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Development and Initial Validation of the Work-Family Facilitation Scale

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Development and Initial Validation of the Work-Family Facilitation Scale

by

Sheila K. Holbrook

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
Department of Psychology
College of Arts and Sciences
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ABSTRACT

The benefits of occupying multiple roles have typically been overlooked. One reason for this oversight is the lack of a well-established scale measuring work-family facilitation. This study developed and validated short, self-report scales of work-to-family facilitation and family-to-work facilitation. Based on conceptualizations of work and family facilitation presented in current research content domains and definitions of the constructs are presented. Work-to-family facilitation is defined as a form of role facilitation in which the experiences in the job, work skills, and emotional gratification from work makes participation in the family easier. Family-to-work facilitation is defined as a form of role facilitation in which the experiences in the family, family skills, and emotional gratification from family makes participation in work easier. Advocated procedures were used to develop the scales and test dimensionality and internal consistency. Satisfactory internal consistency was found. Estimates of construct validity were presented by relating the scales to 11 on- and off-job constructs. Possible instrument limitations and future research needs on the study of work-family facilitation, particularly the identification of antecedents of facilitation, are reviewed.

INTRODUCTION

A widely studied topic in organizational behavior has been the conflict between work and family. Over the past 25 years studies have advanced our understanding of how work conflicts with family and visa versa (Adams, King, & King, 1996; Aryee, Fields, & Luk, 1999; Frone, Russell, & Cooper, 1992a, 1992b; Hammer, Allen & Grigsby, 1997; Kirchmeyer & Cohen, 1999; Nelson, Quick, Hitt, & Moesel, 1990. More recently there has been an interest in the study of a much broader conceptualization of the work and family interface, particularly the study of work-family balance. Frone (2003) suggests that there are two components to work-family balance: work-family conflict (also referred to as negative work-family spillover, interrole conflict, work-nonwork conflict, and work-family interference) and work-family facilitation (also referred to as positive work-family spillover and work-family enhancement). As noted by Frone (2003), numerous studies have examined the prevalence, predictors and outcomes of work-family conflict. In addition, several studies have provide support for a conceptual distinction to be made between work conflicting with family and family conflicting with work (Frone, Russell, & Cooper, 1992a, 1992b; Netemeyer, Boles, & McMurrin, 1996). There has been very little research on the second component of work-family balance, work-family facilitation. As such, little is known about the prevalence, predictors, and outcomes of work-family facilitation. As with work-family conflict, Frone (2003) proposes that a

conceptual distinction can be made between work facilitating family and family facilitating work.

Although recent research has identified positive consequences of work-family facilitation, the potential benefits of participation in the family domain and the work domain need to be examined and understood more thoroughly. As noted by Gutek, Nakamura, and Nieva (1981), because the majority of men and women often must fulfill family and work roles, research on the interdependence of these two important life roles is critical to the understanding of the attitudes and behaviors of both sexes. The major limitations noted in the work-family facilitation literature are a lack of understanding of how work positively affects family life and visa versa and the lack of a well-established, psychometrically sound scale measuring work-family facilitation (Frone, 2003; Voydanoff, 2004a; Wayne, Musisca, & Fleeson, 2003).

Prior research has noted that there are very few established measures of work-family facilitation (Hanson, Colton, & Hammer, 2003; Voydanoff, 2004a; Wayne, Musisca, & Fleeson, 2003). Voydanoff (2004a) points out that measures of work-family facilitation that have been used in the research have limited reliability. There are two national studies (National Study of the Changing Workforce and National Survey of Midlife Development in the United States) that were revised in the 1990s to include items on work-family facilitation that have reported acceptable levels of reliability. However, the National Study of the Changing Workforce items measure only energy and mood and do not adequately measure work-family facilitation because it does not include items on aspects of facilitation such as work (family) behaviors, attitudes, and skills (Voydanoff, 2004a). A major limitation of the National Survey of Midlife Development in the United

States is the lack of items that consider positive psychological spillover (Voydanoff, 2004a). In most of the other research reported on work-family facilitation, the measure of facilitation was developed specifically for the study and for which little or no validity and reliability data are presented (Fisher-McAuley, Stanton, Jolton, & Gavin, 2003) or they are adapted from existing work-family conflict scales (Sumer & Knight, 2001).

In addition, there is a lack of consistency with which the work-family facilitation construct has been operationalized. For example, several studies have looked at work-family balance as a composite of facilitation and conflict (Fisher-McAuley, Stanton, Jolton, & Gavin, 2003), while others have looked at the nonwork roles that an individual participates in, such as parent, spouse, caretaker (Hammer & Neal, 2003; Kirschmeyer, 1992a, 1992b, 1993; Stephens & Franks, 1995; Stephens, Franks, & Atuenza, 1997), making it difficult to make comparisons between studies and examine the prevalence, predictors, and outcomes of work-family facilitation. These problems generate concerns about the reliability and validity of measures of work-family facilitation. It has been suggested that the measures that are used would benefit from additional validation efforts (Wayne, Musisca, & Fleeson, 2003) and that other measures of work-family facilitation should be investigated (Hammer & Neal, 2003).

Grzywacz and Butler (2003) note that, if progress is to be made in the examination of the relationship between work-family facilitation and other variables, there is a profound need for additional theoretical and empirical development around the work-family facilitation construct and better measurement of the construct. Wayne, Randel, and Stevens (2003) also call for researchers to focus on theoretical development of the work-family construct upon which scale building efforts can then be based. The

purpose of this research is to develop and validate self-report measures of work-family facilitation and family-work facilitation: the Work-Family Facilitation Scale.

Literature Review

This section is divided into three parts. The first part provides the background on the growing interest in the work-family interface. The second part discusses the theoretical framework upon which the Work-Family Facilitation Scale was developed. The third part examines the relationship between work-family facilitation and other variables that have been reported in the work-family literature.

Background

Since the groundbreaking report on dual career families by Rapoport and Rapoport was published in 1969, a large number of studies have been conducted by behavioral scientists and business/management researchers seeking to gain an understanding of the dynamics of the linkage between work and family. While the initial focus of the early research was on work-family conflict (Bacharach, Bamberger, & Conley, 1991; Bedeian, Burke, & Moffett, 1988; Kopelman, Greenhaus & Connelly, 1983; MacEwen & Barling, 1988), in recent years the focus has broadened to include positive aspects (positive spillover or work-family facilitation) of the linkage between work and nonwork (Clark, 2001; Fisher-McAuley, Stanton, Jolton, & Gavin, 2003; Friedman & Greenhaus, 2000; Grzywacz, 2000; Grzywacz & Marks, 2000a, 2000b; Sumer & Knight, 2001; Tiedie, Wortman, Downey, Emmons, Biernatt, & Lang, 1990; Voydanoff, 2004a, 2004b, 2003).

Women and men are both faced with trying to balance the competing demands of their family and work roles. Research that has focused on the changing roles of men and

women has shown that the increased entry of women into the paid labor force has resulted in the expansion of their roles. Women now must meet the demands of their responsibilities in the home and in the workplace (Schultz, Chung, & Henderson, 1989). At the same time, research suggests that working men whose spouses are employed are more involved in family activities and contributing more to child care and household responsibilities than men whose spouses are not employed (Alpert & Culbertson, 1987; Emmons, Biernat, Tiedje, Lang, & Wortman, 1990; Hammer, Allen & Grigsby, 1997). As reported by Barnett and Shen (1997) men in dual earner couples do roughly 45% of the housework, as assessed by their own and their wives reports.

Research suggests that personal and family lives are becoming more important to individuals than their job life. There is growing evidence that, for both men and women, the role of partner and parent are ranked similarly in prominence and higher than the role of employee. For example, a recent publication by the Families and Work Institute (2002), based on data from the National Study of the Changing Workforce, reported that participants in this national study between the age of 18 and 37 placed a higher priority on family than work. In addition, research suggests that for both married men and women, a higher percentage would like to reduce their work hours to spend more time with their families (Bond, Galinsky, & Swanberg, 1998; Schultz, Chung, & Henderson, 1989). In order to compete successfully in the job market, organizations may need to develop personnel strategies and policies that facilitate participation in the work place.

Conceptual Framework

The conceptual framework guiding research on work-family conflict is based on what has been labeled the “scarcity approach” of multiple roles, also described as the

competing demands hypothesis and role conflict hypothesis (Marks, 1977). According to the scarcity thesis, “individuals have a fixed amount of psychological and physiological resources to expend in their role obligations (Coser & Coser, 1974). It rests on the assumption that quantity of human energy is fixed and limited, and that the more roles an individual occupies the greater will be the demand on his/her energy and the more depleted his/her reserve (Barnett, 1999). Coser and Coser (1974) suggest that the competition for loyalty and commitment is a continuing dilemma because of a scarcity of time and energy. The various groups that form an individual’s total role set have a claim on the individual’s energies and time. As such, they compete with one another in an effort to get as much of the individual’s energy and time as they can, within normative limits. Given the scarcity of time and energy, individuals occupying multiple roles will inevitably experience role conflict. The individual’s major dilemma is determining how to manage their total role set and keep role strain within acceptable limits (Goode, 1960, cited in Marks, 1977). The scarcity approach of multiple roles has been linked with theories of multiple roles, including theoretical models of work-family conflict. Theoretical models of work-family conflict propose the strains of competing work and family domains intensifies conflict between work and family roles.

The role scarcity hypothesis has been challenged by the “role accumulation hypothesis” of Sieber (1974) and the “role expansion hypothesis,” also referred to as the “role enhancement hypothesis,” of Marks (1977). Sieber (1974) and Marks (1977) argue that the benefits of occupying multiple roles outweigh the costs. Researchers who advocate these perspectives have proposed that multiple roles provide multiple sources of social support, skills that transfer from one role to another, and an increased sense of

meaning, personal worth, and purpose (Thoits, 1983, 1999; Tiedie, Wortman, Downey, Emmons, Biernat, & Lang, 1990).

Sieber (1974) argues that role accumulation may have positive outcomes, which he classifies into four types: role privileges, overall status security, resources for status enhancement and role performance, and enrichment of the personality and ego gratification. Contrary to scarcity theory, which asserts that an individual's efforts are directed toward reducing the strain resulting from participation in multiple roles, Sieber suggests that an individual's efforts are directed toward acquiring and enjoying the net benefits of role accumulation. He believes that role accumulation tends to be more gratifying than stressful and that extending roles successfully contributes to the stability of the role system of an individual in the long run at the modest expense of intermittent short-run instability. While not denying the occurrence of role overload and role conflict, Sieber asserts that if "individuals are as motivated to expand and diversify their role systems as they are to retrench and consolidate them" (p. 577), then perhaps research should focus on the processes that facilitate role accumulation.

Marks (1977) suggests that the scarcity theory is not able to explain those cases where research has found individual's engaged in multiple roles who do not appear to be struggling with role conflicts or experiencing role strain or overload. He proposes that expansion of role occupancy can create energy, rather than simply expend energy. The expansion approach sees the available supply of time and energy as abundant and expansible and that there is no natural limit on the expansion of an individual's commitment level within the range of the individual's ongoing activities and role partners. The main premise is that multiple roles do not inevitably create strain, but may

actually enhance an individual's abilities to participate in their total role system (Marks, 1977). Rather than individuals expending energy on their social involvement, they come away from them more enriched and energized. As such, energy is attributed to socio-cultural conditions rather than a biological fact of nature. In short, individuals are able to form strong commitments to multiple roles and make time and generate energy to engage in role behaviors to which they are committed.

Marks (1977) also does not deny the occurrence of role overload and role conflict. He suggests that the benefit of participation in multiple roles depends on the number of roles and the time demands of each, and that beyond certain limits overload and conflict may occur. The degree to which there is a positive gain depends, in part, on which roles one occupies and on the quality of those roles, with some combinations being more beneficial than others. The benefits of multiple role involvement include monetary income, increased self-esteem, the ability to delegate role obligations, opportunities for social relationships, and challenges (Barnett, 1998; 1999). According to the role expansion perspective, "multiple roles have the potential to enhance psychological well-being by providing opportunities for social integration, a sense of mastery, personal and social recognition, and fulfillment of disparate psychological and social needs" (Fredriksen-Goldsen & Scharlach, 2001, p. 240). Marks (1977) suggests that a theory involving the occupation of multiple roles should not view energy as finite but should include the benefits as well as the drawbacks of participation in multiple roles.

The role accumulation and role expansion (enhancement) hypotheses are consistent with the concept of work-family facilitation proposed by Frone (2003). Frone (2003) proposes "work-family facilitation represents the extent to which participation at

work (home) is made easier by virtue of the experiences, skills, and opportunities gained or developed at home (work)” (p. 145). The scarcity and expansion theories, taken together, provide a framework for the development of a comprehensive model of the direct relationships between work and family characteristics and work, family, and individual outcomes. Theory capturing the complete work-family experience requires research examining how dimensions of conflict and facilitation operate together in shaping relevant outcomes (Gryzwacz, Johnson, & Hartwig, 2002).

What We Know About Work-Family Facilitation

Influenced by the theoretical work of Sieber (1974) and Marks (1977), researchers have begun to explore the benefits associated with performing multiple roles. Particular interest has been placed on identifying work and family factors that may have an effect on the level of facilitation between work and family and the effect of work-family facilitation on work and family outcomes, such as satisfaction, as well as psychological and physiological well-being. However, as the research focusing specifically on work-family facilitation is limited, findings on research related to facilitation of work and other nonwork roles, such as parental, marital, and community, are presented as they provide indirect information on the facilitation process. Also, in some instances, because information on the direct relationship between work-family facilitation and individual, work, and family characteristics and outcomes is not available, findings from research examining work-family balance, work-life balance, and work-family fit are presented because they provide indirect information on these relationships. In this section a brief discussion of the relationship between work-family conflict and work-family facilitation

will be presented, followed by a presentation of the research on the relationship between work-family facilitation and individual, work, and family characteristics and outcomes.

