the second factor, and all family-related sacrifice items loaded on the third factor. Cross-loading on a second factor than the primary occurred for the majority of the items with loadings ranging between .4 and .6. To further reduce the total items in the scale, the lowest-loading item on each primary facet was removed. The resulting three-factor scale contained 14 items (Fit = 5 items, links = 4 items, sacrifice = 5 items).

Principal components analysis of the 14-item scale indicated that the three family embeddedness factors explained 76.9% of variance. The first factor (fit-to-family) explained the majority of the variance (61.10%). The second (family-related sacrifice) and third (links-to-

family) accounted for 8.62% and 7.14%, respectively. Communalities ranged from .57 to .84. The five fit items all loaded strongly (above .89) on the fit-to-family factor, the four links items loaded strongly (above .75) on the links-to-family factor, and all five sacrifice items loaded strongly (above .81) on the family-related sacrifice factor. Cross-loading occurred, however, where each item loaded between .44 and .67 on the other two factors. The 14-item measure demonstrated a high internal consistency of .94. Table 1 contains the means, standard deviations, and rotated factor loadings for each of the 14 items. A working draft of the family embeddedness measure can be found in Appendix D.

Table 1 - Factor Loadings and Item Descriptive Statistics for Family Embeddedness Measure Developed in Phase 1

	Family Embeddedness Item	<i>M</i>	<i>SD</i>	Fit	Links	Sacrifice
1	I fit my family's culture.	4.32	.84	<b>.912</b>	.624	.595
2	My values are compatible with my family's values.	4.30	.88	<b>.905</b>	.614	.653
3	I feel good about my role in my family.	4.34	.80	<b>.893</b>	.591	.598
4	I can reach my personal goals by being in this family.	4.33	.82	<b>.891</b>	.632	.607
5	My family is similar to me.	4.15	.97	<b>.891</b>	.573	.499
6	I spend a lot of time with my family.	3.82	1.02	.578	<b>.891</b>	.560
7	I interact with my family regularly.	4.04	.91	.582	<b>.880</b>	.670
8	I talk with my family about every-day things that happen in my life.	3.82	1.03	.608	<b>.874</b>	.531
9	My family is highly dependent on me.	3.54	1.12	.529	<b>.750</b>	.437
10	I can continue to grow and mature as a person by being in this family.	4.30	.78	.649	.638	<b>.908</b>
11	I would go out of my way to help my family.	4.50	.70	.538	.558	<b>.890</b>
12	I have made or would consider making personal compromises for the sake of my family.	4.25	.83	.514	.510	<b>.848</b>
13	My family gives me a lot of freedom to decide how to pursue my goals.	4.25	.83	.593	.504	<b>.838</b>
14	I would sacrifice a lot if I left my family.	4.39	.88	.634	.658	<b>.806</b>

Note. Factor loadings were obtained by conducting principal components analysis with oblimin rotation ( $N = 306$ ).

**Initial Validity Evidence for Family Embeddedness Measure.** Lastly, Stanton et al.'s (2002) third recommendation was implemented by focusing on external item qualities.

Specifically, convergent, concurrent, and incremental validity of the 14-item family

embeddedness measure was evaluated with respect to family centrality, family cohesion, family disengagement, and family satisfaction.

Evidence for convergent validity was provided by examining a series of bivariate correlations and multiple regression analyses. As expected, family embeddedness was positively related to family centrality ( $r = .39, p < .01$ ), family cohesion ( $r = .76, p < .01$ ), and family satisfaction ( $r = .83, p < .01$ ), and negatively related to family disengagement ( $r = -.33, p < .01$ ).

Table 2 includes basic descriptive statistics, internal consistency estimates, and correlations.

Table 2 – Bivariate Correlations and Internal Reliabilities for Variables in Phase 1

	M	SD	1	2	3	4	5
1 Family embeddedness	4.12	.67	(.94)				
2 Family centrality	3.98	.74	.39**	(.90)			
3 Family cohesion	4.05	.77	.76**	.36**	(.87)		
4 Family disengagement	2.84	.66	-.33*	-.15**	-.47**	(.58)	
5 Family satisfaction	4.20	.72	.83**	.35**	.80**	-.31**	(.86)

Note. \* $p < .05$ ; \*\* $p < .01$  ( $N = 306$ ); internal reliabilities along the diagonal.

Furthermore, concurrent and incremental validity of the family embeddedness was examined by conducting a series of hierarchical regression analyses. Family embeddedness and family centrality were entered as predictors of family satisfaction, family cohesion, and family disengagement. Results indicated that family embeddedness ( $\beta = .81, p < 0.01$ ), but not family centrality ( $\beta = .04, p > 0.05$ ), significantly predicted family satisfaction,  $F(2, 303) = 327.48, p < 0.01$ ; Adj.  $R^2 = .68$ , and explained an additional 56% of variance in family satisfaction above and beyond family centrality. Similarly, family embeddedness ( $\beta = .73, p < 0.01$ ), but not family centrality ( $\beta = .07, p > 0.05$ ), significantly predicted family cohesion [ $F(2, 303) = 208.59, p < 0.01$ ; Adj.  $R^2 = .58$ ], and explained an incremental variance of 45% in family cohesion. Family embeddedness was again found to be the only significant predictor ( $\beta = -.32, p < 0.01$ ) of family disengagement [ $F(2, 303) = 18.87, p < 0.01$ ; Adj.  $R^2 = .11$ ], and explained an additional 9% of incremental variance after accounting for family centrality.



## Discussion

The goal of Phase 1 was to develop a measure for family embeddedness. The expected three-factor structure emerged where each item loaded most strongly on its representative facet. Although cross-loading occurred at a higher than the acceptable .4 level recommended by Tabachnick and Fidell (2007), these results are promising, and additional scale refinement is necessary to achieve a better factor structure.

Convergent validity evidence of the family embeddedness measure was provided by examining its relationship with other family-related constructs, namely: family centrality, family cohesion, family disengagement, and family satisfaction. These relationships were in the expected direction; however, the magnitude of the correlation between family embeddedness and family cohesion and family satisfaction was higher than anticipated. A possible explanation for this finding may be the underlying nature of family-related constructs where individuals have the tendency to view their family lives in a positive light. As such, their responses on family-related items, especially when positively-worded, may be inflated or exaggerated in the positive direction. In support of this argument are past findings (Melby, Ge, Conger, & Warner, 1995) that higher levels of spousal warmth are indicated when participants are primed with a marital discussion task triggered by positive interaction questions compared to when primed with a problem-solving task. To that end, it may be concluded that the response pattern on family-related items is guided by an overall assessment driven by automatic or heuristic processes, rather than a cognitively-demanding evaluation process wherein both positive and negative aspects of one's family environment are equally considered. As such, individuals' scores on family measures such as family embeddedness, cohesion, and satisfaction, may be exaggerated

in the positive direction thus strengthening the magnitude of the correlation among these constructs.

Initial concurrent and incremental validity evidence for the family embeddedness measure was also provided. Multiple regression analyses demonstrated that family embeddedness explained incremental variance in family cohesion, satisfaction, and disengagement after accounting for family centrality. As such, these findings support the theoretical rationale for the differences between family embeddedness and family centrality by demonstrating that these constructs are also empirically distinct.

Overall, the results from Phase 1 provide preliminary evidence of the psychometric viability of the family embeddedness measure by suggesting the expected three-factor structure and demonstrating convergent, concurrent, and incremental validity. Additional scale refinement is necessary, however, to enhance the psychometric characteristics of the family embeddedness factors structure.

## PHASE 2: REFINEMENT OF FAMILY EMBEDDEDNESS MEASURE AND TESTING A CONCEPTUAL MODEL

The purpose of Phase 2 was to refine the family embeddedness measure from Phase 1, and gain additional confidence in its psychometric viability by evaluating the factor structure in greater depth. In addition, a measurement and structural model representing the proposed relationship were tested and indirect effects via job and family embeddedness were calculated to assess Hypotheses 1 through 6.

### Method

**Procedure.** A second independent sample of participants was recruited to complete a web-based survey. The same peer-nomination procedure was used as reported in Phase 1. Different student recruiters were used in Phase 2 than in Phase 1 (see Appendix I for a slightly altered recruitment e-mail invitation template). The survey took approximately 20 minutes to complete.

**Participants.** Of the total 558 participants who completed the survey, 200 individuals were removed on the basis of working fewer than 35 hours per week ( $n = 104$ ), having missing data within a core construct ( $n = 41$ ), living outside of the United States ( $n = 3$ ), identifying themselves as a non-working student ( $n = 5$ ), homemaker ( $n = 5$ ), business owner ( $n = 7$ ), or retired ( $n = 1$ ), and failing to report their work hours and job title ( $n = 34$ ).

Within the final sample ( $N = 358$ ), 63.5% was female, 66.7% was married or living with a partner, 64.9% reported having at least one child, 41.7% reported at least one child living at home 18 years old or younger, and 16.1% reported caring for a dependent adult. The majority of the sample was Caucasian (81.8%), including 10.1% African American, 3.4% Hispanic/Latino, 2.8% Asian/Pacific Islander, and 1.1% American Indian/Alaskan Native. Furthermore, 66.1%

reported having a bachelor's degree or higher, 8.4% reported income less than \$30,000, 33.2% reported income between \$30,000 and \$75,000, and 50% reported \$75,000 and above.