Relationship Between Work-Family Conflict and Work-Family Facilitation

Work-family researchers have examined the primary dimensions of work-family conflict and work-family facilitation, i.e., direction of influence (work-to-family versus family-to-work) and type of effect (conflict versus facilitation). Several studies provide support for the distinction between work-to-family conflict and family-to-work conflict (Frone, Russell, & Cooper, 1992a, 1992b; Netemeyer, Boles, & McMurrin, 1996) and between work-to-family facilitation and family-to-work facilitation (Gryzwacz & Marks, 2000a, 2000b; Kirchmeyer, 1993; Tiedie et al, 1990). More recently the conflict and enhancement perspective have been tied together as a typology. These researchers provide support for the four types of work-family effect (work-to-family conflict, work-to-family facilitation, family-to-work conflict, and family-to-work facilitation) (Grzywacz & Marks, 2000a, 2000b; Tiedie, Wortman, Downey, Emmens, Biernat, & Lang, 1990) and that the four dimensions are uniquely related to work outcomes, family outcomes, and individual psychological and physical well-being (Gryzwacz, 2000; Gryzwacz & Marks 2000a, 2000b, Kirchmeyer, 1992a, 1992b, 1993).

The literature reveals that work-family conflict and work-family facilitation are not mutually exclusive, but that they occur simultaneously (Kirchmeyer, 1993; Tiedie et al, 1990; Gryzwacz & Marks, 2000a, 2000b; Voydanoff, 2004a, 2004b). In general, the dimensions of work-family conflict and work-family facilitation have been found to be unrelated to each other (Sumer & Knight, 2001; Voydanoff, 2004a, 2004b; Wayne, Musisca, & Fleeson, 2004). In contrast, some researchers have reported significant

associations, but these relationship tends to be weak (Sumer & Knight, 2001; Voydanoff, 2004a, Wayne, Musisca, & Fleeson, 2004). For example, Tiedie et al. (1990) examined how women combine perceptions of work and family role conflict and enhancement. They found that perceptions of conflict and enhancement were weakly associated. Similar results were reported by Sumer and Knight (2001) and by Wayne, Musisca, and Fleeson (2004).

Stephens, Franks, and Atienza (1997) in their investigation of the well-being of adult daughters who worked and provided care to their aging parents found these women experienced more positive spillover between their roles as caregiver and work than negative spillover. Brockwood, Hammer and Neal (2003) in a study of dual-earner couples who were caring for both children and elderly parents, found that for both men and women, the occupation of one role (care of children, care of parent, or paid work) results in perceived gains (positive work-to-family and family-to-work spillover) in other roles, regardless of their perceived level of work-family conflict. Taken together, these results, demonstrate that the assessment of the work-family system encompasses both the positive and negative aspects inherent in this complex situation, that conflict and facilitation are independent of each other, and that they occur simultaneously.

Predictors of Work-Family Facilitation

Personal characteristics. Personal characteristics are defined as individual-based variables such as age, gender, race, education, personality and attitude. A review of the work-family facilitation literature suggests that demographic variables are included more as a descriptive statistic or a control variable than as an explanatory variable. Those studies that have talked about the relationship between demographic variables and work-

family facilitation report that women report higher positive spillover from work-to-family than men (Gryzwacz, Almeida, & McDonald, 2002; Gryzwacz and Marks, 2000b; Voydanoff, 2004a, 2004b); that ethnic minorities report greater family-to-work facilitation and work-to-family facilitation than whites (Gryzwacz, Almeida, & McDonald, 2002; Voydanoff, 2004a, 2004b), and that work-to-family and family-to-work facilitation is higher for those with more education (Gryzwacz & Marks, 2000b; Voydanoff, 2004a, 2004b; Wayne, Musisca, & Fleeson, 2003).

A few studies have examined the connection between individual differences and work-family facilitation. There is some evidence that individual differences may predict patterns of work-family facilitation. Few studies have examined personality dispositions as predictors of work-family facilitation. Wayne, Musisca, and Fleeson (2003), for a national sample of men and women, examined the relationship of the Big 5 personality traits and facilitation. They found that extroversion was related to greater facilitation between roles, neuroticism was related to lower facilitation between work-to-family facilitation, openness was related to greater work-to-family facilitation, and conscientiousness and agreeability were related to greater family-to-work facilitation. Grzywacz and Marks (2000b) also reported that high levels of neuroticism were associated with less positive spillover from work-to-family and high levels of extraversion were associated with greater facilitation between roles. Grzywacz and Butler (2003) reported that higher levels of extroversion were associated with greater work-to-family facilitation. Wayne, Musisca, and Fleeson (2003) suggest that the fact personality traits relate to one direction of facilitation but not the other may reflect differences in the nature of facilitation originating from each domain.

Sumer and Knight (2001) looked at whether there were individual differences in work-family spillover based on attachment styles. Individuals were classified into one of four categories based on attachment style: secure, dismissing, fearful, preoccupied. Sumer and Knight (2001) found that individuals with a secure attachment style were more likely to experience positive spillover from work-to-family and from family-to-work. Wayne, Randal, and Stevens (2003) tested the relation of individual coping strategies (advanced planning, seeking support, goal setting, and positive thinking) and work-family facilitation. The results showed that all four coping strategies were related to family-to-work facilitation and that coping by planning and seeking support were related to work-to-family facilitation. Kirchmeyer (1992a) examined the relationship between coping strategies and positive and negative nonwork (parenting, community, and recreation) to work spillover. Kirschmeyer found that coping was related to more positive spillover from nonwork to work roles.

Family characteristics. Family role characteristics are defined as family-based variables such as age and number of children, household chores, family climate, family support system, employment status of spouse, family involvement, and family expectations. Little empirical research exists regarding the relationship between family characteristics and work-family facilitation.

A few studies have examined the relationship between marital status and work-family facilitation, and those that have reported such findings are not in agreement. Gryzwacz (2000) found that married individuals reported higher level of positive work-family spillover. Similar results are reported by Gryzwacz, Almeida, & McDonald (2002) and Wayne, Musisca, & Fleeson (2003). Brennan and Poertner (1997), in a study of

work-family balance of employed parents who give family care to children with serious emotional problems, report that single caregivers attributed significantly higher levels of pleasure from their work than married caregivers.

Wayne, Randel, and Stevens (2003), in their examination of the association between the family characteristics included in their study and work-family facilitation reported that the number of children living at home, hours spent on household responsibilities, hours spent on childcare responsibilities, and family support (instrumental and emotional) were associated with work-family facilitation. They found that the number of children living at home had a positive relationship with both directions of work-family facilitation, but that the number of hours spent on childcare was not related to either form of work-family facilitation. The number of hours spent on household responsibilities also showed a positive relationship with both directions of work-family facilitation. With respect to family support, both instrumental and emotional support showed a positive relationship with both directions of work-family facilitation, with emotional support being the more important predictor of work-family facilitation.

Contrary to the above findings, partial support for the relationship between childcare responsibilities and work-family facilitation is provided by Hill, Hawkins, Martinson, and Ferris (2003). Based on data from the IBM 2001 Global Work and Life Issues Survey, Hill et al. found that responsibility for childcare was positively associated with work-family fit for men, but was negatively associated with work-family fit for women. In addition, Grzywacz and Marks (2000) tested the relationship between family demands and resources and work-to-family enhancement and family-to-work enhancement. They did not find any support for the effect of either work or family

demands on enhancement, but did find that family-related social support was a positive predictor of family-to-work enhancement. For this sample, lower levels of spouse support and family support were associated with lower levels of family-to-work-facilitation.

Some research has focused on involvement in specific roles, such as parenting, community, and recreation, and how participation in each of these roles may facilitate the work role or the family role. Kirchmeyer (1993) examined the relationship between nonwork domain involvement (parenting, community, and recreation), time commitments to nonwork, and positive and negative nonwork to work spillover. Kirschmeyer found that domain involvement correlated positively with positive spillover from nonwork-to-work. Kirschmeyer proposes that with increased levels of domain involvement the benefits of that domain may become more pronounced and the positive side of spillover is heightened. Voydanoff (2004b) looked the relationship between community demands and resources on work-to-family conflict and work-to-family facilitation. She found that a sense of community and support from friends had a weak but significant positive relationship with work-to-family facilitation.

The quality of family roles has also been examined as a potential predictor of family-to-work facilitation. It is suggested that family-to-work facilitation is greater when the quality of the multiple roles an individual participates in within the family are viewed as positive. While there has been little research examining this proposition, some support has been reported. Brockwood, Hammer, and Neal (2003), in a longitudinal examination of the antecedents and outcomes of positive work-family facilitation, found that childcare role quality was a positive predictor of positive family-to-work spillover for both wives

and husbands. However, parent role quality and marital role quality were not significant predictors of positive family-to-work spillover as hypothesized.

Work characteristics. Work role characteristics are defined as work-based variables such as number of hours spend in paid work, organization culture, skill level, job involvement, job responsibilities and work expectations. There is much more research on the relationship between work characteristics and work-family facilitation than there is on the relationship between family characteristics and work-family facilitation.

Previous research has shown that the number of hours worked per week is associated with work-to-family facilitation. Grzywacz (2000), Grzywacz and Butler (2003), and Voydanoff (2004b), in their examinations of the relationship between time spent in paid work and work-family facilitation, reported that work hours significantly and positively predicted work-to-family facilitation. Wayne, Musisca and Fleeson (2004) reported a significant, positive relationship between number of work hours and family-to-work facilitation. Similar results were reported by Wayne, Randel, and Stevens (2003) in their examination of the relationship between organizational time demands, organization support (usage of family friendly benefits), family supportive work culture, and work-family facilitation. They report that organization time demands significantly and positively predict family-to-work facilitation. They also found that a family supportive work culture was a significant positive predictor of work-to-family facilitation. However, organization support (benefit usage) was not related to work-family facilitation.

Several studies have reported on the relationship between work demands and job role quality and work-family facilitation. Voydanoff (2004a, 2004b), in two different national surveys, examined the relationship between work demands and resources on

work-to-family conflict and work-to-family facilitation. Using data from the 1995 National Survey of Midlife Development in the United States, Voydanoff (2004b) reported that job autonomy and work pride showed strong positive associations with work-to-family facilitation and suggests that psychological rewards such as pride and respect may increase self esteem and gratification which may then be transmitted to the family through a positive psychological spillover process contributing to work-to-family facilitation. Using data from the 1997 National Study on the Changing Workforce, Voydanoff (2004a) reported that, having to work extra hours without notice, job insecurity, and work overload had significant negative relationships with work-to-family facilitation. With respect to resources, the availability of time-based family support policies, respect, work autonomy, and learning opportunity in the workplace had significant positive relationships with work-to-family facilitation.

Hill et al. (2003), Brockwood, Hammer, and Neal (2003), Guest (2001), and Grzywacz and Marks (2000) provide partial support for the above findings. Using data from the IBM 2001 Global Work and Life Issues Survey, Hill et al. examined the relationship between job responsibilities, workload, work related travel, use of work-family programs and work-family fit. He found that job workload and job travel were significant, though negative, predictors of work-family fit. In addition, the use of one work-family program, flextime, predicted work-family fit. Brockwood, Hammer, and Neal (2003), in a longitudinal examination of the work-family facilitation, found that job role quality (jobs that offer security, adequate pay, challenge, a supportive environment) was a significant positive predictor of positive work-to-family spillover.

Guest (2001), using data from the United Kingdom CIPD Survey of Psychological Contract and the State of Employment, examined the relationship between the family climate of work (support balance through policies and practices), participative work environment, work autonomy and work-family balance. A sample of 1,000 people in the working population were asked whether they felt they had the right balance between work and life outside of work. Guest found that those who report more scope for direct participation in determining work activities and work autonomy reported less imbalance and those who reported a family friendly work climate reported a better work-life balance. Clark (2000), for a sample of American workers, also found that autonomy over the content of work was associated with better work-life balance.

Finally, Grzywacz and Marks (2000) tested the relationship between work demands and resources and work-to-family enhancement and family-to-work enhancement. Although they did not find any support for the effect of demands on enhancement, work-related social support and decision latitude were both positive predictors of both forms of work-family enhancement. For this sample, the lower the level of decision latitude and support, from supervisor and coworkers, lower work-to-family facilitation was reported.

Outcomes of Work-Family Facilitation

Researchers have expressed more interest in the outcomes of work-family facilitation than they have to its potential predictors. The research on the outcomes of work-family facilitation has produced some insights into the positive side of the connections between work and family life. Research on the outcomes of work-family facilitation often used measures that only assess work-to-family facilitation. This is an

important limitation because recent conceptual models and research that has included both dimensions of work-family facilitation suggest that work-to-family facilitation and family-to-work facilitation have unique role related outcomes (Gryzwacz & Marks, 2000b).

Research findings indicate that individuals with greater work-family facilitation tend to be more satisfied with their lives (job, family, and life) (Crouter, 1984; Edwards and Rothbard, 2000; Brookwood, Hammer, & Neal, 2002; Barnett & Hyde, 2000). Work-family facilitation has also been found to be associated with better physical health, mental health, and psychological well being (Stephens, Franks, & Atienza , 1997; Gryzwacz, 2000; Gryzwacz & Marks, 2000b). For example, Hanson, Colton and Hammer (2003), for a sample of corporate and warehouse employees working for a large distribution center, found that positive work-to-family spillover predicted life satisfaction, family satisfaction, and job satisfaction. In their study, positive work-family spillover was made up of four dimensions: work-to-family affective spillover, family-to-work affective spillover, work-to-family instrumental spillover, and family-to-work instrumental spillover. They reported that work-to-family instrumental spillover predicted life satisfaction, that work-to family affective spillover and family-to-work instrumental spillover predicted family satisfaction, and that work-to-family instrumental spillover predicted job satisfaction.

Hansen, Colton, and Hammer (2003) suggest that people are more satisfied with their work if the values, skills, and behaviors they learn there are instrumental in helping them fulfill their family demands, and that the more useful a person's work is in this respect, the better his or her general well-being. They also propose that people are more

satisfied with their family if the values, skills, and behaviors learned in the family are instrumental in fulfilling their work demands. With respect to the relationship between work-to-family affective spillover and family satisfaction, they suggest that the spillover of positive mood from work-to-family results in better interpersonal interactions in the family domain, leading to greater family satisfaction. This idea is supported by the work of Edwards and Rothbard (2000).

The following review of the consequences of work-family facilitation is grouped into three categories: family related, work related, and psychological/physical well-being, that are discussed in turn.

Family Related Outcomes. Research shows that, for both men and women, work-family facilitation has been shown to have positive effects on family life. Work-to-family facilitation has been reported to have a positive effect on both family satisfaction and family effort. Research findings indicate that men and women who experience more work-family facilitation tend to be more satisfied with their nonwork role. For example, Stephens and Franks (1995), in their examination of the relationship between positive and negative spillover from the parent caregiver role and the wife role, found that positive spillover from the caregiver role to the wife role was significantly related to marital satisfaction; greater positive spillover from caregiver role to wife role was related to higher marital satisfaction. They also found that positive spillover from the wife role to caregiver role was a significant predictor of marital satisfaction.

Additional support of the positive relationship between facilitation and family/marital satisfaction is provided by Tiedie et al. (1990) and Brockwood, Hammer, and Neal (2003). Tiedie and her colleagues, for a sample of women with pre-school age

children, examined the effect of role conflict and role enhancement on satisfaction with their home role. For this sample, satisfaction with parenting was associated with level of perceived conflict and enhancement. Women who experienced low conflict and high enhancement experienced more parental role satisfaction than women in other combinations of conflict/enhancement perceptions. Brockwood, Hammer, and Neal (2003), in a longitudinal examination of the relationship between positive work-family spillover and family satisfaction found that positive work-to-family spillover significantly predicted family satisfaction for both wives and husbands. As noted previously, Brookwood, Hammer, and Neal found in this study that role quality was related to work-family spillover. They suggest that positive work-to-family spillover can possibly be increased by making changes to the quality of one's job, such as increasing autonomy or schedule flexibility, thereby increasing family satisfaction.

In addition to examining the relationship between facilitation and family/marital satisfaction, researchers have looked at the relationship between facilitation and family effort. Wayne, Musisca, and Fleeson (2003), for a national sample of 2,130 men and women, examined the relationship between work-family facilitation, family effort, and family satisfaction. They predicted that work-to-family facilitation would be related to greater family effort and family satisfaction. They found that work-to-family facilitation was not related to family satisfaction and was negatively related to family effort. Wayne, Musisca and Fleeson suggest that because work-to-family facilitation includes beneficial transfer of skills and behaviors from work to family, that this positive transfer of skills and behaviors made it easier to accomplish family role demands without having to put forth much effort. An unpredicted outcome of this study were a positive relationship

between family-to-work facilitation and family satisfaction. Wayne, Musisca and Fleeson propose that the positive effect of the transfer of skills and behaviors may be in the role seen as providing the benefits.

Work Related Outcomes. Researchers have also reported a positive relationship between work-family facilitation and work domain variables. A recent study by Wayne, Randal, and Stevens (2003) examined the relationship between both directions of facilitation and job satisfaction, organization commitment (affective, continuance, and normative), and intentions to leave. They hypothesized that individuals reporting high work-family facilitation would be more satisfied with their job, more committed to their organization, and less likely to have intentions to leave and that family-to-work facilitation would not be related to these work outcomes. They found, for a sample of 101 men and women, that work-to-family facilitation significantly predicted job satisfaction, continuance commitment, normative commitment, and negatively predicted turnover intentions, but did not predict affective commitment and that family-to-work facilitation was not related to any of the work outcomes. Wayne, Randal, and Stevens propose that individuals may assess the degree to which work provides support, status, and renewed energy which helps them in their family role. When they attribute their job as providing these positive things to themselves and their family, they may have a more positive attitude toward their job and organization. Several studies provide support for their findings, and are summarized below.

Wayne, Musisca, and Fleeson (2003), also examined the relationship between work-family facilitation, work effort, and work satisfaction. They predicted that family-to-work facilitation would be related to greater job effort and job satisfaction. They found

that family-to-work facilitation was positively related to job effort but not job satisfaction. Unpredicted outcomes of this study was a positive relationship between work-to-family facilitation and both job satisfaction and job effort. Again, Musisca and Fleeson propose that the positive effect of the transfer of skills and behaviors may be in the role seen as providing the benefits.

Fisher-McAuley et al. (2003) in two studies examined the relationship between work-life balance and the organizational outcomes job strain (pressure and threat), job satisfaction, and turnover intentions (non-work reasons for leaving and work reasons for leaving). They predicted a negative relationship between work-life balance and job strain and turnover intentions and a positive relationship between work-life balance and job satisfaction. The two studies provided partial support. Study one, comprised of a sample of 603 fitness professionals, found that work-life balance had a negative relationship with both measures of job strain and a positive relationship with job satisfaction as predicted. However, work-life balance was not related to both measures of turnover intention; it was negatively related to nonwork related turnover intention but not related to work reasons for leaving. Study two, comprised of 545 managers employed in a variety of organizations, found that work-life balance had a negative relationship with both measures of job strain and a positive relationship with job satisfaction. For this sample, life-work balance was not related to either form of turnover intentions. Results of this study support the notion that facilitation may be a resource for individuals in handling occupational stressors that lead to strains, including feelings of overall work strain, job satisfaction, and, to some extent turnover intentions.

Kirschmeyer (1992a, 1992b, 1993) investigated the extent to which individuals perceive that the privileges, status security, status enhancement, and personality enrichment associated with parenting, community activities, and recreation enhanced organization commitment and job satisfaction. Both organization commitment and job satisfaction were positively correlated with parenting, community, and recreation enhancement and several achieved significance. She reported that the outcome of multiple participation depended on role type. For her sample, only parenting was a significant predictor of organization commitment, while community and recreation were significant predictors of job satisfaction. Kirschmeyer (1992b) suggests that the type of skills developed outside of work that are useful at work may vary by nonwork domain. Kirschmeyer (1992a, 1992b) suggests that participation in nonwork roles may enhance a person's self esteem, skills, and perspectives and enhance their capacity to meet work demands and his/her importance to the organization. This enriching of personal resources may allow the individual to extend greater loyalty and effort toward organizational goals and create in him/her less vulnerability to the jobs dissatisfying attributes.

Brockwood, Hammer, and Neal (2003), in a longitudinal examination of work-family spillover and job satisfaction found that positive family-to-work spillover significantly predicted job satisfaction for both wives and husbands. As noted previously, Brookwood, Hammer, and Neal found in this study that role quality was related to work-family facilitation. They suggest that positive family-to-work spillover can possibly be increased by implementation of organizational programs to help support parenting efforts, such as parenting classes, day care, and flexible scheduling, leading to increased job satisfaction.

Psychological and Physical Well-Being. Research has documented the significant relationship between work-family facilitation and psychological and physical well-being. In general, work-family facilitation has been reported to be significantly related to better psychological and physical well-being.

In a series of studies of Barnett and her colleagues, the relationship between the occupancy and quality of multiple roles on psychological distress were examined. Barnett and Marshall (1992), for a sample of 409 women practical nurses and social workers, examined positive and negative spillover between employee and parenting role. They examined the relationship between role rewards and role concerns, overall role quality, positive and negative spillover, and psychological distress. They found no negative spillover effects. They found a positive spillover effect from job to parenting. Women with rewarding jobs were protected from the negative mental health affects of troubled relationships with their children.

Barnett, Marshall, and Sayer (1992) using the same sample of 409 women discussed above, looked at the job rewards to identify which mitigated the relationship between parent-role quality and psychological distress and which parental concerns were buffered by these mitigators. They found that challenging work was the only job reward factor that mitigated parental stress. If employed mothers experience higher reward from challenging work they reported less distress, regardless of their level of disaffection in their relationship with their children. If the reward from challenging work was low, employed mothers who were concerned about disaffection in their relationship with their children reported high psychological distress. They suggest that perhaps women who

enjoy rewards from challenging work experience greater self-esteem and confidence which enables them to cope with stressors in their relationships with their children.

Barnett (1994) examined the moderating effect of family role quality on job role quality and psychological distress. She found that when parental and marital role experiences are positive there was little relationship between job experiences and distress, but when parental and marital role experiences are negative there was a stronger relationship between job experiences and distress. They suggest that, for men and women dual earner couples, there is little separation between home and work, and that what happens in one domain affects what happens in other domains.

Several studies have examined the relationship between work-family facilitation and mental and physical well-being. For example, in a series of studies using cross sectional data from the National Survey of Midlife Development in the United States (MIDUS), Grzywacz and his colleagues report work-family facilitation was related to better mental health, fewer chronic health problems, fewer incidents of binge drinking, and better self-reported well-being. (Grzywacz, 2000; Grzywacz & Bass, 2003; Grzywacz, Johnson, & Hartwig, 2002; Grzywacz & Marks, 2000a).

Grzywacz and Marks (2000a) found that high levels of positive spillover from family to work was associated with lower odds of problem drinking, while high levels of positive spillover from work to family was associated with higher odds of problem drinking. Similar results were reported by Grzywacz, Johnson, and Hartwig (2002), using a subsample of participants in the MIDUS study who also participated in the National Study of Daily Experiences. They propose that family-to-work facilitation is an important family resource that individuals can draw upon to desensitize the meaning and impact of

enduring and specific forms of work-family tension. Work-to-family facilitation, however, strengthened the association between work-family conflict and binge drinking. They suggest that, given that the strongest known correlates of work-to-family facilitation are decision latitude, perhaps this effect is capturing some social characteristic of jobs (e.g., entertaining clients).

Grzywacz (2000) reported that higher work-to-family facilitation and family-to-work facilitation were associated with better mental health, and that higher family-to-work facilitation was significantly related to fewer chronic health problems and better self-reported well-being. He also found that work-to-family facilitation was associated with better physical health. Grzywacz and Bass (2003) examine the effects of work-family facilitation on a variety of health and well-being outcomes. They found that higher family-to-work facilitation was associated with lower risk of depression. Additional support for the relationship between facilitation and depression is provided by Tiedie et al. (1990). For a sample of women, Tiedie et al. found that depression was related to role conflict and role enhancement. For this sample, depression was associated with level of perceived conflict and enhancement. Women who experiences low conflict and high enhancement were less depressed than women in other combinations of conflict/enhancement perceptions.

Two other studies provide support for the relationship between facilitation and depression and physical health. Stephens and Franks (1995) concluded, based on their examination of the relationship between positive and negative spillover from the parent caregiver and the wife role and caregiver well-being, that positive role spillover was a significant predictor of physical health and depression. Although they did not find

support for the effects of positive spillover from caregiver role to the wife role on physical health, positive spillover was significantly related to depression and positive affect. They found that the higher the positive spillover from caregiver role to wife role, the lower reported depression and the higher reported positive effect. Stephens and Franks (1995) also found positive spillover from wife role to caregiver role was a significant predictor of depression. They propose that the experiences in each of the roles may enhance the caregiver/wife's perceptions of self-esteem and effectiveness in their caregiver/wife role and thereby are less likely to report depressive symptoms.

Stephens, Franks, and Atienza (1997), for a sample of 105 employed adult daughter caregivers, found these women both positive and negative experiences in the caregiver role spilled over to affect quality of experiences in the work role. Positive spillover generally was related to caregiver reported depression and positive spillover from work role to caregiver role was a significant predictor of positive affect. Good moods that spread from one role to the other was the most often reported type of positive spillover in both directions.

Finally, only one study examined the relationship between facilitation and life satisfaction. Sumer and Knight (2001) found both directions of positive spillover had a significant positive correlation with two overall life satisfaction measures.

Taken together, these findings indicate that work-family facilitation consistently relates to psychological and physical well-being and that the direction of influence is most often to improving psychological and physical well-being.

Current Study

Component of Work-Family Facilitation Defined

Because there has been little theoretical research on work-to-family facilitation and family-to-work facilitation, only a few sources of work-family facilitation have been identified. However, most researchers agree that role experiences, role skills, and role attitudes in one domain facilitate participation in the other domain (Friedman & Greenhaus, 2000; Grzywacz, 2000; Grzywacz & Marks, 2000b; Kirchmeyer, 1993; Tiedie et.al., 1990, Voydanoff, 2004a). The experiences encountered in a role refer to the opportunities, information, and resource gains associated with a given role. Skill transfer occurs when a skill acquired/used at work (home) is used in performing family- (work-) related activities or responsibilities. Role attitude refers to the emotional gratification, such as an increased sense of meaning, personal worth, and purpose, received by participation in a role. As such, the following definitions were used to guide scale development in the current study. *Work-to-family facilitation* is a form of role facilitation in which the experiences in the job, job skills, and emotional gratification from the job facilitate performing family-related responsibilities/activities. *Family-to-work facilitation* is a form of role facilitation in which the experiences in the home, family skills, and emotional gratification from the home facilitate performing work-related responsibilities/activities.

Relations With Other Variables

Investigating the construct validity of the work-family facilitation subscales developed in this study calls for a number of predictions to be advanced. These

predictions pertain to the relationship between work-to-family facilitation and family-to-work facilitation and other work and nonwork constructs.

Work Constructs. Research suggests that there is an inverse relationship between work overload and work-to-family facilitation and family-to-work facilitation (Hill et al., 2003; Voydanoff, 2004a, 2004b). Thus, negative correlations between work overload and the work-to-family facilitation and family-to-work facilitation scales are predicted.

It has been suggested that work-to-family facilitation and family-to-work facilitation should be positively associated with work autonomy (Guest, 2001; Voydanoff, 2004a, 2004b), time spent in paid work (Grzywacz, 2000; Grzywacz and Butler, 2003; Voydanoff, 2004b; Wayne, Musisca, & Fleeson, 2004), work schedule flexibility (Voydanoff, 2004b), and job satisfaction (Brockwood, Hammer, & Neal, 2003; Fisher-McAuley et al., 2003; Hanson, Colton, & Hammer, 2003). Thus, positive correlations between these variables and the work-to-family facilitation and family-to-work facilitation scales are predicted. Prior research also indicates that work-to-family facilitation is more strongly related to job satisfaction than family-to-work facilitation (Wayne, Musisca, & Fleeson, 2004; Wayne, Randall, & Stevens, 2003). Given these findings, it is predicted that work-to-family facilitation correlates more strongly with job satisfaction than family-to-work facilitation.

Nonwork Constructs. Research suggests that there is not a significant association between the dimensions of work-family conflict (work-to-family and family-to-work) and work-family facilitation (Voydanoff, 2004a, 2004b) and that when a relationship is found that it is a weak relationship (Sumer & Knight, 2001; Voydanoff, 2004a, 2004b; Wayne, Musisca, & Fleeson, 2004). Thus, it is predicted that there will be no relationship

between the two dimensions of work-family conflict and work-to-family facilitation, and if a relationship does exist, it will be weak.