A variety of occupations were represented. The most frequent were professional and related occupations (29.6%), management, business, and financial operations (20.4%), office and administrative support (13.1%), and educator (12.8%). The mean age of the sample was 40.13 ( $SD = 12.13$ ), mean total work hours (includes both primary and secondary jobs) was 45.65 ( $SD = 8.98$ ), and mean tenure was 9.71 years ( $SD = 9.20$ ).

**Measures.** For consistency, participants responded using a 5-point scale. Unless otherwise indicated, responses ranged from 1 = strongly disagree to 5 = strongly agree. All scales, with the exception of family embeddedness, have been previously validated and shown to demonstrate acceptable internal consistency ( $\alpha > .62$ ).

Family involvement. Psychological involvement was assessed with five items adapted by Carlson and Frone (2003) from a measure developed by Kanungo (1982) (see Appendix J). A sample item from the spousal involvement version of the scale included "My (husband/wife/partner/boyfriend/girlfriend) is a very important part of my life." The terms 'husband/wife/partner/boyfriend/girlfriend' were replaced with 'him/her.' A sample item from the parental involvement version of the scale included "Most of my interests center around my child(ren)." Behavioral involvement was assessed by using an item from Carlson and Frone (2003) who asked respondents "In an average week, how many total hours do you spend in family-related work activities, such as household chores and maintenance, (doing things for your children), and shopping? Do not include time spent together in recreational activities."

Family commitment. Marital and parental role commitment was each assessed using five items from Life-Role Salience Scales (LRSS; Amatea et al., 1986) (see Appendix K). Consistent

with Graves, Ohlott, and Ruderman (2007), items was adjusted by substituting the terms “committed relationship” and “life partner” for the terms “marriage” and “spouse.” A sample item from Marital Role Commitment was “I expect to commit whatever time is necessary to making my spouse feel loved, supported, and cared for.” A sample item from Parental Role Commitment was “Becoming involved in the day-to-day details of rearing children involves costs in other areas of my life which I am unwilling to make” (reverse-coded).

Family satisfaction. Family satisfaction was assessed with a scale adapted by Breugh and Frye (2007) based on by Kopelman, Greenhaus, and Connolly (1983) job satisfaction measure. Sample items included “I am happy with my family just the way it is” and “I am deeply committed to my family” (see Appendix H).

Leader-member exchange. Perceived leader-member exchange quality was assessed with Liden and Maslyn’s (1998) 11-item LMX-MDM scale (see Appendix L). A sample item included “My supervisor would defend me to others in the organization if I made an honest mistake.”

Perceived family support. Perceived social support from family members was assessed by using six items from Vinokur, Schul, and Caplan (1987) (see Appendix M). Participants responded on a scale of 1 (not at all) to 5 (a great deal). Sample items asked how much the family member closest to you “provides you with encouragement,” “provides you with useful information,” and “says things that raise your self-confidence.”

Job embeddedness. Job embeddedness was assessed using fifteen items from Ng and Feldman’s (2009) shortened version of Mitchell et al.’s (2001) job embeddedness measure (see Appendix N). For consistency purposes, and following the example of past research (Felps, Hekman, Mitchell, Lee, Harman, & Holtom, 2009; Johnson et al., 2010), the five open-ended

questions in the links dimension were adapted into five statements. For example, “How many coworkers do you interact with regularly?” was reworded as “On the job, I interact frequently with my work group members.” Five items assessed job fit. Sample items for the fit dimension include “My company utilizes my skill and talents well” and “I feel like I am a good match for this company.” Five items assessed organization-related sacrifice. Sample items include “The perks provided by this organization are outstanding” and “My promotional opportunities are excellent in this organization.”

Family embeddedness. The final scale for which initial psychometric viability was demonstrated in Phase 1 was modified and refined for use in Phase 2 (see Appendix O). All associated information on scale refinement is included in Results.

Work-family balance. Satisfaction with work-family balance was assessed with a measure by Valcour’s (2007) (see Appendix P). Upon examination of the item content, one of the items was dropped due to redundancy, resulting in a four-item measure. Respondents rated how satisfied they are with items such as “the way you divide your time between work and personal or family life” on a scale of 1 (very dissatisfied) to 5 (very satisfied).

## **Results**

### **Family Embeddedness Measure Refinement and Confirmation of Factor Structure.**

Although the initial three-factor structure was achieved in Phase 1, the high degree of cross-loading that occurred raised concerns for redundancy among the items, and further evaluation of the clarity and conceptual representativeness of each item was necessitated. Based on an examination of the 14 items from family embeddedness measure developed in Phase 1, seven items were modified and five additional items were added to help refine the measure and more fully capture the family embeddedness construct space. As in Phase 1, means and standard

deviations were examined to ensure that all 19 items demonstrated acceptable psychometric characteristics.

Given that job embeddedness theory (Mitchell et al., 2001) and Phase 1 exploratory factor analysis results provided support for a three-factor solution, standard latent variable confirmatory factor analysis (CFA) was performed to evaluate the family embeddedness structure. The structure was expected to reflect three second-order latent factors (i.e., fit-to-family, links-to-family, and family-related sacrifice) that load on a higher-order family embeddedness latent construct.

Based on common practice, four measures of model fit were calculated: chi-square, comparative fit index (CFI), root mean square error of approximation (RMSEA), and standard-root-mean residual (SRMR). To achieve good model fit, the value for CFI should be .95 or higher, RMSEA should be .06 or lower, and SRMR should be .08 or lower (Hu & Bentler, 1999). A non-significant chi-square indicates good model fit; however, this model fit statistic is sensitive to sample size, such that the higher the sample size, the lower the likelihood that chi-square will be non-significant (Marsh, Hau, & Wen, 2004).

The six fit items were set as indicators of the fit-to-links factor, the six links items were set as indicators of the links-to-family factor, and the seven sacrifice items were set as indicators of the family-related sacrifice factor. The initial model demonstrated poor fit,  $\chi^2(149) = 692.40$ ,  $p < .001$ ; CFI = .90; RMSEA = .10; SRMR = .05.

In order to achieve a more acceptable fit, items that were the least conceptually representative of the respective family embeddedness facet were considered for removal. This approach of selecting items for removal that relies heavily on judgmental item qualities has been strongly advocated by Stanton et al. (2002), as only those items with the highest conceptual

relevance to the family embeddedness construct are retained. Although such a process introduces subjectivity into the item selection strategy, it has been applied successfully in past research (Clark & Watson, 1995; Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002; Matthews, Kath, & Barnes-Farrell, 2010). Additionally, modification indices were examined to further inform the decision-making process. As a result, ten items were removed and nine items remained (see Appendix O; see Table 3 for basic item-level descriptive information). Confirmatory factor analysis of the 9-item measure, where three fit items loaded on the fit-to-family factor, three links items loaded on the links-to-family factor, and three sacrifice items loaded on the family-related sacrifice factor, revealed good fit, with all items loading above .69 on their respective second-order latent factor,  $\chi^2(24) = 53.90, p < .001$ ; CFI = .99; RMSEA = .06; SRMR = .03. The overall internal reliability for this 9-item measure of family embeddedness was .94.

Table 3 – Item Descriptive Statistics for Refined Family Embeddedness Measure Developed in Phase 2

	Family Embeddedness Item	<i>M</i>	<i>SD</i>
1	I feel close to my family. (L)	4.26	.96
2	The benefits of being in this family are good. (S)	4.27	.84
3	I get a lot by being a part of my family. (S)	4.21	.86
4	I feel like I am a good match for my family. (F)	4.32	.80
5	I contact my family in both good times and in bad. (L)	4.28	.92
6	I frequently communicate with my family. (L)	4.18	.94
7	I fit my family's culture. (F)	4.07	.92
8	My values are compatible with my family's values. (F)	4.21	.87
9	I would sacrifice a lot if I left this family. (S)	4.41	.94

Note. Included in parenthesis is the facet represented by each item, where F = Fit-to-family, L = Links-to-family, and S = Family-related sacrifice ( $N = 358$ ).

In an effort to confirm that this higher-order latent factor structure best fits the data, an alternative model was tested. The alternative model consisted of all nine items loading on a single latent factor which captures the underlying family embeddedness concept. This single factor model demonstrated poor fit,  $\chi^2(27) = 336.55, p < .001$ ; CFI = .88; RMSEA = .18; SRMR



= .05. Based on examination of the overall model fit and specific fit indices, it can be concluded that the higher-order latent model more accurately captures the family embeddedness structure.

To obtain further evidence in support of the higher-order model, its AIC fit statistic was compared to that obtained for the single-latent factor model. Although the AIC value carries no inherent meaning individually, it is a useful tool for comparing fit relative to an alternative model's AIC value, with lower values indicating better fit (Kline, 2005). The higher-order model with the three latent factors demonstrated an AIC value of 95.90, while that for the alternative model was 372.55. As such, it can be concluded with greater confidence that the higher-order model is a more accurate representation of the family embeddedness factor structure.

**Construct Validity Evidence for Refined Family Embeddedness Measure.** To provide construct validity evidence for the family embeddedness 9-item measure (see Appendix O), a series of bivariate correlations and multiple regression analyses were calculated. Both composite and faceted variables for family commitment and psychological involvement are included. Specifically, the two individual facets for family commitment are marital and parental commitment. Similarly, the two individual facets for family psychological involvement are spousal and parental involvement.

As expected, family embeddedness was positively related to family commitment ( $r = .20$ ,  $p < .01$ ) and psychological involvement ( $r = .32$ ,  $p < .01$ ). Interestingly, family embeddedness was not significantly related to behavioral involvement ( $r = .08$ ,  $p > .05$ ). At a deeper, facet level, family embeddedness was positively related to marital ( $r = .17$ ,  $p < .01$ ) and parental commitment ( $r = .20$ ,  $p < .01$ ), as well as spousal ( $r = .26$ ,  $p < .01$ ) and parental involvement ( $r = .25$ ,  $p < .01$ ). Table 4 includes basic descriptive statistics, internal consistency estimates, and correlations.

Table 4 – Bivariate Correlations and Internal Reliabilities for Variables in Phase 2

	M	SD	1	2	2a	2b	3	3a	3b	4
1 Family embeddedness	4.24	0.74	(.94)							
2 Family commitment	4.07	0.57	.20**	(.75)						
2a Marital commitment	3.97	0.66	.17**	.85**	(.62)					
2b Parental commitment	4.18	0.68	.20**	.85**	.45**	(.69)				
3 Psychological involvement	4.26	0.56	.32**	.53**	.51**	.40**	(.84)			
3a Spousal involvement	4.06	0.76	.26**	.42**	.52**	.21**	.86**	(.87)		
3b Parental involvement	4.44	0.59	.25**	.43**	.24**	.49**	.72**	.27**	(.82)	
4 Family satisfaction	4.22	0.74	.77**	.26**	.17**	.27**	.33**	.22**	.26**	(.80)
5 Behavioral involvement (hrs/wk)	18.99	13.23	.08	.06	.01	.11	.19**	.11	.20**	.03

Note. \* $p < .05$ ; \*\*  $p < .01$  ( $N = 358$ ); internal reliabilities along the diagonal.

To conduct the multiple regression analyses, a common family domain outcome – family satisfaction – was utilized. Upon entry of family embeddedness, psychological involvement, behavioral involvement, and family commitment, the most important predictor of family satisfaction that emerged was family embeddedness ( $B = .69, p < .001$ ). The second most important predictor was family commitment ( $B = .23, p < .001$ ). Specifically, parental commitment ( $B = .22, p < .001$ ), and not spousal commitment, significantly predicted family satisfaction. Psychological and behavioral involvement did not significantly predict family satisfaction ( $p > .05$ ). Hierarchical regression analysis demonstrated that family embeddedness ( $\beta = .73$ ) explained an additional 52.5% of variance in family satisfaction above and beyond parental commitment,  $F(2, 313) = 235.66, p < .001$ ;  $Adj. R^2 = .60$ ;  $R^2 \Delta = .53, p < .001$ . In addition, and also among family embeddedness, psychological and behavioral involvement, and family commitment, family embeddedness ( $B = .27, p < .01$ ) was the only significant predictor of work-family balance satisfaction,  $F(2, 211) = 3.19, p < .05$ ;  $Adj. R^2 = .04$ .

**Analysis of Proposed Mediation Model.** The proposed model (see Figure 1) was analyzed using AMOS 20 software (Arbuckle, 2008). Item-level list-wise deletion resulted in a sample of 358 participants. A standard latent variable confirmatory factor analysis was

conducted to test the viability of the measurement model. Following a standard CFA approach, all latent variables were correlated.

Following a parallel line of reasoning to family embeddedness, three second-order factors were created to load on a first-order job embeddedness latent factor. Five fit items loaded on the job fit dimension, five links items loaded on the job links dimension, and five loaded on the job sacrifice dimension. Furthermore, six indicators loaded on a family social support latent factor, four indicators loaded on a work-family balance satisfaction latent factor, and eleven indicators loaded on a leader-member exchange latent factor. Calculating the initial measurement model resulted in poor model fit,  $\chi^2(979) = 3642.00, p < .001$ ; CFI = .78; RMSEA = .09; SRMR = .07.

In an effort to obtain improved model fit, steps grounded in theoretical and empirical rationale were taken to respecify the initial measurement model. First, with respect to job embeddedness, due to weak loadings (less than .2) on the respective factor, one fit, two links, and one sacrifice item were dropped from the analysis. Second, for simplicity purposes, leader-member exchange items were parceled, such that all items reflecting affect were averaged into one observed indicator of the leader-member exchange latent variable, all items reflecting loyalty were averaged into a second indicator, all items reflecting contribution were averaged into a third indicator, and all items reflecting professional respect were averaged into a fourth indicator. Again, all latent variables were correlated. The respecified measurement model demonstrated good fit,  $\chi^2(511) = 892.13, p < .001$ ; CFI = .95; RMSEA = .05; SRMR = .06.

The proposed structural model was calculated after the adequately-fitting measurement model was achieved. Following standard structural equation modeling practices, the two exogenous variables (family social support and leader member exchange) were correlated. The

model demonstrated acceptable fit,  $\chi^2(516) = 907.10, p < .001$ ; CFI = .95; RMSEA = .05; SRMR = .07 (see Figure 2).

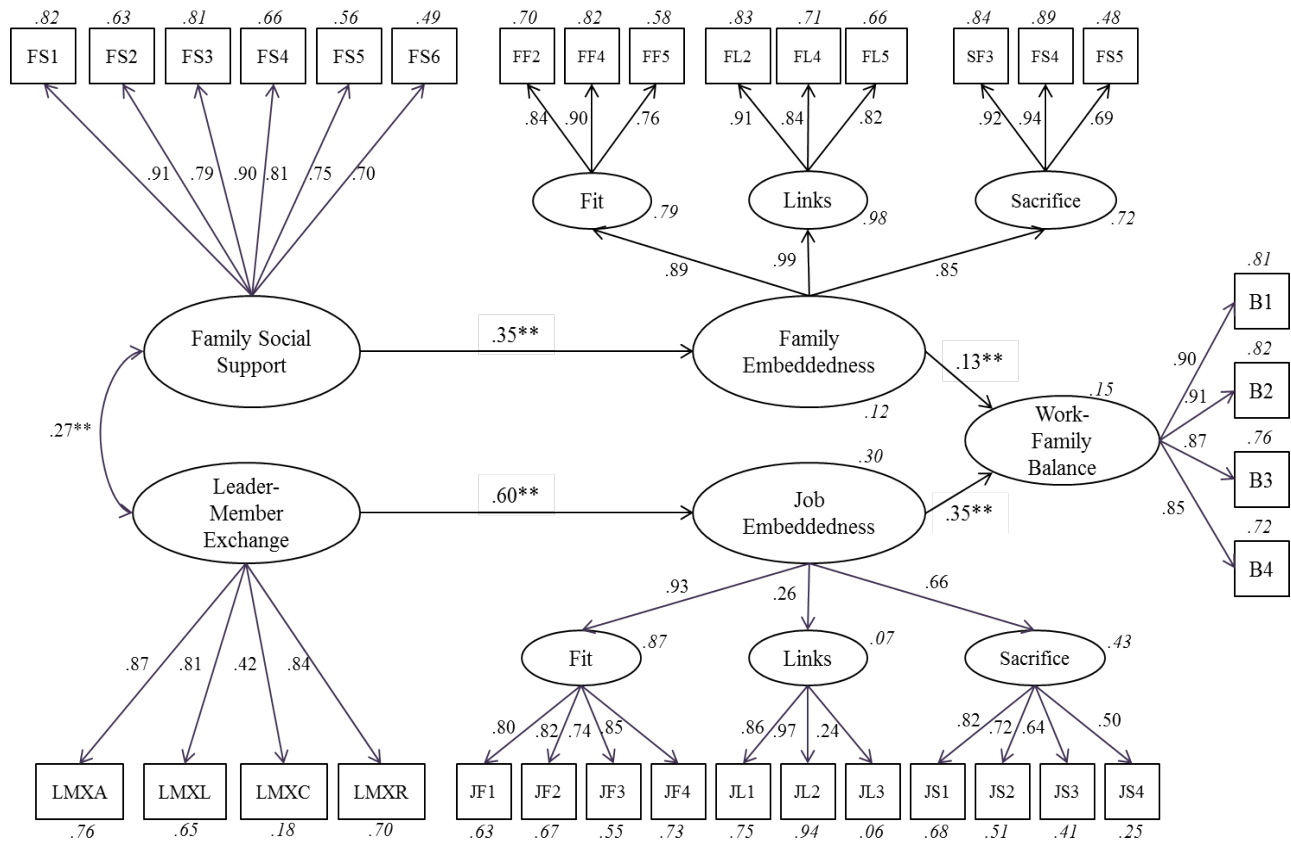


Figure 2 – Latent-factor hybrid model with standardized path estimates. Note.  $** p < .01$ . Squared multiple correlations are reported in italics. Error and disturbance terms are omitted for simplicity purposes ( $N = 358$ ).

Hypotheses 2, 4, and 6 were supported. Family social support was positively related to family embeddedness ( $\beta = .35, p < .01$ ) and family embeddedness was positively related to work-family balance satisfaction ( $\beta = .13, p < .05$ ). Based on bootstrapping results (Sample 5000), family social support was found to have a standardized indirect effect of .09 (90% CI: .05 to .12,  $p < .01$ ) on work family balance satisfaction via family embeddedness. In other words, a one standard deviation increase of family social support will create satisfaction with work-family balance through an associated .09 standard deviation increase in family embeddedness. As such,

family embeddedness partially mediated the effect of family social support and satisfaction with work-family balance. These results suggest that individuals who perceive their family to be highly supportive are more likely to become extensively embedded within the family domain which in turn enables them to fulfill their family and work roles more effectively.