Research suggests that there is an inverse relationship between psychological distress and work-to-family facilitation and family-to-work facilitation (Gryzwacz, 2000; Stephens & Franks, 1995). Thus, negative correlations between psychological distress and the work-to-family facilitation and family-to-work facilitation scales are predicted. Prior research also indicates that work-to-family facilitation correlates more strongly with psychological distress than family-to-work facilitation (Stephens, Franks, & Atienza, 1997). Thus, it is predicted that work-to-family facilitation correlates more strongly with psychological distress than family-to-work facilitation.

It has been suggested that there is an inverse relationship between family-to-work facilitation and parental demands and that parental demands is not related to work-to-family facilitation (Kirchmeyer, 1993). Thus, it is predicted that there will be a negative correlation between family-to-work facilitation and parental demands and no relationship between work-to-family facilitation and parental demands.

For the variables life satisfaction, family satisfaction, number of children living at home, and number of hours spent in household chores a positive relationship with work-to-family facilitation and family-to-work facilitation has been suggested (Hanson, Colton, & Hammer, 2003; Wayne, Randel, & Stevens, 2003). Thus, positive correlations between the work-to-family facilitation and family-to-work facilitation scales and these variables are predicted. Prior research also indicates that family-to-work facilitation is more strongly related to family satisfaction than work-to-family facilitation. Thus, it is

predicted that family-to-work facilitation will correlate more strongly with family satisfaction than work-to-family facilitation.

METHOD

The procedures followed in developing the Work-Family Facilitation Scale closely adhered to those described in the psychometric literature (Cortina, 1993; DeVellis, 1991; Nunnally & Bernstein, 1994; Schriesheim, Powers, Scandura, Gardiner, & Lankau, 1993; Spector, 1992). After construct definition, these procedures included item generation and judging, examination of dimensionality and internal consistency, and construct validity assessment.

Item Generation and Judging

Based on the theoretical framework outlined above and a literature review of previous studies examining work-family facilitation, two subscales were developed to measure the two dimensions of work-family facilitation, work-to-family facilitation and family-to-work facilitation.

Procedure

The item derivation process was divided into three phases.

Phase 1: Review of Literature and Existing Work-Family Facilitation Scales

Items were collected from an examination of previously published sources that were believed to represent the two dimensions of work-family facilitation and three characteristics of each domain (role experience, role attitude, and role skill). Items for inclusion were selected from the scales used in prior research (Hanson, Colton, & Hammer, 2003; Kirchmeyer, 1992a, 1992b, 1993; MacArthur Foundation Research

Network on Successful Midlife, National Survey of Midlife Development in the United States, n.d.; Small & Riley, 1990; Stephens, Franks, & Atienza, 1997; Sumer & Knight, 2001; Voydanoff, 2004; and Wayne, Randel, & Stevens, 2003).

Phase 2: Focus Groups

To help in the generation of an adequate pool of items, focus groups were held. The primary goal of focus groups is to learn about participants' attitudes and opinions by asking them to respond to a set of focused, structured, open-ended questions. In addition, focus groups provide an opportunity to learn more about participants' experiences and perspectives that would not be as accessible through the use of questionnaires. Through group interaction, participants share and compare their ideas and experiences. This interaction process provides an opportunity to collect information on how participants themselves understand their similarities and differences (Morgan, 1997). Some of the advantages of focus groups versus individual interviews include 1) a greater amount of information can be gathered more efficiently, 2) group synergy fosters more creative thought, ideas, and expressions, and 3) the peer validation that is inherent in focus groups can serve as a catalyst to generating a broader discussion of the topic of interest (Nassar-McMillan & Borders, 2002).

Morgan (1997) states that focus groups can contribute to the creation of survey items in three basic ways. First, focus groups can help the researcher capture all the domains that need to be measured in the survey. The use of focus groups can ensure that the researcher has as complete a picture as possible of what is relevant to the topic rather than relying on assumptions of what is relevant. Morgan notes that although the use of interviews can also provide this kind of insight about the domains that should be

measured in a survey, focus groups have the general advantage of providing access to a wide range of perspectives in a short time.

Second, in addition to locating all of the domains, focus groups are an efficient method for determining the dimensions that make up each of the domains. Focus groups can generate a large number of ideas about the categories of items that are needed in the survey to ensure each of the domains are covered (Morgan, 1997). Third, focus groups can assist in the creation of survey items by providing item wording that reflects the researcher's intent to survey respondents. The group interactions inherent in focus groups provide the researcher with insights on ways of expressing an idea that will not only resonate with the potential respondents but will also minimize questions and confusion.

Focus group participants. A sample of male and female employees in support and professional positions at the University of South Florida was selected for participation in this study. The sample was selected in the following way. A list of full-time employees who indicated on their W-4 that they were married and/or had at least one dependant or whose personnel record indicated that they were married was obtained from the university's human resources department. The list received contained 1,431 names and included the following information: name, employee ID, department ID, department, campus mailing address, salary plan (professional or support staff), marital status, number of dependents reported on W-4, and FTE (full-time equivalent).

Focus group recruitment procedure. Simple random sampling was used to select subjects. The sample size objective for the focus groups was a minimum of 50 participants or until no new information was obtained from a minimum of two consecutive focus group sessions. Four random samples of 100 each were drawn

approximately one week apart, for a total of 400 subjects. This was done for logistical and planning purposes.

Telephone numbers and e-mail addresses of the selected respondents were obtained by a search of the university's web-based employee directory. If the selected respondent's name was not found or if no telephone number or e-mail address was found, no attempt was made to contact the selected respondent. Initial contact of selected respondent's was by telephone. If the respondent did not answer the telephone after two attempts, contact was made by e-mail. If the respondent had voice mail, a voice mail message describing the purpose of the contact and a return telephone number was left. If the selected respondent did not return the call within five days, a return call was made. If the selected respondent was not reached on the second attempt, contact was made by e-mail. The telephone recruitment script and the text of the initial contact e-mail are attached as Appendix A.

There were two eligibility requirements: 1) have at least one child under the age of 18 living at home and 2) work at least 32 hours per week. These criteria were used to ensure that respondents were suitable for the proposed research study. Of the 400 selected participants, 15 were no longer employees of the university, 13 did not have a telephone number or e-mail address listed in the university directory, 11 were not able to take personal telephone calls during work time, and two did not answer the telephone and did not have voice mail or an e-mail listing. Of the remaining 360, contact was made with 276 (76.9%). The remaining 83 did not reply to telephone and/or e-mail messages. Of the 276 individuals contacted, 122 declined to participate in the study and 81 did not meet the

eligibility criteria. Sixty-one of the 74 selected participants eligible to participate agreed to attend one of the focus groups.

Confirmation of scheduled participation and an informed consent form were sent by campus mail or by e-mail prior to the scheduled session. The day before each focus group, participants were contacted by telephone or e-mail to remind them of their scheduled participation. If participants did not show up for their scheduled focus group session, contact was made by telephone or by e-mail and they were offered the opportunity to reschedule if they so desired. A copy of the acknowledgement letter, acknowledgement e-mail, and informed consent are attached as Appendix B.

Focus group sessions. Twelve focus groups were held, with five to seven individuals scheduled to participate in each session. Of the 61 subjects who agreed to participate in a focus group, 36 participated. The size of the focus groups ranged from two to five participants. Because no new material was obtained in the last four sessions, no additional focus groups were scheduled. Sixty-nine percent of the sample were women and 86% were married. Forty-seven percent of the sample were support staff and 53% were professional staff.

Each focus group session followed the same procedure and consisted of introductions, a brief description of the purpose of the study, confirmation of participants' consent to audiotape the discussion, review of focus group groundrules and instructions for participation, asking questions, and closing. A copy of the discussion guide is attached as Appendix C. Participants were asked to respond to four questions: (1) When you hear the words work-family balance, what comes to mind? (2) What sorts of job experiences, skills or attitudes have made it easier for you to perform your family-related

responsibilities? (3) What sorts of family experiences, skills or attitudes have made it easier for you to perform your work-related responsibilities? (4) Of all the things we discussed on the topic of work and family making it easier for you to perform your responsibilities in the other domain, which one thing has been the most benefit to you?

The questions were asked in the same order for each focus group. Key points were recorded on a flip chart and at the end of each session key ideas that emerged were reviewed with participants and they were provided the opportunity to describe additional situations or experiences where the work and/or family role facilitated the other role. Following each focus group session, the audiotape of the session was transcribed. A master transcript that combined all of the sessions was prepared following the last session.

Phase 3: Rating by Expert Judges

To ensure content adequacy (validity) of the two work-family facilitation subscales, to reduce the pool of items to a manageable number, and to categorize each item into one of the three dimensions (role attitude, role experience, and role skill) of work-family facilitation, the items resulting from the literature review and generated based on qualitative data gathered in the focus groups were reviewed by a panel of researchers involved in research in the field of work-family life. Five faculty members from other universities were asked to judge the items for representativeness and to classify each of the items into one of the three dimensions of work-family facilitation: role attitude, role experience, or role skill. Four of the five judges returned completed rating forms. Two judges have been active in the study of work and family life since the late seventies to early eighties and two judges entered the field in the mid-nineties. In

addition, the judges have similar, but different, areas of specialization. Two judges are interested in work-family linkages, one's research interests focus on the sociology of the family, and the other's focuses on career and adult life development.

Judges were given rating forms and instructions concerning how to complete the forms. The rating form included the construct definitions and the definition of the three dimensions of work-family facilitation. The rating form instructions asked the judges to rate each work-family facilitation item on a 1 to 5 likert-type magnitude scale. The judges were asked to evaluate each item as *not representative*, *somewhat representative*, *moderately representative*, *very representative*, or *completely representative* of the definitions. The judges were also asked to categorize each item as belonging to one of the three dimensions of work-family facilitation: *role experience*, *role skill*, or *role attitude*. Finally, the judges were asked to provide feedback on how to improve the clarity and/or conciseness of each item. A copy of the rating forms and instructions concerning how to complete them are attached as Appendix D. Four of the five subject matter experts returned completed rating questionnaires.

Dimensionality and Internal Consistency and Construct Validity Assessment

Participants

A sample of male and female employees in staff and professional positions at the University of South Florida were selected for participation in this study. A list of employees who worked at least 32 hours per week (.80 FTE) and had indicated on their W-4 that they were married or had at least one dependant was obtained from the university's human resources department. The list received contained 2,020 names and included the following information: name, department, campus mailing address, salary

plan (professional or support) marital status, and number of dependents reported on W-4. Because a large sample size was desired, all employees on the list were included in this study.

Procedure

A letter (Appendix E) was sent to all participants stating how their names were obtained and explaining the nature of the study. The letter explained that participation was entirely voluntary and that their employer would not have access to their response. Participants were told that the survey would take about 40 minutes to complete and were asked to complete the survey on their own and return the completed survey document and informed consent via campus mail within 20 days. A follow-up reminder, emphasizing the importance of the study and of a high rate of response, was sent within 30 days after the initial mailing to those participants who had not returned a questionnaire or who had not indicated to the researcher that they would not be participating in the research study. The follow-up reminder was sent via e-mail to participants with access to e-mail and a letter was sent to those without access to e-mail. A copy of the letter and e-mail are attached as Appendix F.

A total of 176 questionnaires were returned, a response rate of 8%. Upon receipt of returned questionnaires, the demographic data were reviewed to determine eligibility. There were three eligibility requirements: 1) married or living as married, had at least one child under the age of 18 living at home, or both 2) work at least 35 hours per week, and 3) provide complete data on all measures described below. These criteria were used to ensure that respondents were suitable for the proposed research study. Of the 176 questionnaires returned, 166 became usable for further analysis. Of the 166 respondents,

116 were women, 139 were married, and 119 had children under the age of eighteen living at home. The mean age of the sample was 43; the mean age of men and women was 45 and 42 respectively. The sample mean tenure with the organization was 8 years, and the mean tenure in their current position was 5 years. Seventy-seven percent of the sample was white, 10% was Black, 8% was Hispanic, and the rest was Asian or Pacific Islander and other. Twenty-eight percent of the sample had graduate or professional degrees, 11% had completed some graduate level or professional school coursework, 27% had undergraduate degrees, 23% had completed some undergraduate coursework, and the rest had a high school education or less. Forty-nine percent of the sample held supervisory positions. Thirty-one percent of the sample held professional positions, 30% held managerial or administrative positions, and the rest held clerical (22%), technical (12%) or semi-skilled/unskilled (6%) positions.

Instruments

The questionnaire included in this survey included over 150 items, including 69 work-family facilitation items. Subjects responded to the 69 work-family facilitation items. These items were responded to along a 7-point strongly disagree-strongly agree response scale. The other measures included in the questionnaire are listed below, accompanied by a brief description of the measures and instruments used in their assessment.

Work-Family Conflict and Family-Work Conflict

Netemeyer, Boles, and McMurrian's (1996) scales which measure work-family conflict and family-work conflict were used to measure these two aspects of respondents' level of conflict between work and family roles (see Appendix G). Both the work-family

conflict and family-work conflict scales are composed of five items each. Respondents were asked to respond on a 7-point likert scale, ranging from strongly disagree (1) to strongly agree (7). Items were summed to reflect individual scores for the work-family conflict and family-work conflict measures. A high score represents a high level of work-family (family-work) conflict. Acceptable levels of reliability have been reported for both scales ranging from .88 to .89 for the work-family conflict scale and from .83 to .89 for the family-work conflict scale (Netemeyer, Boles, & McMurrin, 1996). The alphas for the present study were .89 and .86, respectively.

Work Role Overload

Work role overload was measured using a five item subscale of the Organizational Role Stress Scale developed by Pareek (1983) (see Appendix H). Respondents were asked to respond on a 7-point likert scale, ranging from strongly disagree (1) to strongly agree (7). High scores on the role overload scale represent high levels of role overload. The role overload scale has retest reliability of .73 (Pareek, 1983). The alpha for the present study was .90.

Autonomy

Autonomy was measured using the three autonomy items from Hackman and Oldham's (1980) Job Diagnostic Survey (see Appendix I). Respondents were asked to respond on a 7-point likert scale. One question asked respondents to rank the extent to which they have decision latitude on their job and responses range from very little (1) to very much (7). The two other questions ask respondents to indicate how accurate the statements are in describing their job and responses range from very inaccurate (1) to

very accurate (7). A high score on the scale represents a high level of autonomy. The alpha for the present study was .72.

Work Hours

The number of hours worked per week was assessed by asking respondents to record the standard number of hours worked per week, whether at their place of work or at home, and the time spent each day commuting to and from work. The sum of these two items provides an index of the total number of hours devoted to job related activities.

Home Chores

The number of hours spent on home chores per week was measured by adding together the number of hours listed for each of the following: hours per week spent on household chores (e.g., planning meals, food preparation and clean-up, cleaning), hours per week spent on household maintenance (e.g., yard work, household repairs), and hours per week spent on household shopping (e.g., groceries, household supplies).

Parental Demands

Parental demands was measured by asking respondents to record the number of hours per week spent on child care activities (e.g., chauffeuring children, attending functions with children, daily care of children).

Job Satisfaction

Job satisfaction was measured using five items from Hackman and Oldham's (1980) Job Diagnostic Survey (see Appendix J). Three questions asked respondents how satisfied they are with their job on a 7-point likert scale, ranging from extremely dissatisfied (1) to extremely satisfied (7). Two questions asked respondents to indicate their agreement with statements about how satisfied others are with the same job. A high

score on the scale represents a high level of job satisfaction. The alpha for the present study was .80.

Family Satisfaction

Family satisfaction was measured using a modified version of the 20 item general family satisfaction scale developed by Carver and Jones (1992). Because the scale was developed as a measure of satisfaction with one's family of origin, items were reworded to measure satisfaction with one's family of procreation (see Appendix K). Carver and Jones (1992) report acceptable levels of reliability, coefficient alpha of .95, and satisfactory temporal stability of the scores, test-retest correlation of .88. Respondents were asked to respond on a 7-point likert scale, ranging from extremely dissatisfied (1) to extremely satisfied (7). A high score on the scale represents a high level of family satisfaction. The alpha for the present study was .90.

Life Satisfaction

Life satisfaction was measured using a five item satisfaction with life scale developed by Diener, Emmons, Larson, and Griffin (1985) (see Appendix L). Respondents were asked to respond on a 7-point likert scale, ranging from extremely dissatisfied (1) to extremely satisfied (7). A high score on the scale represents a high level of life satisfaction. Acceptable levels of reliability have been reported, ranging from .82 to .88 (Carlson & Kacmar, 2000; Carlson, Kacmar, & Williams, 2000; Diener, et al., 1985; Hanson, Colton, & Hammer, 2003; and Lucas, Diener, & Suh, 1996) and acceptable test-retest reliability (.82) (Diener, et al., 1985). The alpha for the present study was .89.

Psychological Distress

Psychological Distress was measured using the Center for Epidemiological Studies' Depression Scale (see Appendix M). Developed by the National Institute on Mental Health (Radloff, 1975), the Center for Epidemiological Studies' Depression Scale was designed to measure depressive symptoms in the general population. Respondents were asked to report the frequency of occurrence in the previous month of 20 symptoms, such as feeling sad, having restless sleep, or not feeling hopeful about the future. The 20 item scale has been used in previous work-family research and has an acceptable level of reliability, ranging from .88 to .90 (Googins & Burden, 1987; Kandel, Davies, & Raveis, 1985; and Radloff, 1975). The alpha for the present study was .89.

Demographic Variables

Demographic information was gathered in order to gain an understanding of the characteristics of the sample (see Appendix N). Gender was measured by responses to a dichotomous item coded 0 for male and 1 for female. Marital status was assessed by responses to a dichotomous item coded 0 for married/living as married and 1 for single. Age, children living at home, age of children living at home, tenure in current position, and tenure in organization were measured with single open-ended items. For data analysis purposes, children living at home was coded as 0 = no children living at home and 1 = children under the age of 18 living at home. Ethnicity was measured by a five category scale (1 = Asian or Pacific Islander, 2 = Black, 3 = Hispanic, 4 = White, 5 = Other). Type of position (supervisory or nonsupervisory) was assessed by responses to a dichotomous item coded 1 for supervisory and 2 for nonsupervisory. Education was measured by a five category scale (1 = high school graduate, 2 = some college, 3 =

college graduate, 4 = some graduate or professional school, and 5 = graduate or professional degree). Occupational level was measured by a six category scale (1 = professional, 2 = managerial or administrative, 3 = clerical or sales, 4 = technical, 5 = semi-skilled or unskilled, and 6 = other).

RESULTS

Item Generation and Judging

Phase 1: Literature Review

A review of existing scales focused on identifying items for inclusion that were felt to capture the domain elements of the constructs as previously discussed. Some items required slight wording modifications to fit the likert-type format used in this analysis. A total of 71 items was collected in this phase of item generation. Of these, 34 items reflected work-to-family facilitation and 37 items reflected family-to-work facilitation (see Appendix O).

Phase 2: Focus Groups

The master transcript was reviewed and, by counting the frequency with which certain themes emerged during focus group sessions, common themes were identified. The most common themes were selected to develop into quantitative indices. Consistent with prior research, three general indices of work-family facilitation emerged: role experiences, role skills, and role attitudes (Friedman & Greenhaus, 2000; Grzywacz, 2000; Grzywacz & Marks, 2000b; Tiedie et.al., 1990; Voydanoff, 2004a). Examples of how work facilitates participation in the family focused on the useful skills and attitudes acquired at work and having a supportive work environment. For example, one participant spoke about attitudes acquired at work and put to use in the home:

When I come home and I feel satisfied or proud of something, I think that that reflects in my attitude with the kids.

A student advisor explained how her work had taught her and her family lessons that paid off in the home:

Working here has given my family an awful lot of different experience in terms of the types of people that they meet . . . I have learned a lot about multiculturalism and diversity and how to interact with different diverse groups of people.

Examples of facilitation from family to work focused on the supportive nature of family relationships and the useful skills and attitudes that are acquired at home and put to use in other settings, including work. For example, a set designer spoke about how his supportive family relationship made the occasional inconveniences of the job easier to handle:

I think your family support you, you know as far as believing in what you are doing. Especially my wife helps me. If there is an issue I am dealing with at work I discuss it with her and she will give me her ideas and opinions.

A supervisor explained how her family had taught her lessons that paid off on the job:

Parenting skills are also good supervisory skills. Learning how to talk to someone in private instead of yelling at them in front of their friends, how to correct them without demeaning them, protecting their feelings.”

Thirty-eight items were generated such that a total of 108 items served as the initial pool of statements. Of these, 54 items each were generated to reflect work-to-family facilitation and family-to-work facilitation. Twenty-three role attitude, 22 role experience, and 9 role skill items reflected family-to-work and work-to-family facilitation.

Phase 3: Rating by Expert Judges

A consensus estimate of interrater agreement for judges' ratings of representativeness and of assigning items into categories was used. Consensus estimates

are useful when different levels of the rating scale represent a linear continuum of the construct, but are ordinal in nature, such as the likert scale used by the judges in rating the representativeness of facilitation items. Consensus estimates are also useful as a measure of interrater reliability when data are nominal in nature and different levels of the rating scale represent qualitatively different idea, as is the case with the expert judges' categorization of work-family facilitation items. A typical guideline for evaluating the quality of interrater reliability based on percent agreement is that percent agreement should be 70% or greater (Stemler, 2004).

For the judges' ratings of representativeness, a modification of the percent agreement method for calculating consensus estimates was utilized. The method included adjacent scoring categories on the rating scale (i.e. as long as the ratings did not differ by more than one point above or below the other judges, the judges were said to have reached consensus). As noted by Stemler (2004), this method is beneficial because it relaxes the strict criterion that the judges agree exactly. While this approach can lead to inflated estimates of interrater reliability if there is a limited number of categories to choose from, it is an acceptable method if the number of categories to choose from is greater than four.

There was little agreement among the four judges on ratings of the representativeness of items, with percent agreement reaching only 37%. When three judges at a time were considered, the values were not much higher, ranging from 33% to 48%. When two judges at a time were considered, the values were higher, but, with one exception, did not reach 70%. Judge 1 and Judge 2 percent agreement was 86%. Values for the other two judge combinations ranged from 30% to 68%.

Because there were only three categories for judges to choose from in categorizing items, a simple percent agreement was calculated based on exact agreement, e.g., all judges had to categorize the item the same. As with the judges' ratings of representativeness, there was little agreement among the four judges in categorizing the items, with percent agreement reaching only 30%. When three judges at a time were considered, the values were not much higher, ranging from 30% to 58%. When two judges at a time were considered, the values were higher, but, with two exceptions, did not reach 70%. Judges 1 and 2 and Judges 1 and 3 percent agreement was 74% and 75% respectively. Values for the other two judge combinations ranged from 35% to 65%.

Only when two judges (Judge 1 and Judge 2) were considered did the percent agreement with respect to item representativeness and categorization surpass 70%. Therefore, only the ratings of Judge 1 and Judge 2 were used for item reduction purposes. Those items that these two judges rated as "very representatives" or "completely representative" of the construct definition and classified the same were retained. This analysis reduced the pool to 69 items: 32 from a total of 54 work-to-family facilitation items (8 role attitude, 17 role experience, and 7 role skill) and 37 from a total of 54 family-to-work facilitation items (8 role attitude, 23 role experience, and 6 role skill). Finally, the comments received from all four judges were reviewed and several items were reworded. Appendix O lists the 108 items included in the final questionnaire distributed to study participants, and includes the classification of each item.

There are several possible reasons for the lack of agreement among the subject matter experts. First, as noted by Gwet (2001), the subject sample, in this case items, should be representative of the target subject universe, in this case the proposed

dimensionality of work-family facilitation. The selection of items to include on the subject matter expert rating scales may have been biased. In particular, not all items from the scales used in previous research were included in order to prevent significant redundancy in items. Perhaps those items that were excluded from this study may have been better exemplars of the dimensionality of work-family facilitation and resulted in higher inter-rater agreement.

Second, the lack of inter-rater agreement suggests that the raters did not have a common interpretation of the constructs of interest. As noted by Stemler (2004), consensus estimates of inter-rater reliability are based on the assumption that raters should be able to come to exact agreement about how to apply the various levels of a scoring choices to the items. A lack of training on how to interpret the constructs or items and on how to use the rating scale could have led to this lack of agreement. The procedure followed to obtain subject matter expert ratings and classification of items was not an interactive process. The subject matter experts may not have been provided sufficient information to ensure that they had a common interpretation of the definitions provided of the two components of work-family facilitation and the three dimensions of facilitation within each component, leading to a lack of agreement. In addition, the raters were also not afforded the opportunity to seek clarification on how to use the rating scale. Some of the raters may have been more experienced in the use of the rating procedures, leading to a lack of agreement. Additional training on the constructs to ensure a common interpretation and on the use of the rating scale to ensure a common usage of the scale may have resulted in higher inter-rater agreement.

Finally, in general, it is expected that raters from one professional group will agree among themselves to a greater extent than if they are included in a group with raters from different professional groups (Gwet, 2001). However length of experience and area of specialization may have an impact on inter-rater agreement. As previously mentioned, in the current study, raters may have been more like to classify an item as representative (or not representative) of work-family facilitation based on the knowledge and experience they have due to the number of years they have been studying the interrelationship between work and family life. The two raters who reached 86% agreement on the representativeness of items and 74% agreement on the categorization of items have been active in the study of work and family life from the late seventies to early eighties. The other two raters entered the field in the mid-nineties. In addition, the raters have similar, but different, areas of specialization. For example, although the two raters who reached agreement both are interested in work-family linkages, one's research interests focus on the sociology of the family while the other's focuses on career and adult life development. These rater specific characteristics may have contributed to a lack of agreement between the raters. Rater selection techniques that take into account rater specific characteristics may have resulted in higher rater agreement.

Dimensionality and Internal Consistency

The Work-Family Facilitation Scale was analyzed in two ways. First, item analysis was conducted on each subscale and the total scale to examine internal consistency and homogeneity (i.e., alpha coefficients, correlations of each item with its assigned subscale and with the total scale, and subscale intercorrelations). Second, factor

analysis was conducted to determine whether the work-to-family facilitation and family-to-work facilitation subscales were tapping two distinct dimensions of facilitation.

Item Analysis

The purpose of item analysis is to identify those items that measure the same construct and eliminate those items that do not measure the same construct (DeVellis, 1991; Spector, 1992). Standard psychometric analysis showed that the items on the Work-Family Facilitation Scale were highly reliable internally, both for the total scale ($\alpha = .98$) and for the two subscales (work-to-family facilitation and family-to-work facilitation, $\alpha = .96$). The correlation between the two subscales was .73.

The 69 items included in the Work-Family Facilitation Scale had item-total correlations ranging from .36 to .78, with 88% of the items having an item-total correlation greater than .50. The mean score on items ranged from 3.5 to 5.8. Examination of what alpha would be if an item was deleted showed that the deletion of any item would not improve alpha.

Factor Analysis

An exploratory factor analysis of the correlation matrix using principle factor analysis procedures with squared multiple correlation (SMC) communality estimates and oblique rotation was conducted. Factor analysis was performed to determine the factor structure and to determine whether additional items should be deleted. While a particular number and pattern of relationships was expected, which would support using confirmatory factor analysis (Rummel, 1988), the inability of the subject matter experts to reach agreement in categorizing the items, particularly into the experience and attitude dimensions, led to a decision to use exploratory factor analysis to detect the structure of

the data. Common factor analysis was chosen because it is more appropriate when the objective of the analysis is to extract a small number of factors to account for the intercorrelations among the observed variables – to identify the latent dimensions that explain why the variables are correlated with each other (Rummel, 1970). The squared multiple correlation for each variable was used as it is the best estimate for initial commonalities both theoretically and empirically (Rummel, 1970). In addition, an oblique rotation method was used because the item analysis showed that the components of work-family facilitation were correlated at .73 and a correlation between the latent variables under examination was expected (Rummel, 1970). Four criteria were used to determine the number of factors to be extracted for the final factor solution: (a) Kaiser's criterion (eigenvalues greater than 1.0), (b) scree test (examination of a plot of eigenvalues for noticeable drops), (c) percentage of total variance explained, and (d) interpretability of the solution, using factor loadings greater than or equal to .40 (Rummel, 1970).