Hypotheses 1, 3, and 5 were also supported. Leader-member exchange was positively related to job embeddedness ( $\beta = .60, p < .01$ ), and job embeddedness, in turn, was positively related to work-family balance satisfaction ( $\beta = .36, p < .01$ ). Leader-member exchange was found to have a standardized indirect effect of .13 (90% CI: .09 to .18,  $p < .01$ ) on work-family balance satisfaction via job embeddedness. In other words, a one standard deviation increase in high-quality leader-member exchange will create satisfaction with work-family balance through an associated .13 standard deviation increase in job embeddedness. These results indicated that job embeddedness partially mediated the effect of leader-member exchange on satisfaction with work-family balance. As such, employees who experience higher quality exchange relationship with their supervisor are likely to become more extensively embedded within the organization, which in turn creates satisfaction with how well they are able to meet work and family demands. Refer to Table 5 for basic descriptive statistics, internal consistencies, and bivariate correlations for the constructs included in the model.

Table 5 – Bivariate Correlations and Internal Reliabilities for Variables Included in Model Tested in Phase 2

	M	SD	1	2	3	4	5
1 Family social support	4.17	.80	(.92)				
2 Leader-member exchange	3.88	.77	.23**	(.93)			
3 Family embeddedness	4.24	.73	.32**	.24**	(.94)		
4 Job embeddedness	3.70	.60	.11**	.46**	.21**	(.85)	
5 Work-family balance satisfaction	3.63	.83	.18**	.22**	.20**	.33**	(.94)

Note. \* $p < .05$  \*\*  $p < .01$  ( $N = 358$ ); internal reliabilities along the diagonal.

## Discussion

**Family Embeddedness Measure.** Phase 2 findings support the three-factor family embeddedness structure suggested in Phase 1. The CFA model also provides support for the argument for three independent but related facets of family embeddedness (i.e., fit-to-family, links-to-family, and family-related sacrifice). This factor structure representation is consistent with past work-family research by Hammer, Kossek, Yragui, Bodner, and Hanson (2009) who have also developed a measure to capture a multidimensional construct, namely family-supportive supervisor behaviors (FSSB), which is conceptualized to encompass four dimensions – emotional support, instrumental support, role modeling behaviors, and creative work-family management. Hammer et al. represent the FSSB construct as consisting of four second-order latent factors, with each factor capturing one of the four FSSB dimension, and loading on an overall, first-order FSSB latent construct. Furthermore, the shortened, 9-item, family embeddedness measure demonstrates convergent and concurrent validity, as well as incremental validity above and beyond family involvement and commitment with respect to family satisfaction.

**Mediational Model.** As part of Phase 2, how family embeddedness functions within a larger nomological network and in parallel to a similar process occurring within the work domain was also examined. Consistent with previous research (Harris et al., 2011), these findings indicate that leader-member exchange is positively related to job embeddedness. In addition, family social support is positively related to family embeddedness. As such, evidence is provided that parallel processes exist in both work and family domains, in which social support creates embeddedness in the form of higher perceptions of fit, increased density of links, and greater perceived sacrifice upon weakening the links to the family or organization.

As expected, the two types of domain-specific social support – leader-member exchange and family social support – enhance work-family balance satisfaction by way of job and family embeddedness, respectively. Specifically, individuals with supportive families and supervisors obtain domain-specific resources (e.g., positive affect, self-efficacy, psychological and instrumental aid, information, and flexibility) which are available for use while performing work- and family-related duties. In line with the work-family balance framework proposed by Valcour (2007), individuals are able to effectively fulfill their roles as parents and/or spouses on one hand and as employees on the other by drawing on resources that are generated or renewed within each domain. In turn, the efficiency in role functioning enhances the individual's satisfaction with how well he or she is able to balance the work and family life. This line of reasoning is also consistent with other scholars (Ferguson, Carlson, Zivnuska, & Whitten, 2012) who draw on conservation of resources theory (Hobfoll, 1989) to argue that individuals receiving social support at work and at home acquire resources that help them balance work and family demands, which is reflected in higher domain satisfaction.

**Indirect Effects via Job and Family Embeddedness.** An additional goal of the present research was to determine the independent mediational contribution of job and family embeddedness in the relationship between social support and work-family balance satisfaction. This examination facilitates the drawing of conclusions regarding the relative involvement of each domain-specific process in the self-evaluation of work-family functioning. Interestingly, the indirect effect from leader-member exchange to work-family balance satisfaction through job embeddedness was stronger than the parallel process occurring in the family domain. It is important to keep in mind, however, that although the constructs of family social support and leader-member exchange are similar they do not represent equivalent concepts. These constructs

are conceptualized as resource generators within the present research, which allows the modeling of how such resources are allocated to either domain to enhance satisfaction with work-family balance.

The results of this study suggest that the work domain is the primary indicator that guides the individuals' perception of their success in juggling work and family demands. Specifically, this balance evaluation is aided by a subjective judgment of how embedded the individual is in his or her job. As such, the perception of high fit with the organization, degree and quality of interdependence with coworkers, and the potential loss of job-related perks (e.g., financial stability, benefits, prestige, and fulfillment) carry a greater importance or weight in the evaluation of work-family balance satisfaction than the parallel family-related factors (e.g., fit with the family, interdependence or quality of relationships with other family members, and losses that may result from weakening family links). This finding is not surprising as studies have shown that the factors arising from the work domain have a stronger impact on individual outcomes (e.g., wellbeing or domain satisfaction) than factors arising in the family domain (Greenhaus & Powell, 2007; Noor, 2004).

Potentially due to the positivity of the family embeddedness construct and measure, individuals are likely to consistently report high degrees of embeddedness in the family. Ratings were higher on family embeddedness ( $M = 4.24$ ;  $SD = .73$ ) and family social support compared to job embeddedness ( $M = 3.70$ ;  $SD = .60$ ) and high-quality leader-member exchange ( $M = 3.88$ ;  $SD = .77$ ). Intuitively, individuals tend to view themselves in a positive light when they evaluate how they perform in their family role, which is in line with attribution theory (Weiner, 1980, 1992). A key tenet of attribution theory is that individuals interpret their environment in a way that maintains a positive self-image. As such, for most individuals it is not typical to regularly



obtain a realistic performance appraisal of one's functioning in the family domain, which leads to a perpetuation of a rose-colored view of the self as a parent or spouse.

On the work domain side, results reveal comparatively lower levels of job embeddedness, which is the primary factor guiding the work-family balance satisfaction evaluation. In contrast to the family domain, individuals may not necessarily maintain the same confidence and positivity when evaluating whether they are a good employee. The positive light in which one may view him or herself may readily be challenged by way of performance appraisal or supervisor feedback, thus changing one's perception of how well he/she fits on the job or quality of links with other employees.

It is possible that events occurring in the work domain have a greater effect on the individual's functioning compared to the family domain, and the individual may not be as sensitive to events occurring in the family environment (e.g., an argument with the supervisor versus an argument with the spouse). The idea that family social support creates a buffer around and protects individuals, by reducing life stress, promoting healthy behaviors, and decreasing work-family conflict, has been supported in published literature (e.g., Barclay & Burks, 1985; Wang, Liu, Zhan, & Shi, 2010). Since high support arriving from the spouse is expected while high support arriving from the supervisor is typically not, having a very helpful, caring, or supportive supervisor may be more impactful than having a helpful or supportive spouse. As such, a supervisor who demonstrates high investment in the employee would stand out more strongly and clearly than having a highly invested spouse.

With respect to obtained resources, an individual who has high-quality leader-member exchange, does well on the job, has positive workplace relationships, and benefits from the organizational rewards and perks, would feel empowered and able to dedicate sufficient time and

energy to the family domain, leading to satisfaction with how effective the individual is at balancing their work and family. Additionally, job embeddedness may be linked to the family domain in the shape of organizational benefits that also transfer over to the employee's spouse (e.g., family health insurance or financial stability), which would provide further explanation for why primarily job experiences dictate the evaluation of work-family balance satisfaction.

## GENERAL DISCUSSION

The contribution of this study is two-fold. First, job embeddedness theory was extended to encompass the family domain by developing a parallel construct and measure for family embeddedness. Placing emphasis on the family domain and developing reliable measures that effectively capture important family life characteristics are paramount to progress in the work-family field (Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005), as they would enhance our understanding of the various antecedents that influence perceptions of work-family balance. In addition, the mechanism through which social support promoted perceived effectiveness in meeting work and family role demands via job and family embeddedness was examined, and the mediational contribution of embeddedness in the social support-balance relationship was determined. As such, a nomological network for family embeddedness was created and that of job embeddedness was extended.

The present research offers evidence of the psychometric viability of the family embeddedness scale, and its empirical distinction from related family constructs was provided by way of concurrent, convergent, and incremental validity. The nomological network surrounding family and job embeddedness was further extended by placing these parallel concepts within a work-family balance framework. Drawing on ecological systems theory (Bronfenbrenner, 1979) solidifies the notion that the phenomenon of embeddedness should encompass the unrepresented family microsystem. By doing so, an avenue is provided for future research to comprehensively and systematically examine the phenomenon of embeddedness within the three key life domains – work, community, and family – that interact to influence individuals' decision-making processes, attitudes, beliefs, and behavior.

Overall, this study meets a call by Eby et al., (2005) who encourage researchers to more effectively capture individuals' family lives, as there has been an overemphasis on the work domain, and to systematically examine sources of support in both the work and family environment. The results contribute to the understanding of the underlying processes linking the work and family domains, specifically through parallel mechanisms occurring in the work and family via job and family embeddedness. Identifying conditions under which work-family balance occurs is important as research shows that difficulties in balancing work and family life demands has numerous unfavorable consequences (e.g., health, wellbeing, and performance; Byron, 2005; Eby et al., 2005).

### **Implications**

This study has several important implications. First, it adds to existing job embeddedness and work-family literature by developing a construct and measure that captures the positive side of immersion or enmeshment within the family. Specifically, this study demonstrates that being embedded in the family domain by way of fit, links, and sacrifice generates, protects, and allocates resources that enable an individual to function effectively as a spouse, parent, and employee. Second, this study creates an avenue for future research to systematically examine all three microsystems proposed by Bronfenbrenner (1979) – work, family, and community. As such, a better understanding can be provided of how the three broad life domains influence individuals' development and functioning.

Third, and as suggested by Eby et al. (2005), this study focuses on developing a process model that examines "...the psychological and behavioral processes linking the work and family..." (p. 183). Thus, it helps to advance work-family research by conceptualizing and testing job and family embeddedness as a mechanism that guides how individuals choose to

allocate resources to these life domains. Fourth, this study further extends theory and research by integrating job embeddedness theory and work-family balance perspective by positing that embeddedness enhances satisfaction with how well individuals handle their work and family lives. Moreover, work-family literature is expanded by linking two resource-generating types of social support – leader-member exchange and family social support – and work-family balance satisfaction. As such, antecedents that create embeddedness in the work and family domains and satisfaction with work-family balance are identified.

Family embeddedness also helps understand why individuals make decisions to continue allocating resources to the family domain despite the presence of negative factors and family-related attitudes (e.g., family dissatisfaction). Thus, this study helps explain reasons for paradoxical behavior, where individuals' actions and decisions do not align with their attitudes and feelings. Consistent with past research demonstrating that extensively embedded employees are less likely to turnover in the presence of workplace stressors (Burton et al., 2010) or engage in developmental opportunities (Ng & Feldman, 2010), individuals who are experiencing family stressors may similarly choose to maintain a status quo in the family domain – a decision potentially stemming from a high degree of embeddedness in the family.

This study also has practical implications. By providing a more complete understanding of job and family embeddedness, further support can be garnered for the provision of organizational policies, procedures, and benefits that aim to embed individuals within the organization as well as their families. Allen (2006) has provided empirical support for the argument that the implementation of socialization activities at work enables employers to increase retention rates by embedding new employees more extensively in the organization. By encouraging parallel socialization activities for employees and their families (e.g., family-

friendly benefits, on-site childcare, eldercare support, flexible-work arrangements, and social events), organizations can enhance the extent to which employees are embedded in their families, alongside their jobs.

The increased level of job and family embeddedness, in turn, helps employees accumulate a network of resources that enhances their role performance in both life domains simultaneously. In effect, individuals may feel that the organization is invested in their work-family balance efforts, thus increasing perceptions of organizational support, which has been linked to a variety of favorable outcomes in existing work-family literature (e.g., work engagement, job satisfaction, organizational commitment, organizational citizenship behaviors, psychological wellbeing, lower work-family conflict, decreased turnover intentions; Allen, 2001; Kossek, Pichler, Bodner, & Hammer, 2011; Mesmer-Magnus & Viswesvaran, 2006; Thompson & Prottas, 2006; Zacher & Winter, 2011). This argument is further supported by Hayton, Carnabuci, and Eisenberger (2012) who have demonstrated that being socially embedded in a dense network of connections at work contributes to perceptions of organizational support.

### **Limitations**

The present study has several limitations. First, data was obtained from a single source and at a single point in time. As such, inferences about the temporal precedence of variables cannot be made with confidence, and there is potential for common method bias that may have inflated the relationships among the variables in this study. Common method variance has been defined as a systematic error variance shared among constructs of interest that is a function of scale type, response format, and response biases (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Richardson, Simmering, & Sturman, 2009). The high correlation between family embeddedness and family cohesion, for example, may be a result of common method bias. To

minimize effects of common method variance, procedural remedies recommended by Podsakoff et al. (2003) can be applied (e.g., collecting multi-source data, and introducing methodological and temporal separation by having several time points or different response formats).

Nevertheless, Spector (2006) has argued that common method bias is, in fact, not as widespread and problematic as initially suspected. Additionally, future research may also benefit from utilizing longitudinal type designs to examine temporal precedence among variables.

Furthermore, responses on the family embeddedness items may have been captured inaccurately since individuals who are above a positively-worded item tend to respond very highly on that trait resulting in an overestimation of their realistic level on that particular item. In other words, individuals are more likely to “strongly agree” with the items “I have a lot to offer my family” or “I feel good about my role and responsibility I have in my family” when they are at or above the level represented by the item content. This issue is typical for scales constructed under a dominance approach which relies on internal consistency, item-total correlations, and factor loadings to guide the item selection process (Stark, Chernyshenko, Drasgow, & Williams, 2006; Weekers & Meijer, 2008). As such, these scales typically consist of slightly- to extremely-positive or negative items leading to item responding that primarily falls on extreme ends of the continuum. Moreover, the method of gathering data in which students were used to recruit working adults to complete a web-based survey may have introduced potential for invalid responding resulting from the students’ need to obtain a maximum number of extra credit points in a short period of time.

In addition, Mitchell et al. (2001) originally developed open-ended items to capture the links dimension of job embeddedness. It has become common practice, however, for scholars (e.g., Felps et al., 2009) to use adapted versions of these open-ended items for consistency and

simplicity purposes which allows participants to respond to the links items on a scale ranging from strongly agree to strongly disagree. Based on the high factor loadings of the links dimensions on the higher-order family and job embeddedness factor, more research is warranted that would attempt to resolve issues relating to how the links dimensions is measured.

Lastly, since Phase 1 and Phase 2 samples are relatively homogeneous with respect to demographic variables and geographical location, the degree to which the pattern and magnitude of the examined relationships can be generalized to the population is limited. Despite the demographically non-representative sample, individuals from a variety of organizations, organizational levels, and employment sectors were included. Future research should examine how the scale functions for individuals who responded to the family embeddedness items with regards to their families of origin (i.e., in which the focal responded is the child) or with regards to their current families (i.e., in which the focal respondent is a parent). In addition, measurement invariance, cohort effects, or invalid data should be taken into consideration as such factors have been shown to spuriously change internal item qualities (Alwin & Jackson, 1979; Goldberg, 2000).

### **Directions for Future Research**

Future research is encouraged to continue the scale refinement process for the family and job embeddedness measures. Given that the links-to-family items were generated based on adapted open-ended job links questions, and that both the job and family links second-order facets loaded very highly on the overall embeddedness latent construct, the links dimension items may particularly benefit from closer examination. Furthermore, the community embeddedness scale requires further consideration. Specifically, community-related items (Mitchell et al., 2001; Ng & Feldman, 2009) should be generated independently of the



organizational or work factors. As such, three parallel measures may be developed that capture the phenomenon of embeddedness within each of the three main life domains independently – work, family, and community.

Previous literature has provided evidence that job embeddedness may play a moderator role in the relationship between leader-member exchange and task performance, leader-member exchange and organizational citizenship behaviors, and additionally, a three-way interaction involving job embeddedness, leader-member exchange, and organization-based self-esteem has been found (Sekiguchi et al., 2008). Furthermore, past research (Ng & Feldman, 2010) has demonstrated a potential downside to high levels of embeddedness where highly embedded managers tended to engage in fewer behaviors for development of social capital. Ng and Feldman have suggested the possibility that embeddedness may have differential effects on important work-related outcomes (e.g., turnover intentions, performance) across time points. As such, the potential curvilinear effects may be of particular interest, and future researchers may aim to identify the tipping point at which the effects of job and family embeddedness change from positive to negative. Additional avenues for continued research on embeddedness include testing a compensatory model in which the interdependence of work and family embeddedness levels are examined, as it may shed light on potential facilitation- or conflict-driving aspects of the forces that surround an individual's life domains.

Lastly, given extant research demonstrating that family centrality moderates the relationship between work demands and work-family conflict (e.g., Boyar, Maertz, Mosley, & Carr, 2008), and that work centrality moderates the relationship between work-family conflict and retention and job satisfaction (Carr et al., 2008), the degree to which an individual places

importance to the work and family domains should be considered when determining the relationship between embeddedness and various outcomes or antecedents of interest.

## CONCLUSION

By developing a psychometrically viable measure of family embeddedness in parallel to job embeddedness, this research provides evidence that the phenomenon of embeddedness exists both in the work and family domains based on a similar structure and with shared antecedents and outcomes. Specifically, family social support and leader-member exchange create resources that are stored within the respective domain in the form of fit, links, and sacrifice. These accumulated resources are then available to individuals as they strive to meet work and family demands. Finally, examination of the mechanism through which resources are allocated to each domain by way of job and family embeddedness revealed that individuals primarily consider the work domain in their evaluations of how effectively they balance the work and family roles.