Bryant and Yarnold (1995) recommends that the subjects-to-variables ratios should be no lower than 5 to 1 to have confidence in the results of factor analysis. Because sample size was only 161, the maximum number of items that could be retained for examination of the dimensionality of the work-family facilitation scale was 32. To maintain a high level of internal consistency, the 30 items with the highest correlations with the total scale were reviewed in conjunction with the 15 items from each of the subscales with the highest correlations with the total subscale. Items were selected for inclusion in additional exploratory factor analysis procedures if they were among the 30 highest correlations with the total scale and they were among the 15 highest correlations

with their respective subscale. This process resulted in 26 items, 13 from each subscale. The work-to-family facilitation items represented each of the proposed dimensions as follows: 6 role skill items, 5 role experience items, and 2 role attitude items. The family-to-work facilitation items represented each of the proposed dimensions as follows: 5 role skill items, 6 role experience items, and 2 role attitude items.

The 26 items were subjected to principle factor analysis procedure as described above to determine the impact of deletion of items on the factor structure and to determine if additional items should be deleted. For both subscales, Kaiser's criterion suggested that one factor was extracted, scree test suggested that one to four factors be retained, and percentage of variance explained suggested that after one factor was extracted the remaining variance was due to random error. The factor pattern and structure matrices of the one, two, and three factor solutions were examined. Tables 1, 2, and 3 present the pattern and structure coefficients from this exploratory factor analysis for the work-to-family facilitation subscale and Tables 4, 5, and 6 present the pattern and structure coefficients from this exploratory factor analysis for the family-to-work-facilitation subscale.

For the work-to-family facilitation items, a comparison of the results indicated that the one factor solution provided the most meaningful interpretation of the data. Although, for the most part, items loaded on only one factor for the two and three factor solutions, the factors were uninterpretable as the experience, skill, and attitude items did not cluster together. The one factor solution accounted for 61.37% of the total variance.

For the family-to-work facilitation subscale, a comparison of the results indicated that the two factor solution provided the most meaningful interpretation of the data. The

role experience and role attitude items had high loadings, ranging from .52 to .84, on one factor, while the role skill items had high loadings, ranging from .48 to .95, on the other factor. The two factor solution accounted for 46.23% of the total variance, with the experience/attitude factor accounting for 24.86% and the skill factor accounting for 21.38% of the variance in the data.

For the 26-item total scale, Kaiser's criterion suggested that two factors be retained, a scree test indicated that two to four factors be retained, and percentage of variance explained indicated that after two factors were extracted the remaining variance was due to random error. Factor analysis of two, three, and four factor solutions were examined. A comparison of the results indicated that the two factor solution provided the most meaningful interpretation of the data, with the majority of the work-to-family facilitation items loading on one factor and the majority of the family-to-work facilitation items loading on the other factor. Tables 7, 8, and 9 present the pattern and structure coefficients from this exploratory factory analysis.

The 13 items of the work-to-family facilitation subscale had high loadings, ranging from .42 to .93, on one factor while the 13 items of the family-to-work facilitation subscale had high loadings, ranging from .58 to .90, on the other factor. One item loaded equally on both factors and was deleted from further analysis. The two factor solution accounted for 53.49% of the total variance, with the work-to-family facilitation factor explaining 27.31% and the family-to-work facilitation factor explaining 26.18% of the variance in the data. Coefficient alpha of the work-to-family facilitation subscale was .95 and item-whole correlations ranged from .65 to .86 with a mean of .76. Coefficient alpha of the family-to-work subscale was .95 and item-whole correlations

Table 1. Factor Analysis Pattern and Structure Coefficients for the Initial 13-Item Work-to-Family Facilitation Subscale, One Factor Solution

Item		Factor 1
WFF16	I am better able to perform my family responsibilities as a result of skills acquired at work (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)	0.88
WFF27	The skills that I have developed at work help me perform my family responsibilities. (Role skills)	0.86
WFF18	My job develops skills in me that are useful for completing family responsibilities (Sumer & Knight, 2001, reworded). (Role skills)	0.86
WFF26	The learning experiences that I have at work help me more effectively perform my family responsibilities. (Role experiences)	0.84
WFF24	The increased competence I gain through work activities helps me fulfill my family responsibilities (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role experiences)	0.82
WFF05	My job shows me ways of seeing things that are helpful in my family life (Sumer & Knight, 2001, reworded). (Role experiences)	0.77
WFF13	My effectiveness in handling my work responsibilities has enabled me to be more effective at home. (Role experiences)	0.77
WFF19	Successfully performing tasks at work helps me to more effectively accomplish family tasks (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)	0.76
WFF06	Values developed at work help me in handling my family responsibilities. (Role attitudes)	0.75
WFF11	Carrying out my family responsibilities is made easier by using behaviors performed at work (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)	0.75
WFF25	The skills I use at work are useful for things I have to do at home (The Midlife Development Inventory, n.d., reworded). (Role skills)	0.73
WFF22	My interactions with my family are better because I have felt good about myself at work. (Role attitudes)	0.70
WFF10	In meeting my family responsibilities, I utilize values required at work (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role experiences)	0.66

Table 2. Factor Analysis Pattern and Structure Coefficients for the Initial 13-Item Work-to-Family Facilitation Subscale, Two Factor Solution

Item		Pattern		Structure	
		Factor 1	Factor 2	Factor 1	Factor 2
WFF24	The increased competence I gain through work activities helps me fulfill my family responsibilities (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role experiences)	0.99	-0.14	0.87	0.69
WFF22	My interactions with my family are better because I have felt good about myself at work. (Role attitudes)	0.91	-0.19	0.75	0.57
WFF27	The skills that I have developed at work help me perform my family responsibilities. (Role skills)	0.87	0.02	0.89	0.76
WFF26	The learning experiences that I have at work help me more effectively perform my family responsibilities. (Role experiences)	0.67	0.20	0.84	0.77
WFF25	The skills I use at work are useful for things I have to do at home (The Midlife Development Inventory, n.d., reworded). (Role skills)	0.62	0.14	0.73	0.66
WFF19	Successfully performing tasks at work helps me to more effectively accomplish family tasks (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)	0.58	0.21	0.76	0.70
WFF13	My effectiveness in handling my work responsibilities has enabled me to be more effective at home. (Role experiences)	0.46	0.34	0.75	0.73
WFF06	Values developed at work help me in handling my family responsibilities. (Role attitudes)	-0.12	0.91	0.64	0.81
WFF10	In meeting my family responsibilities, I utilize values required at work (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role experiences)	-0.13	0.83	0.56	0.72
WFF11	Carrying out my family responsibilities is made easier by using behaviors performed at work (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)	-0.02	0.80	0.65	0.79
WFF05	My job shows me ways of seeing things that are helpful in my family life (Sumer & Knight, 2001, reworded). (Role experiences)	0.05	0.76	0.69	0.80
WFF16	I am better able to perform my family responsibilities as a result of skills acquired at work (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)	0.32	0.59	0.82	0.86
WFF18	My job develops skills in me that are useful for completing family responsibilities (Sumer & Knight, 2001, reworded). (Role skills)	0.36	0.54	0.81	0.69

Note: values in bold indicate item loads on factor. Values in bold and italics indicates factor could load on more than one factor loading > 0.40 criteria.

Table 3. Factor Analysis Pattern and Structure Coefficients for the Initial 13-Item Work-to-Family Facilitation Subscale, Three Factor Solution

Item	Factor 1	Factor 2	Factor 3	Pattern			Structure		
				Factor 1	Factor 2	Factor 3	Factor 1	Factor 2	Factor 3
WFF06	0.73	0.12	0.00	0.81	0.61	0.52	0.73	0.47	0.52
WFF10	0.71	-0.12	0.16	0.73	0.47	0.52	0.73	0.47	0.52
WFF11	0.65	0.15	0.04	0.78	0.61	0.54	0.78	0.61	0.54
WFF05	0.56	0.42	-0.12	0.77	0.72	0.50	0.77	0.72	0.50
WFF16	0.48	0.36	0.15	0.82	0.78	0.68	0.82	0.78	0.68
WFF18	0.46	0.30	0.22	0.79	0.75	0.70	0.79	0.75	0.70
WFF13	0.32	0.26	0.31	0.68	0.67	0.67	0.68	0.67	0.67
WFF27	0.00	0.80	0.17	0.64	0.92	0.70	0.64	0.92	0.70
WFF26	0.13	0.73	0.09	0.67	0.87	0.65	0.67	0.87	0.65
WFF25	0.11	0.55	0.17	0.58	0.73	0.60	0.58	0.73	0.60
WFF19	0.31	-0.07	0.66	0.66	0.57	0.80	0.66	0.57	0.80
WFF22	-0.04	0.20	0.66	0.50	0.61	0.77	0.66	0.61	0.77
WFF24	-0.02	0.34	0.63	0.60	0.75	0.85	0.63	0.75	0.85

Note: values in bold indicate item loads on factor. Values in bold and italics indicates factor could load on more than one factor loading > 0.40 criteria.

Table 4. Factor Analysis Pattern and Structure Coefficients for the Initial 13-Item Family-to-Work Facilitation Subscale, One Factor Solution

Item		Factor 1
FWF23	The learning experiences that I have in my family life help me effectively perform my work responsibilities. (Role experiences)	0.85
FWF03	Abilities developed in my family life help me in my job. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)	0.84
FWF32	Values developed at home help me in handling my work responsibilities (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003, reworded). (Role experiences)	0.82
FWF30	The things I do in my family life help me in performing my work responsibilities. (Role experiences)	0.80
FWF04	The skills that I have developed in my family life help me perform my work responsibilities. (Role skills)	0.79
FWF06	I am better able to perform my work responsibilities as a result of skills acquired through my family responsibilities. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003, reworded) (Role skills)	0.79
FWF11	My family life develops skills in me that are useful at work. (Kirchmeyer, 1992, reworded). (Role skills)	0.79
FWF13	The increased competence I gain through family activities helps me fulfill my work responsibilities. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003) (Role experiences)	0.77
FWF33	Behaviors required in my family life lead to behaviors that assist me at work. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003) (Role skills)	0.74
FWF22	The things I do at home help me to deal with personal and practical issues at work. (Role experiences)	0.73
FWF24	The positive characteristics I have developed at home have made me feel better about my work. (Stephens et al., 1997, reworded). (Role attitudes)	0.73
FWF14	The relationships I have in my family life help me to interact more effectively with people at work. (Role experiences)	0.66
FWF36	I fell more confident in performing my work when I feel that I am successful in my family life. (Wayne, Randel, & Stevens, 2003, reworded) (Role attitudes)Attitude	0.63

Table 5. Factor Analysis Pattern and Structure Coefficients for the Initial 13-Item Family-to-Work Facilitation Subscale, Two Factor Solution

Item		Pattern		Structure	
		Factor 1	Factor 2	Factor 1	Factor 2
FWF30	The things I do in my family life help me in performing my work responsibilities. (Role experiences)	0.84	0.03	0.86	0.60
FWF23	The learning experiences that I have in my family life help me effectively perform my work responsibilities. (Role experiences)	0.82	0.10	0.89	0.66
FWF24	The positive characteristics I have developed at home have made me feel better about my work. (Stephens et al., 1997, reworded). (Role attitudes)	0.70	0.08	0.76	0.56
FWF22	The things I do at home help me to deal with personal and practical issues at work. (Role experiences)	0.69	0.10	0.75	0.57
FWF32	Values developed at home help me in handling my work responsibilities (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003, reworded). (Role experiences)	0.58	0.31	0.79	0.70
FWF13	The increased competence I gain through family activities helps me fulfill my work responsibilities. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003) (Role experiences)	0.53	0.30	0.74	0.67
FWF36	I feel more confident in performing my work when I feel that I am successful in my family life. (Wayne, Randel, & Stevens, 2003, reworded) (Role attitudes) Attitude	0.52	0.16	0.63	0.52
FWF04	The skills that I have developed in my family life help me perform my work responsibilities. (Role skills)	-0.07	0.95	0.58	0.90
FWF03	Abilities developed in my family life help me in my job. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)	0.13	0.79	0.67	0.88
FWF06	I am better able to perform my work responsibilities as a result of skills acquired through my family responsibilities. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003, reworded) (Role skills)	0.17	0.70	0.65	0.82
FWF11	My family life develops skills in me that are useful at work. (Kirchmeyer, 1992, reworded). (Role skills)	0.32	0.54	0.69	0.76
FWF33	Behaviors required in my family life lead to behaviors that assist me at work. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003) (Role skills)	0.32	0.49	0.65	0.71
FWF14	The relationships I have in my family life help me to interact more effectively with people at work. (Role experiences)	0.25	0.48	0.57	0.65

Table 6. Factor Analysis Pattern and Structure Coefficients for the Initial 13-Item Family-to-Work Facilitation Subscale, Three Factor Solution

Item	Factor 1	Factor 2	Factor 3	Pattern			Structure		
				Factor 1	Factor 2	Factor 3	Factor 1	Factor 2	Factor 3
FWF04	The skills that I have developed in my family life help me perform my work responsibilities. (Role skills)	0.89	-0.01	0.03	0.90	0.58	0.55		
FWF03	Abilities developed in my family life help me in my job. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)	0.72	0.10	0.13	0.87	0.65	0.63		
FWF06	I am better able to perform my work responsibilities as a result of skills acquired through my family responsibilities. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003, reworded) (Role skills)	0.64	0.31	-0.06	0.81	0.68	0.53		
FWF11	My family life develops skills in me that are useful at work. (Kirchmeyer, 1992, reworded). (Role skills)	0.48	0.14	0.30	0.74	0.64	0.67		
FWF33	Behaviors required in my family life lead to behaviors that assist me at work. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003) (Role skills)	0.43	0.39	0.01	0.69	0.67	0.53		
FWF24	The positive characteristics I have developed at home have made me feel better about my work. (Stephens et al., 1997, reworded). (Role attitudes)	0.03	0.68	0.11	0.53	0.77	0.59		
FWF23	The learning experiences that I have in my family life help me effectively perform my work responsibilities. (Role experiences)	0.04	0.66	0.27	0.62	0.87	0.74		
FWF36	I fell more confident in performing my work when I feel that I am successful in my family life. (Wayne, Randel, & Stevens, 2003, reworded) (Role attitudes)	0.12	0.63	-0.05	0.49	0.67	0.45		
FWF32	Values developed at home help me in handling my work responsibilities (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003, reworded). (Role experiences)	0.25	0.58	0.10	0.67	0.80	0.64		
FWF22	The things I do at home help me to deal with personal and practical issues at work. (Role experiences)	0.03	0.14	0.69	0.53	0.62	0.80		
FWF30	The things I do in my family life help me in performing my work responsibilities. (Role experiences)	-0.04	0.41	0.56	0.55	0.77	0.82		
FWF14	The relationships I have in my family life help me to interact more effectively with people at work. (Role experiences)	0.42	-0.15	0.51	0.63	0.46	0.66		
FWF13	The increased competence I gain through family activities helps me fulfill my work responsibilities. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003) (Role experiences)	0.24	0.27	0.37	0.64	0.68	0.70		

Note: values in bold indicate item loads on factor. Values in bold and italics indicates factor could load on more than one factor loading > 0.40 criteria.