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## APPENDIX A RECRUITMENT E-MAIL INVITATION TEMPLATE FOR PHASE 1

### Extra Credit Opportunity: Assist with Field Research

- Make a list of working adults whom you know well enough to invite as participants (e.g., friends who have recently graduated college, family members, neighbors, close acquaintances, current and recent coworkers). You will need an e-mail address for each person that you invite.
- Choose a PERSONAL CODE. E-mail your code to Tatiana Toumbeva at ttoumb1@lsu.edu. Be sure to include the COURSE, SECTION, and PROFESSOR'S name in the e-mail. Also include a rough estimate of the number of e-mails you intend to send out. Tatiana will e-mail you an electronic copy of this template to use for your recruitment e-mails, once she receives your code.
- Tailor the e-mail message below to include YOUR name and YOUR CODE and the name of the person you are inviting.
- Then copy and paste the invitation into an e-mail message and send.
- Only invite adults who are, to the best of your knowledge, employed at least part-time (15 or more hours a week).
- For the best results, send each invitation individually. (NO SPAMMING!)
- An effective way to recruit is to ask people beforehand if they would be willing to participate and let them know that you will send an e-mail with the invitation. Invite people to participate, but do not pressure them.
- Send all invitations within two weeks.
- You will receive extra credit for each person who completes the survey, up to a maximum number of points (as determined by your professor). (We will only be able to award points if the participant enters your personal code on the survey.)

#### Template for E-Mail Invitation

Dear Mr./Ms./Mrs. X:

I am writing to invite you to participate in a web survey of family life conditions. The survey is one of the extra credit options I have chosen to participate in. My task is to recruit participants, adults working at least 15 hours a week, for the survey.

The survey will take approximately 14 minutes to complete. Your responses will be kept confidential, and only aggregated results will be reported in any published scientific study.

Follow this link to participate (please paste the link in your web browser if clicking the link does not take you to WELCOME PAGE of the survey): URL WILL BE PROVIDED HERE

When you start the survey, you will be asked to provide a code. The purpose of this code is to ensure that I receive the proper credit for my recruitment efforts. This number does *NOT* identify who you are; it only identifies me as the person who recruited you to be in the study. The code that you should enter is: ENTER YOUR CODE HERE

Participation in this study is voluntary and you may withdraw from participation at any time. Data will only be accessible by the study researchers, and will be destroyed after five years. If you have any questions about your rights as a research participant you may contact Robert C. Mathews, Institutional Review Board (IRB), LSU, at 225-578-8692. If you have any research related questions you may contact the doctoral student who is conducting this study, Tatiana Toumbeva:

Tatiana Toumbeva, Department of Psychology, Louisiana State University - ttoumb1@lsu.edu

Thank you in advance for your consideration in completing this important project!

Student's Name (YOUR NAME!)

**APPENDIX B**  
**FAMILY EMBEDDEDNESS – STARTING SET OF ITEMS**

Please indicate the degree to which you agree or disagree with each of the following statements about your family life:

- F 1. I fit my family's culture.
- F 2. My values are compatible with my family's values.
- F 3. I feel good about my role in my family.
- F 4. I can reach my personal goals by being in this family.
- F 5. My family is similar to me.
- F 6. I like the members of my family.
- F 7. My family utilizes my skills and talents well.
- F 8. I feel like I am a good match for my family.
- F 9. I like the authority and responsibility I have in my family.
- F 10. I feel good about my personal growth and development.
- F 11. I get along well with my family.
- F 12. I feel close to my family.
- F 13. My word counts in my family.
- F 14. My religious views fit those of my family.
- F 15. My political orientation fits that of my family.
- F 16. In my family, skills are passed on from parent to child.
- F 17. I have a lot to offer my family.
- F 18. I have a lot of responsibility in my family.
- F 19. My family is supportive of me.
- F 20. I like that my family is supportive of my personal and professional endeavors.

- F 21. I like that my family encourages my personal and professional growth.
- F 22. If I could change my family, I would.
- L 23. I spend a lot of time with my family.
- L 24. I interact with my family regularly.
- L 25. I talk with my family about every-day things that happen in my life.
- L 26. My family is highly dependent on me.
- L 27. I have been a part of this family for a long time.
- L 28. My family and I work well together.
- L 29. I am very involved in my family.
- L 30. I visit my family often.
- L 31. I remember family holidays, birthdays, or anniversaries.
- L 32. I remember family traditions.
- L 33. I would find a job or go to school close to where my family lives.
- L 34. I would live in the same town as my family.
- L 35. My family has influence on the decisions I make.
- L 36. I share my thoughts with my family.
- L 37. I share with my family important details of my life.
- L 38. I like to consult with my family.
- L 39. I only contact my family in bad times or in times of need. (R)
- L 40. I contact my family in both good times and in bad.
- L 41. If I want to visit my family, I always call in advance.
- L 42. I am highly dependent on my family
- S 43. I would sacrifice a lot if I left my family.



- S 44. I can continue to grow and mature as a person by being in this family.
- S 45. I have a lot of freedom in my family to decide how to pursue my goals.
- S 46. I would go out of my way to help my family.
- S 47. I have made or would consider making personal compromises for the sake of my family.
- S 48. The perks of being in my family are outstanding.
- S 49. I feel that my family respects me a great deal.
- S 50. My opportunities for growth are excellent in my family.
- S 51. I get a lot by being a part of this family.
- S 52. The benefits of being in this family are good.
- S 53. I have retirement benefits to make it easier on my family.
- S 54. I look forward to my future in my family.
- S 55. If my spouse or significant other gets a job in a different city, I would move.
- S 56. I would not hold grudges against a family member.
- S 57. Not letting my family down means a great deal to me.
- S 58. I can count on my family to help me in time of need.
- S 59. I invest a lot of time for my family.
- S 60. I would sacrifice a lot for my family.

Note. The three dimensions are represented by the letters F = fit, L = links, and S = sacrifice.

Scale. 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree; (R)

indicates a reverse-coded item.

**APPENDIX C**  
**FAMILY EMBEDDEDNESS – POST-CONTENT ANALYSIS AND Q-SORT**

Please indicate the degree to which you agree or disagree with each of the following statements about your family life:

- F 1. I like the members of my family.
- F 2. My family is similar to me.
- F 3. I feel like I am a good match for my family.
- F 4. I fit my family's culture.
- F 5. I can reach my personal goals by being in this family.
- F 6. My values are compatible with my family's values.
- F 7. I get along well with my family.
- F 8. I feel good about my role in my family.
- F 9. My religious views fit those of my family.
- F 10. My political orientation fits that of my family.
- L 11. I am very involved in my family.
- L 12. I like to consult with my family.
- L 13. I contact my family in both good times and in times of need.
- L 14. I can count on my family.
- L 15. I frequently communicate with my family.
- L 16. I share with my family important details of my life.
- L 17. I invest a lot of time in my family.
- L 18. I spend a lot of time with my family.
- L 19. I interact with my family regularly.
- L 20. I talk with my family about every-day things that happen in my life.

- L 21. My family is highly dependent on me.
- S 22. I would sacrifice a lot if I left my family.
- S 23. The benefits of being in this family are good.
- S 24. I have a lot to be thankful to my family for.
- S 25. I would go out of my way to help my family.
- S 26. I have made or would consider making personal compromises for the sake of my family.
- S 27. I have a lot of freedom in my family to decide how to pursue my goals.
- S 28. I can continue to grow and mature as a person by being in this family.
- S 29. My family gives me a lot of freedom to decide how to pursue my goals.
- S 30. The perks of being in my family are outstanding.

Note. The three dimensions are represented by the letters F = fit, L = links, and S = sacrifice.

Scale. 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree

**APPENDIX D**  
**FAMILY EMBEDDEDNESS SCALE BASED ON PHASE 1 – A WORKING DRAFT**

Please indicate the degree to which you agree or disagree with each of the following statements about your family life:

- F 1. I fit my family's culture.
- F 2. My values are compatible with my family's values.
- F 3. I feel good about my role in my family.
- F 4. I can reach my personal goals by being in this family.
- F 5. My family is similar to me.
- L 6. I spend a lot of time with my family.
- L 7. I interact with my family regularly.
- L 8. I talk with my family about every-day things that happen in my life.
- L 9. My family is highly dependent on me.
- S 10. I would sacrifice a lot if I left my family.
- S 11. I can continue to grow and mature as a person by being in this family.
- S 12. My family gives me a lot of freedom to decide how to pursue my goals.
- S 13. I would go out of my way to help my family.
- S 14. I have made or would consider making personal compromises for the sake of my family.

Note. The three dimensions are represented by the letters F = fit, L = links, and S = sacrifice.

Scale. 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree

## APPENDIX E FAMILY CENTRALITY SCALE

Please respond to the following statements with the extent to which you agree or disagree with each of the following statements:

1. In my view, an individual's personal life goals should be family-oriented rather than work-oriented.
2. The major satisfaction in life comes from family rather than work.
3. The most important things that happen to me involve my family rather than work.
4. Family should be considered central to life rather than work.
5. Overall, I consider family to be more central to my existence than work.

Scale. 1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree

## **APPENDIX F FAMILY COHESION SCALE**

Please respond to the following statements with the degree to which they are true of your family:

1. The members of my family really help and support one another.
2. There is a feeling of togetherness in my family.
3. My family doesn't do things together. (R)
4. We really get along well with each other in my family.
5. Family members seem to avoid contact with each other when at home. (R)

Note. (R) indicates the item is reverse-coded so that higher scores indicate greater degree of cohesion.