Table 7. Factor Analysis Pattern and Structure Coefficients for the Initial 26-Item Work-Family Facilitation Scale, Two Factor Solution

Item		Pattern		Structure	
		Factor 1	Factor 2	Factor 1	Factor 2
WFF18	My job develops skills in me that are useful for completing family responsibilities (Sumer & Knight, 2001, reworded). (Role skills)	0.93	-0.09	0.87	0.47
WFF16	I am better able to perform my family responsibilities as a result of skills acquired at work (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)	0.89	-0.01	0.88	0.52
WFF27	The skills that I have developed at work help me perform my family responsibilities. (Role skills)	0.87	0.01	0.87	0.53
WFF26	The learning experiences that I have at work help me more effectively perform my family responsibilities. (Role experiences)	0.84	0.02	0.85	0.53
WFF05	My job shows me ways of seeing things that are helpful in my family life (Sumer & Knight, 2001, reworded). (Role experiences)	0.79	-0.02	0.78	0.46
WFF11	Carrying out my family responsibilities is made easier by using behaviors performed at work (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)	0.75	0.03	0.77	0.48
WFF06	Values developed at work help me in handling my family responsibilities. (Role attitudes)	0.74	0.02	0.76	0.47
WFF24	The increased competence I gain through work activities helps me fulfill my family responsibilities (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role experiences)	0.73	0.13	0.81	0.58
WFF19	Successfully performing tasks at work helps me to more effectively accomplish family tasks (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)	0.71	0.09	0.77	0.52
WFF13	My effectiveness in handling my work responsibilities has enabled me to be more effective at home. (Role experiences)	0.65	0.18	0.76	0.57
WFF25	The skills I use at work are useful for things I have to do at home (The Midlife Development Inventory, n.d., reworded). (Role skills)	0.60	0.21	0.73	0.58
WFF22	My interactions with my family are better because I have felt good about myself at work. (Role attitudes)	0.50	0.30	0.68	0.60
WFF10	In meeting my family responsibilities, I utilize values required at work (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role experiences)	0.42	0.40	0.66	0.65
FWF03	Abilities developed in my family life help me in my job. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)	-0.09	0.90	0.45	0.85
FWF04	The skills that I have developed in my family life help me perform my work responsibilities. (Role skills)	-0.10	0.87	0.42	0.81
FWF32	Values developed at home help me in handling my work responsibilities (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003, reworded). (Role experiences)	0.00	0.82	0.50	0.82
FWF06	I am better able to perform my work responsibilities as a result of skills acquired through my family responsibilities. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003, reworded) (Role skills)	0.00	0.80	0.48	0.80

Table 7. Factor Analysis Pattern and Structure Coefficients for the Initial 26-Item Work-Family Facilitation Scale, Two Factor Solution (Continued)

Item		Pattern		Structure	
		Factor 1	Factor 2	Factor 1	Factor 2
FWF33	Behaviors required in my family life lead to behaviors that assist me at work. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003) (Role skills)	-0.02	0.76	0.44	0.75
FWF11	My family life develops skills in me that are useful at work. (Kirchmeyer, 1992, reworded). (Role skills)	0.12	0.72	0.55	0.79
FWF24	The positive characteristics I have developed at home have made me feel better about my work. (Stephens et al., 1997, reworded). (Role attitudes)	0.09	0.67	0.49	0.72
FWF30	The things I do in my family life help me in performing my work responsibilities. (Role experiences)	0.26	0.63	0.64	0.78
FWF13	The increased competence I gain through family activities helps me fulfill my work responsibilities. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003) (Role experiences)	0.22	0.62	0.60	0.76
FWF14	The relationships I have in my family life help me to interact more effectively with people at work. (Role experiences)	0.08	0.62	0.45	0.66
FWF22	The things I do at home help me to deal with personal and practical issues at work. (Role experiences)	0.19	0.59	0.55	0.71
FWF36	I feel more confident in performing my work when I feel that I am successful in my family life. (Wayne, Randel, & Stevens, 2003, reworded) (Role attitudes) Attitude	0.10	0.58	0.45	0.64

Note: values in bold indicate item loads on factor. Values in bold and italics indicates factor could load on more than one factor loading > 0.40 criteria.

Table 8. Factor Analysis Pattern and Structure Coefficients for the Initial 26-Item Work-Family Facilitation Scale, Three Factor Solution

Item		Pattern			Structure		
		Factor 1	Factor 2	Factor 3	Factor 1	Factor 2	Factor 3
WFF18	My job develops skills in me that are useful for completing family responsibilities (Sumer & Knight, 2001, reworded). (Role skills)	0.87	-0.07	0.07	0.88	0.40	0.53
WFF05	My job shows me ways of seeing things that are helpful in my family life (Sumer & Knight, 2001, reworded). (Role experiences)	0.86	0.16	-0.21	0.81	0.46	0.35
WFF16	I am better able to perform my family responsibilities as a result of skills acquired at work (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)	0.84	0.01	0.06	0.89	0.46	0.55
WFF06	Values developed at work help me in handling my family responsibilities. (Role attitudes)	0.80	0.17	-0.17	0.79	0.47	0.38
WFF26	The learning experiences that I have at work help me more effectively perform my family responsibilities. (Role experiences)	0.75	-0.03	0.18	0.84	0.44	0.59
WFF27	The skills that I have developed at work help me perform my family responsibilities. (Role skills)	0.73	-0.09	0.29	0.85	0.42	0.65
WFF11	Carrying out my family responsibilities is made easier by using behaviors performed at work (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)	0.71	0.05	0.07	0.77	0.43	0.49
WFF13	My effectiveness in handling my work responsibilities has enabled me to be more effective at home. (Role experiences)	0.63	0.19	0.06	0.76	0.53	0.52
WFF19	Successfully performing tasks at work helps me to more effectively accomplish family tasks (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)	0.61	0.00	0.25	0.75	0.43	0.59
WFF25	The skills I use at work are useful for things I have to do at home (The Midlife Development Inventory, n.d., reworded). (Role skills)	0.44	0.02	0.42	0.69	0.45	0.68
WFF10	In meeting my family responsibilities, I utilize values required at work (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role experiences)	0.43	0.39	0.06	0.65	0.63	0.51
FWF04	The skills that I have developed in my family life help me perform my work responsibilities. (Role skills)	0.04	0.90	-0.09	0.42	0.87	0.40
FWF03	Abilities developed in my family life help me in my job. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)	0.01	0.88	0.01	0.44	0.89	0.48
FWF06	I am better able to perform my work responsibilities as a result of skills acquired through my family responsibilities. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003, reworded) (Role skills)	0.06	0.75	0.06	0.47	0.82	0.49

Table 8. Factor Analysis Pattern and Structure Coefficients for the Initial 26-Item Work-Family Facilitation Scale, Three Factor Solution (Continued)

Item		Pattern			Structure		
		Factor 1	Factor 2	Factor 3	Factor 1	Factor 2	Factor 3
FWF11	My family life develops skills in me that are useful at work. (Kirchmeyer, 1992, reworded). (Role skills)	0.13	0.62	0.17	0.53	0.77	0.57
FWF33	Behaviors required in my family life lead to behaviors that assist me at work. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003) (Role skills)	-0.04	0.59	0.28	0.40	0.72	0.56
FWF32	Values developed at home help me in handling my work responsibilities (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003, reworded). (Role experiences)	-0.08	0.58	0.41	0.44	0.76	0.67
FWF14	The relationships I have in my family life help me to interact more effectively with people at work. (Role experiences)	0.11	0.55	0.10	0.44	0.66	0.46
FWF13	The increased competence I gain through family activities helps me fulfill my work responsibilities. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003) (Role experiences)	0.20	0.52	0.20	0.57	0.72	0.59
FWF30	The things I do in my family life help me in performing my work responsibilities. (Role experiences)	0.07	0.29	0.61	0.56	0.65	0.81
WFF22	My interactions with my family are better because I have felt good about myself at work. (Role attitudes)	0.29	0.00	0.58	0.62	0.45	0.75
FWF23	The learning experiences that I have in my family life help me effectively perform my work responsibilities. (Role experiences)	0.03	0.41	0.56	0.56	0.73	0.80
FWF24	The positive characteristics I have developed at home have made me feel better about my work. (Stephens et al., 1997, reworded). (Role attitudes)	-0.07	0.35	0.56	0.42	0.61	0.70
WFF24	The increased competence I gain through work activities helps me fulfill my family responsibilities (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role experiences)	0.51	-0.12	0.53	0.76	0.41	0.76
FWF22	The things I do at home help me to deal with personal and practical issues at work. (Role experiences)	0.05	0.31	0.51	0.49	0.60	0.70
FWF36	I fell more confident in performing my work when I feel that I am successful in my family life. (Wayne, Randel, & Stevens, 2003, reworded) (Role attitudes) Attitude	-0.04	0.30	0.50	0.39	0.54	0.63

Note: values in bold indicate item loads on factor. Values in bold and italics indicates factor could load on more than one factor loading > 0.40 criteria.

Table 9. Factor Analysis Pattern and Structure Coefficients for the Initial 26-Item Work-Family Facilitation Scale, Four Factor Solution

Item	Factor 1	Pattern			Structure			
		Factor 2	Factor 3	Factor 4	Factor 1	Factor 2	Factor 3	Factor 4
WFF18 My job develops skills in me that are useful for completing family responsibilities (Sumer & Knight, 2001, reworded). (Role skills)	0.85	-0.08	0.04	0.18	0.86	0.38	0.51	0.30
WFF05 My job shows me ways of seeing things that are helpful in my family life (Sumer & Knight, 2001, reworded). (Role experiences)	0.83	0.21	-0.26	0.12	0.80	0.47	0.35	0.26
WFF16 I am better able to perform my family responsibilities as a result of skills acquired at work (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)	0.80	-0.04	0.06	0.25	0.86	0.43	0.54	0.38
WFF26 The learning experiences that I have at work help me more effectively perform my family responsibilities. (Role experiences)	0.80	0.07	0.09	-0.09	0.87	0.46	0.56	0.07
WFF27 The skills that I have developed at work help me perform my family responsibilities. (Role skills)	0.79	0.00	0.19	-0.11	0.88	0.44	0.62	0.06
WFF06 Values developed at work help me in handling my family responsibilities. (Role attitudes)	0.72	0.10	-0.15	0.34	0.73	0.44	0.39	0.45
WFF13 My effectiveness in handling my work responsibilities has enabled me to be more effective at home. (Role experiences)	0.65	0.26	0.00	-0.04	0.77	0.55	0.51	0.14
WFF11 Carrying out my family responsibilities is made easier by using behaviors performed at work (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)	0.62	-0.10	0.12	0.41	0.71	0.37	0.50	0.51
WFF19 Successfully performing tasks at work helps me to more effectively accomplish family tasks (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)	0.60	-0.04	0.23	0.12	0.74	0.41	0.58	0.26
WFF24 The increased competence I gain through work activities helps me fulfill my family responsibilities (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role experiences)	0.58	-0.09	0.48	-0.09	0.79	0.42	0.73	0.08
WFF25 The skills I use at work are useful for things I have to do at home (The Midlife Development Inventory, n.d., reworded). (Role skills)	0.45	-0.04	0.42	0.09	0.68	0.43	0.67	0.24

Table 9. Factor Analysis Pattern and Structure Coefficients for the Initial 26-Item Work-Family Facilitation Scale, Four Factor Solution (Continued)

Item		Pattern				Structure			
		Factor 1	Factor 2	Factor 3	Factor 4	Factor 1	Factor 2	Factor 3	Factor 4
FWF04	The skills that I have developed in my family life help me perform my work responsibilities. (Role skills)	0.03	0.92	-0.07	-0.01	0.41	0.89	0.46	0.24
FWF03	Abilities developed in my family life help me in my job. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)	-0.03	0.81	0.08	0.14	0.40	0.88	0.55	0.38
FWF06	I am better able to perform my work responsibilities as a result of skills acquired through my family responsibilities. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003, reworded) (Role skills)	0.06	0.74	0.09	0.02	0.45	0.82	0.55	0.26
FWF11	My family life develops skills in me that are useful at work. (Kirchmeyer, 1992, reworded). (Role skills)	0.15	0.63	0.17	-0.05	0.53	0.78	0.60	0.19
FWF33	Behaviors required in my family life lead to behaviors that assist me at work. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003) (Role skills)	0.01	0.63	0.27	-0.17	0.42	0.74	0.59	0.07
FWF14	The relationships I have in my family life help me to interact more effectively with people at work. (Role experiences)	0.06	0.46	0.17	0.17	0.40	0.64	0.50	0.35
FWF13	The increased competence I gain through family activities helps me fulfill my work responsibilities. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003) (Role experiences)	0.15	0.38	0.28	0.25	0.53	0.68	0.64	0.45
FWF30	The things I do in my family life help me in performing my work responsibilities. (Role experiences)	0.08	0.16	0.67	0.11	0.55	0.61	0.83	0.31
FWF23	The learning experiences that I have in my family life help me effectively perform my work responsibilities. (Role experiences)	0.03	0.27	0.64	0.13	0.54	0.69	0.84	0.35
FWF24	The positive characteristics I have developed at home have made me feel better about my work. (Stephens et al., 1997, reworded). (Role attitudes)	-0.07	0.22	0.63	0.11	0.41	0.57	0.74	0.29
FWF22	The things I do at home help me to deal with personal and practical issues at work. (Role experiences)	0.05	0.20	0.56	0.10	0.48	0.57	0.72	0.29

Table 9. Factor Analysis Pattern and Structure Coefficients for the Initial 26-Item Work-Family Facilitation Scale, Four Factor Solution (Continued)

Item	Pattern				Structure			
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 1	Factor 2	Factor 3	Factor 4
WFF22	0.37	0.03	0.53	-0.16	0.66	0.46	0.73	0.02
FWF36	0.00	0.25	0.52	-0.05	0.40	0.53	0.65	0.14
FWF32	-0.10	0.43	0.50	0.16	0.41	0.72	0.73	0.38
WFF10	0.32	0.19	0.17	0.48	0.57	0.56	0.56	0.62

Note: values in bold indicate item loads on factor. Values in bold and italics indicates factor could load on more than one factor loading > 0.40 criteria.

ranged from .61 to .82 with a mean of .74. The correlation between the two subscales was .69.