Scale. 1 = Very untrue of my family, 2 = Somewhat untrue of my family, 3 = Neither true nor untrue of my family, 4 = Somewhat true of my family, 5 = Very true of my family

## **APPENDIX G**

### **FAMILY DISENGAGEMENT SCALE**

Please respond to the following statements with the degree to which they are true of your family:

1. It is difficult to keep track of what other family members are doing.
2. In our family we know where all family members are at all times. (R)
3. Family members do not check with each other when making decisions.
4. Family members are extremely independent.
5. Family members are expected to have the approval of others before making decisions. (R)

Note. (R) indicates the item is reverse-coded so that higher scores indicate greater degree of disengagement.

Scale. 1 = Very untrue of my family, 2 = Somewhat untrue of my family, 3 = Neither true nor untrue of my family, 4 = Somewhat true of my family, 5 = Very true of my family

## **APPENDIX H**

### **FAMILY SATISFACTION SCALE**

Please indicate the degree to which you agree or disagree with the following statements relating to your family:

1. I often find myself feeling dissatisfied with my family. (R)
2. I have a good time with my family.
3. I am happy with my family just the way it is.
4. In general I am very unhappy with my family. (R)
5. I am deeply committed to my family.

Note. (R) indicates the item is reverse-coded so that higher scores indicate greater degree of satisfaction.

Scale. 1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree



## APPENDIX I RECRUITMENT E-MAIL INVITATION TEMPLATE FOR PHASE 2

### Extra Credit Opportunity: Assist with Field Research

- Make a list of working adults whom you know well enough to invite as participants (e.g., friends who have recently graduated college, family members, neighbors, close acquaintances, current and recent coworkers). You will need an e-mail address for each person that you invite.
- Choose a PERSONAL CODE. E-mail your code to Tatiana Toumbeva at ttoumb1@lsu.edu. Be sure to include the COURSE, SECTION, and PROFESSOR'S name in the e-mail. Also include a rough estimate of the number of e-mails you intend to send out. Tatiana will e-mail you an electronic copy of this template to use for your recruitment e-mails, once she receives your code.
- Tailor the e-mail message below to include YOUR name and YOUR CODE and the name of the person you are inviting.
- Then copy and paste the invitation into an e-mail message and send.
- Only invite adults who are, to the best of your knowledge, employed at least part-time (15 or more hours a week).
- For the best results, send each invitation individually. (NO SPAMMING!)
- An effective way to recruit is to ask people beforehand if they would be willing to participate and let them know that you will send an e-mail with the invitation. Invite people to participate, but do not pressure them.
- Send all invitations within two weeks.
- You will receive extra credit for each person who completes the survey, up to a maximum number of points (as determined by your professor). (We will only be able to award points if the participant enters your personal code on the survey.)

#### Template for Email-Invitation

Dear Mr./Ms./Mrs. X:

I am writing to invite you to participate in a web survey of how people manage their work and family/personal lives. The survey is one of the extra credit options I have chosen to participate in. My task is to recruit participants, adults working at least 15 hours a week, for the survey.

The survey will take approximately 14 minutes to complete. Your responses will be kept confidential, and only aggregated results will be reported in any published scientific study.

Follow this link to participate (please paste the link in your web browser if clicking the link does not take you to WELCOME PAGE of the survey): URL WILL BE PROVIDED HERE

When you start the survey, you will be asked to provide a code. The purpose of this code is to ensure that I receive the proper credit for my recruitment efforts. This number does *NOT* identify who you are; it only identifies me as the person who recruited you to be in the study. The code that you should enter is: ENTER YOUR CODE HERE

Participation in this study is voluntary and you may withdraw from participation at any time. Data will only be accessible by the study researchers, and will be destroyed after five years. If you have any questions about your rights as a research participant you may contact Robert C. Mathews, Institutional Review Board (IRB), LSU, at 225-578-8692. If you have any research related questions you may contact the doctoral student who is conducting this study, Tatiana Toumbeva:

Tatiana Toumbeva, Department of Psychology, Louisiana State University - ttoumb1@lsu.edu

Thank you in advance for your consideration in completing this important project!

Student's Name (YOUR NAME!)

**APPENDIX J**  
**PSYCHOLOGICAL INVOLVEMENT SCALE**

**Spousal Involvement**

Please indicate how much you agree or disagree with each statement about your spouse/partner.

1. The most important things that happen to me involve him/her.
2. Most of my interests center around him/her.
3. He/she is a very important part of my life.
4. To me, being his/her spouse/partner is a large part of who I am.
5. I am very much personally involved with him/her.

**Parental Involvement**

Please indicate how much you agree or disagree with each statement about your child(ren).

1. The most important things that happen to me involve my child(ren).
2. Most of my interests center around my child(ren).
3. My child(ren) is/are a very important part of my life.
4. To me, being a parent is a large part of who I am.
5. I am very much personally involved with my child(ren).

Scale. 1 = Strongly disagree, 2 = Disagree, 3 = Somewhat disagree, 4 = Somewhat agree, 5 = Agree, 6 = Strongly agree

**Behavioral Involvement**

1. In an average week, how many total hours do you spend in family-related work activities, such as household chores and maintenance, (doing things for your children), and shopping?  
(Do not include time spent together in recreational activities).

**APPENDIX K**  
**FAMILY COMMITMENT SCALE**

**Marital Commitment**

Please read the following statements and indicate the degree to which you agree or disagree.

1. I expect to commit whatever time is necessary to making my spouse feel loved, supported, and cared for.
2. Devoting a significant amount of my time to being with or doing things with a spouse is not something I expect to do. (R)
3. I expect to put a lot of time and effort into building and maintaining a marriage.
4. Really involving myself in a marriage involves costs in other areas of my life which I am unwilling to accept. (R)
5. I expect to work hard to build a good marriage even if it means limiting my opportunities to pursue other personal goals.

**Parental Commitment**

Please read the following statements and indicate the degree to which you agree or disagree.

1. It is important to me to have some time for myself and my own development rather than have child(ren) and be responsible for their care. (R)
2. I expect to devote a significant amount of my time and energy to the rearing of child(ren) of my own.
3. I expect to be very involved in the day-to-day matters of rearing child(ren) of my own.
4. Becoming involved in the day-to-day details of rearing child(ren) involves costs in other areas of my life which I am unwilling to make. (R)
5. I do not expect to be very involved in childrearing. (R)

Note. (R) indicates the item is reverse-coded so that higher scores indicate greater degree of commitment.

Scale. 1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree

## APPENDIX L LEADER-MEMBER EXCHANGE SCALE

Please indicate the degree to which you agree or disagree with the following statements about your immediate supervisor at your work.

- A 1. I like my supervisor very much as a person.
- A 2. My supervisor is the kind of person I would like to have as a friend.
- A 3. My supervisor is a lot of fun to work with.
- L 4. My supervisor defends my work actions to a superior, even without complete knowledge of the issue in question.
- L 5. My supervisor would come to my defense if I were “attacked” by others.
- L 6. My supervisor would defend me to others in the organization if I made an honest mistake.
- C 7. I do work for my supervisor that goes beyond what is specified in my job description.
- C 8. I am willing to apply extra efforts, beyond those normally required, to further the interests of my work group.
- PR 9. I am impressed with my supervisor’s knowledge of his/her job.
- PR 10. I respect my supervisor’s knowledge of and competence on the job.
- PR 11. I admire my supervisor’s professional skills.

Note. The four dimensions are indicated by the letters A = Affect, L = Loyalty, C = Contribution, PR = Professional Respect.

Scale. 1 = Strongly disagree, 2 = Disagree, 3 = Somewhat disagree, 4 = Neither agree nor disagree, 5 = Somewhat agree, 6 = Agree, 7 = Strongly agree

## APPENDIX M FAMILY SOCIAL SUPPORT SCALE

Please indicate how much your closest family member does each of the following behaviors:

1. Provides you with encouragement.
2. Provides you with useful information.
3. Says things that raise your self-confidence.
4. Listens to you when you need to talk.
5. Shows that he/she cares about you as a person.
6. Understand the way you think and feel about things.

Scale. 1 = Not at all, 2 = Just a little, 3 = A moderate amount, 4 = Quite a lot, 5 = A great deal

## APPENDIX N JOB EMBEDDEDNESS SCALE

Please indicate the degree to which you agree or disagree with the following statements concerning the organization/company for which you work:

- F 1. My company utilizes my skills and talents well.
- F 2. I feel like I am a good match for this company.
- F 3. I fit with the company's culture.
- F 4. I like the authority and responsibility I have at this company.
- F 5. My values are compatible with the organization's values.
- L 6. I have been in the present job position for a long time.
- L 7. I have worked for this company for a long time.
- L 8. On the job, I interact frequently with my work group members.
- L 9. My coworkers are highly dependent on me.
- L 10. I am a part of many work teams/committees.
- S 11. The perks provided by this organization are outstanding.
- S 12. My promotional opportunities are excellent in this organization.
- S 13. I'm well-compensated for my level of performance in this organization.
- S 14. The health-care benefits provided by this organization are excellent.
- S 15. The retirement benefits provided by this organization are excellent.

Note. The three dimensions are represented by the letters F = fit, L = links, S = sacrifice.

Scale. 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree

## APPENDIX O REFINED FAMILY EMBEDDEDNESS SCALE

Please indicate the degree to which you agree or disagree with each of the following statements about your family life:

- F 1. I fit my family's culture.
- F 2. I feel like I am a good match for my family.
- F 3. My values are compatible with my family's values.
- L 4. I feel close to my family.
- L 5. I contact my family in both good times and in bad.
- L 6. I frequently communicate with my family.
- S 7. I get a lot by being a part of my family.
- S 8. The benefits of being in this family are good.
- S 9. I would sacrifice a lot if I left this family.

Note. The three dimensions are represented by the letters F = fit, L = links, and S = sacrifice.

Scale. 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree



**APPENDIX P**  
**SATISFACTION WITH WORK-FAMILY BALANCE SCALE**

Please indicate your level of satisfaction or dissatisfaction with each of the following statements:

1. The way you divide your time between work and personal or family life.
2. The way you divide your attention between work and home.
3. How well your work life and personal or family life fit together.
4. Your ability to balance the needs of your job with those of your personal or family life.
5. The opportunity you have to perform your job well and yet be able to perform home-related duties adequately.

Scale. 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, 5 = Very satisfied

## APPENDIX Q PHASE 1 INSTITUTIONAL REVIEW BOARD APPROVAL FORM

### Application for Exemption from Institutional Oversight

Unless qualified as meeting the specific criteria for exemption from Institutional Review Board (IRB) oversight, ALL LSU research/ projects using living humans as subjects, or samples, or data obtained from humans, directly or indirectly, with or without their consent, must be approved or exempted in advance by the LSU IRB. This Form helps the PI determine if a project may be exempted, and is used to request an exemption.



Institutional Review Board  
Dr. Robert Mathews, Chair  
131 David Boyd Hall  
Baton Rouge, LA 70803  
P: 225.578.8692  
F: 225.578.6792  
irb@lsu.edu  
lsu.edu/irb

-- Applicant, Please fill out the application in its entirety and include the completed application as well as parts A-E, listed below, when submitting to the IRB. Once the application is completed, please submit two copies of the completed application to the IRB Office or to a member of the Human Subjects Screening Committee. Members of this committee can be found at <http://www.lsu.edu/screeningmembers.shtml>

- A Complete Application Includes All of the Following:
- (A) Two copies of this completed form and two copies of part B thru E.
  - (B) A brief project description (adequate to evaluate risks to subjects and to explain your responses to Parts 1&2)
  - (C) Copies of all instruments to be used.  
\*If this proposal is part of a grant proposal, include a copy of the proposal and all recruitment material.
  - (D) The consent form that you will use in the study (see part 3 for more information.)
  - (E) Certificate of Completion of Human Subjects Protection Training for all personnel involved in the project, including students who are involved with testing or handling data, unless already on file with the IRB. Training link: (<http://phrp.nihtraining.com/users/login.php>.)
  - (F) IRB Security of Data Agreement: (<http://www.lsu.edu/irb/IRB%20Security%20of%20Data.pdf>)

1) Principal Investigator:  Rank:   
 Dept:  Ph:  E-mail:

2) Co Investigator(s): please include department, rank, phone and e-mail for each

IRB#	<u>E5556</u>	LSU Proposal #
<input checked="" type="checkbox"/>	Complete Application	
<input checked="" type="checkbox"/>	Human Subjects Training	

3) Project Title:

**Study Exempted By:**  
Dr. Robert C. Mathews, Chairman  
Institutional Review Board  
Louisiana State University  
203 B-1 David Boyd Hall  
225-578-8692 | [www.lsu.edu/irb](http://www.lsu.edu/irb)  
Exemption Expires: 6-29-2014

4) Proposal? (yes or no)  If Yes, LSU Proposal Number

- Also, if YES, either  This application completely matches the scope of work in the grant  
 OR  More IRB Applications will be filed later

5) Subject pool (e.g. Psychology students)

\*Circle any "vulnerable populations" to be used: (children <18; the mentally impaired, pregnant women, the aged, other). Projects with incarcerated persons cannot be exempted.

6) PI Signature  Date  (no per signatures)

\*\* I certify my responses are accurate and complete. If the project scope or design is later changes, I will resubmit for review. I will obtain written approval from the Authorized Representative of all non-LSU institutions in which the study is conducted. I also understand that it is my responsibility to maintain copies of all consent forms at LSU for three years after completion of the study. If I leave LSU before that time the consent forms should be preserved in the Departmental Office.

Screening Committee Action:	Exempted <input checked="" type="checkbox"/>	Not Exempted <input type="checkbox"/>	Category/Paragraph <u>2</u>
Reviewer	<u>Mathews</u>	Signature	<u>Ruby Mathews</u> Date <u>6/30/11</u>

## APPENDIX R PHASE 2 INSTITUTIONAL REVIEW BOARD APPROVAL FORM

### Application for Exemption from Institutional Oversight



Institutional Review Board  
Dr. Robert Mathews, Chair  
131 David Boyd Hall  
Baton Rouge, LA 70803  
P: 225.578.8692  
F: 225.578.6792  
irb@lsu.edu  
lsu.edu/irb

Unless qualified as meeting the specific criteria for exemption from Institutional Review Board (IRB) oversight, ALL LSU research/ projects using living humans as subjects, or samples, or data obtained from humans, directly or indirectly, with or without their consent, must be approved or exempted in advance by the LSU IRB. This Form helps the PI determine if a project may be exempted, and is used to request an exemption.

- Applicant, Please fill out the application in its entirety and include the completed application as well as parts A-E, listed below, when submitting to the IRB. Once the application is completed, please submit two copies of the completed application to the IRB Office or to a member of the Human Subjects Screening Committee. Members of this committee can be found at <http://www.lsu.edu/screeningmembers.shtml>

-- A Complete Application Includes All of the Following:

- (A) Two copies of this completed form and two copies of part B thru E.
- (B) A brief project description (adequate to evaluate risks to subjects and to explain your responses to Parts 1&2)
- (C) Copies of all instruments to be used.  
\*If this proposal is part of a grant proposal, include a copy of the proposal and all recruitment material.
- (D) The consent form that you will use in the study (see part 3 for more information.)
- (E) Certificate of Completion of Human Subjects Protection Training for all personnel involved in the project, including students who are involved with testing or handling data, unless already on file with the IRB. Training link: (<http://phrp.nihtraining.com/users/login.php>.)
- (F) IRB Security of Data Agreement: (<http://www.lsu.edu/irb/IRB%20Security%20of%20Data.pdf>)

1) Principal Investigator: Tatiana Toumboua Rank: student  
Dept: Psychology Ph: 813-748-3362 E-mail: ttoumb1@lsu.edu

2) Co Investigator(s): please include department, rank, phone and e-mail for each

Russell Matthews, Ph.D. I/O Psychology  
matthews@lsu.edu

E IRB# <u>5828</u>	LSU Proposal # _____
<input type="radio"/>	Complete Application
<input checked="" type="radio"/>	Human Subjects Training

3) Project Title: Embeddedness and Work-Family Balance

Study Exempted By:  
Dr. Robert C. Mathews, Chairman  
Institutional Review Board  
Louisiana State University  
203 B-1 David Boyd Hall  
225-578-8692 | [www.lsu.edu/irb](http://www.lsu.edu/irb)  
Exemption Expires: 2/5/13

4) Proposal? (yes or no)  If Yes, LSU Proposal Number \_\_\_\_\_

Also, if YES, either  This application completely matches the scope of work in the grant  
OR  More IRB Applications will be filed later

5) Subject pool (e.g. Psychology students) Psychology students will be used to recruit working adults  
\*Circle any "vulnerable populations" to be used: children <18; the mentally impaired, pregnant women, the aged, other). Projects with incarcerated persons cannot be exempted.

6) PI Signature [Signature] Date 01/26/12 (no per signatures)

\*\* I certify my responses are accurate and complete. If the project scope or design is later changes, I will resubmit for review. I will obtain written approval from the Authorized Representative of all non-LSU institutions in which the study is conducted. I also understand that it is my responsibility to maintain copies of all consent forms at LSU for three years after completion of the study. If I leave LSU before that time the consent forms should be preserved in the Departmental Office.

Screening Committee Action: Exempted <input checked="" type="checkbox"/> Not Exempted _____	Category/Paragraph <u>2</u>
Reviewer <u>Mathews</u> Signature <u>[Signature]</u> Date <u>2/6/12</u>	

## VITA

Tatiana Toumbeva is an industrial/organizational psychology doctoral student working under the academic mentorship of Dr. Russell Matthews. Tatiana obtained a Bachelor of Science degree in biology from the University of South Florida in 2008. She then attended Boston University, and earned a Master of Arts degree in mental health counseling and behavioral medicine in 2010. Tatiana joined Louisiana State University in 2010 to pursue an education in industrial/organizational psychology.

Tatiana's primary research interests include work-family conflict, social support, employee wellbeing, and employee selection and assessment. She has presented at various national and local conferences including Society for Industrial/Organizational Psychology, Work, Stress, and Health, and Louisiana State University Life Course and Aging Center annual conference.

Tatiana has held internship positions with Verizon Wireless as part of Talent Acquisition and Assessment and Selection Strategy teams. Additionally, Tatiana is a Louisiana State University Life Course and Aging Center award recipient and has worked with Dr. Katie Cherry on assessing legal needs of elderly citizens in urban and rural Louisiana.