Because excessive redundancy within each subscale was undesirable and the subscales showed high internal reliability, it was decided that there was little advantage to retaining all of the 25 items. Consequently, the 8 items with the highest factor loadings representing the three dimensions (role experience, role skill, and role attitude) of facilitation were retained for subsequent analysis.

The 16 items were subjected to principle factor analysis procedure as described above to determine the impact of deletion of items. A comparison of the results of the 26 item and the 16 item factor analysis solutions showed that the subscales and total scale had essentially the same properties as the subscales and 26 items scale. The one-factor solution best described the work-to-family facilitation data and the two factor solution best described the family-to-work facilitation data. The 8 items of the work-to-family facilitation subscale had high loadings, ranging from .47 to .89, on one factor while the 8 items of the family-to-work facilitation subscale had high loadings, ranging from .60 to .91, on the other factor. The two factor solution accounted for 56.05% of the total variance, with the work-to-family facilitation factor explaining 28.62% and the family-to-work facilitation factor explaining 27.42 % of the variance in the data.

The final version of the Work-Family Facilitation Scale consisted of two subscales, work-to-family facilitation and family-to-work facilitation, each with three role experience items, three role skill items and two role attitude items. Items for this version of the Work-Family Facilitation Scale are presented in Table 10. Subsequent analysis suggested that the final version of the Work-Family Facilitation Scale has

Table 10. The Work-Family Facilitation Scale

Work-Family Facilitation Subscale	
1.	My job develops skills in me that are useful for completing family responsibilities. (Sumer & Knight, 2001, reworded)
2.	I am better able to perform my family responsibilities as a result of skills acquired at work. (Hanson, Colton, & Hammer, 2003)
3.	The skills that I have developed at work help me perform my family responsibilities.
4.	The learning experiences that I have at work help me more effectively perform my family responsibilities.
5.	My job shows me ways of seeing things that are helpful in my family life. . (Sumer, & Knight, 2001, reworded)
6.	The increased competence I gain through work activities helps me fulfill my family responsibilities. (Hanson, Colton, & Hammer, 2003)
7.	Values developed at work help me in handling my family responsibilities.
8.	My interactions with my family are better because I have felt good about myself at work.

Family-Work Facilitation Subscale	
1.	Abilities developed in my family life help me in my job. (Hanson, Colton, & Hammer, 2003)
2.	The skills that I have developed in my family life help me perform my work responsibilities.
3.	I am better able to perform my work responsibilities as a result of skills acquired through my family responsibilities. (Hanson, Colton, & Hammer, 2003, reworded)
4.	Values developed at home help me in handling my work responsibilities (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003, reworded). (Role experiences)
5.	The learning experiences that I have in my family life help me effectively perform my work responsibilities.
6.	The relationships I have in my family life help me to interact more effectively with people at work.
7.	The positive characteristics I have developed at home have made me feel better about my work. (Stephens et al., 1997, reworded)
8.	I feel more confident in performing my work when I feel that I am successful in my family life. (Wayne, Randel, & Stevens, 2003, reworded)

substantial reliability. Coefficient alpha of the work- to-family facilitation subscale

was .94 and item-whole correlations ranged from .65 to .86 with a mean of .78.

Coefficient alpha of the family-to-work subscale was .92 and item-whole correlations

ranged from .61 to .82 with a mean of .73. The two subscales of the work-family

facilitation scale were moderately correlated (.59), which, in conjunction with the results

of the exploratory factor analysis, suggests some distinctiveness between the two

subscales.

Construct Validity Assessment

Descriptive Information

Zero-order correlations were employed to study the general pattern of relationships between demographic characteristics and the work-family facilitation subscales. The demographic variables included age, gender, ethnicity, education, marital status, children under the age of 18 living at home, tenure in position, tenure in organization, occupational level, and type of position. The mean, standard deviation, range and correlation with each direction of work-family facilitation are reported in Table 11. Only one demographic variable, ethnicity, was significantly and it was negatively correlated with work-to-family facilitation ($r = -.16$ $p < .05$). with ethnic minorities reporting greater work-to-family facilitation than whites. However, the finding with respect to ethnicity should be interpreted with caution given the small number of subjects in the sample that were members of a minority group (38 of 166). The remaining demographic variables' correlations with work-to-family facilitation ranged from .02 to .14, and six of the nine were in a negative direction. The demographic variables

Table 11. Demographic Variables Mean, Standard Deviation, Range, Correlation with Work-Family Facilitation

Variable	Mean	Std Dev	Range	Correlation With Work-to-Family Facilitation	Correlation With Family-to-Work Facilitation
Age	43.18	9.47	22 to 71	.03	.06
Gender	.70	.46	0 to 1	-.07	.07
Ethnicity	3.60	.84	0 to 1	-.16*	-.04
Education	3.24	1.35	1 to 5	-.07	-.10
Marital Status	.16	.37	0 to 1	-.02	.05
Children at Home	.71	.45	0 to 1	.05	-.04
Work Type	2.33	1.24	1 to 6	.02	.01
Position Type	1.50	.50	1 to 2	-.04	.02
Position Tenure	4.85	5.71	.13 to 32.66	-.14	-.03
Organization Tenure	8.04	7.21	.13 to 32.66	-.05	.01

N= 161

* $p < .05$

Table 12. Mean, Standard Deviation, Range, and Internal Consistency

Variable	Mean	Std Dev	Range	Internal Consistency
Home Chores	19.67	10.75	2 to 58	N/A
No. of Children	1.17	.99	0 to 5	N/A
Parental Demands	10.07	13.32	0 to 60	N/A
Work Hours	50.06	8.25	36.25 to 77.50	N/A
Work Schedule Flexibility	4.48	1.61	2 to 8	.67
Work-Family Conflict	18.27	7.25	5 to 35	.89
Family-Work Conflict	15.90	6.42	5 to 35	.86
Work Overload	16.79	6.98	5 to 35	.90
Work Autonomy	16.25	3.87	3 to 21	.72
Job Satisfaction	21.89	6.36	5 to 35	.80
Family Satisfaction	119.30	14.45	67 to 140	.90
Life Satisfaction	24.16	6.66	8 to 35	.89
Psychological Distress	30.65	9.04	20 to 73	.89
Work-to-Family Facilitation	34.39	9.62	8 to 56	.94
Family-to-Work Facilitation	39.33	8.37	8 to 56	.92

N=161

were not significantly correlated with family-work facilitation, with correlations ranging from .01 to .10, and four of the ten were in a negative direction.

The mean, standard deviation, range, and internal consistency estimates for the work and non-work constructs included in this study are reported in Table 12. Internal consistency was tested using Cronbach's alpha for each measure. One of the scales, work schedule flexibility, had internal consistency less than the .70 significance guidelines suggested by Nunnally (1978) for exploratory research. The internal consistency estimates for the other variables were within the acceptable range for survey research, ranging from .72 (work autonomy) to .94 (work-to-family facilitation). Because the work schedule flexibility scale consisted of only two items, the low reliability of this scale could be due to the scale being too short or because the items have very little in common (Nunnally, 1978).

Correlations

The zero-order correlations between all study variables are reported in Table 13.

Work constructs. Negative correlations were predicted between work overload and the work-to-family facilitation and family-to-work facilitation scales. The correlation between work overload and family-to-work facilitation was significant and in the predicted direction ($r = -.15, p < .05$). It was predicted that work autonomy, time spent in paid work, work schedule flexibility, and job satisfaction would positively correlated with the work-to-family facilitation and family-to-work facilitation scales. Two of the eight correlations pertaining to these predictions were significant. Work autonomy and job satisfaction ($r = .15, p < .05$ and $r = .36, p < .01$, respectively) was significantly correlated with work-to-family facilitation, as predicted.

Nonwork Constructs. Work-to-family conflict and family-to-work conflict were predicted to be unrelated to work-to-family facilitation and family-to-work facilitation, or if there was a relationship, it would be weak. This prediction was supported. Of the four correlations pertaining to these predictions, two were significant, and those relationship was weak. Work-family conflict was significantly correlated with family-to-work facilitation ($r = -.16, p < .05$) and family-work conflict was significantly correlated with work-to-family facilitation ($r = .15, p < .05$).

Psychological distress was predicted to be negatively related to the work-to-family facilitation and family-to-work facilitation scales. Of the two correlations pertaining to this prediction, one was significant. Psychological distress was significantly correlated with family-to-work facilitation and in the predicted direction ($r = -.16, p < .05$).

Table 13. Correlations Between Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Work-to-Family Facilitation														
2 Family-to-Work Facilitation	.59**													
3 Home Chores	-.01	.06												
4 No. of Children	.11	.05	.14											
5 Parental Demands	-.06	.001	.12	.43*										
6 Work Hours	-.11	-.02	-.07	.06	-.003									
7 Work Schedule Flexibility	-.13	-.06	.09	-.003	.07	.22**								
8 Work-Family Conflict	-.04	-.14	-.04	.12	.02	.30**	.19**							
9 Family-Work Conflict	.16*	-.01	.08	.21**	.04	.06	.09	.61**						
10 Work Overload	.02	-.15*	.11	.04	-.03	.14	.13	.39**	.28**					
11 Work Autonomy	.15*	.01	.05	-.10	-.08	-.12	-.16*	-.13	.02	.01				
12 Job Satisfaction	.36**	.07	-.03	.08	-.06	.07	-.19**	-.02	-.001	-.08	.34**			
13 Family Satisfaction	.02	.21**	-.07	-.14	-.20**	.03	-.03	-.22**	-.34**	-.02	.14	.10		
14 Life Satisfaction	.22**	.17**	-.07	-.16*	-.15*	-.03	-.10	-.19**	-.21**	-.13	.19**	.34**	.48**	
15 Psychological Distress	-.13	-.16*	.07	.05	.09	-.11	-.04	.13	.22**	.07	-.12	-.17*	-.48**	-.54**

N = 161

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

Parental demands was predicted to be negatively related to family-to-work facilitation and to be unrelated to work-to-family facilitation. Partial support was provided for these predictions. The correlation between parental demands and work-to-family facilitation was not significant, however the predicted relationship between parental demands and family-to-work facilitation was not supported.

Number of children living at home, number of hours spent in household chores, life satisfaction, and family satisfaction were predicted to be positively correlated with the work-to-family facilitation and family-to-work facilitation scales. Of the eight correlations pertaining to these predictions three were significant. The positive correlations pertaining to the predictions between life satisfaction and work-family facilitation and family-to-work facilitation were significant ($r = .22, p < .01$ and $r = .17, p > .05$, respectively) and family satisfaction was significantly correlated with family-to-work facilitation ($r = .21, p < .01$).

Correlational Tests

Three predictions were made regarding the strength of the relationship between work-family facilitation and job satisfaction, psychological distress, and family satisfaction. Specifically, it was predicted that work-to-family facilitation would be more strongly related with job satisfaction and psychological distress than family-to-work facilitation and that family-to-work facilitation would be more strongly related with family satisfaction than work-to-family facilitation. To test these predictions, t tests between dependent correlations (Cohen & Cohen, 1983, *p* 56-57) were performed. One of the three predictions regarding the strength of the relationships described above was supported by the results of the t-tests between correlations. Work-to-family facilitation

was more highly correlated with job satisfaction than was family-to- work facilitation,
 $t(158) = 2.231, p < .05$.

DISCUSSION

Summary

As the research on work and family life has evolved there has been a growing interest in examining not only work-family conflict, but also work-family facilitation. A measure of work-family facilitation is noticeably absent. This study reports on the design and validation the Work-Family Facilitation Scale, which consists of short, self-report measures of work-to-family facilitation and family-to-work facilitation. To this end, eight-item subscales of work-to-family facilitation and family-to-work facilitation were developed.

Dimensionality and Internal Consistency

The work-family facilitation scale was designed to measure two types of facilitation, work-to-family and family-to-work. Each domain of work-family facilitation was also theorized to consist of three dimensions, role skills, role experience, and role attitude. Content validation of the items developed to capture the two domains of facilitation was conducted using methods suggested by Netemeyer, Boles, and McMurrian (1996). The results of scale refinement (item analysis and exploratory factor analysis) confirmed the reliability of the scores on the facilitation subscales and provide support for two domains of facilitation. The internal consistency of the two subscales of the Work-Family Facilitation Scale was good, indicating that the items were satisfactory related with each other in terms of measuring facilitation. In addition, the Work-Family

Facilitation Scale appears to tap two distinct forms of facilitation: work-to-family facilitation and family-to-work facilitation. As noted by Frone (2003), integrative research on work-family facilitation clearly shows that it is important to distinguish between the two directions of influence, both types of work-family facilitation must be examined. These results contribute to establishing the discriminate validity of the measure. Results support previous findings that facilitation from work to family and from family to work are two separate constructs that occur simultaneously.

However, the results did not support the proposed three dimensions (skill, experience, and attitude) of facilitation. The family-to-work facilitation subscale appears to tap two dimensions, one capturing the transfer of skills from the family to work and the other capturing the experience encountered in the family and the emotional gratification received by participation in the family. Because experience and attitude are highly related to each other, in the sense that an individual's experiences have a significant impact on his or her attitude toward self and personal worth, it may be difficult to capture these latent variables as separate dimensions of facilitation.

The work-to-family facilitation subscale appears to tap one dimension. Because the items for the two subscales were similar in wording and structure, it would be expected that the same dimensions would have emerged. The reasons the work-to-family facilitation scale did not show the same dimensions as the family-to-work facilitation scale may be because there was restriction in range in use of the response categories. An examination of mean score of the items on each subscale, showed that for the work-to-family facilitation subscale, the mean score for 27 of the 32 items was between 4.1 and 4.8, within the neither agree nor disagree response range of the scale. This was not the

case for the family-to-work facilitation scale, in which over half of the items the mean score was greater than 5, slightly agree to agree. This suggests, that for this sample, in general, work is not perceived as facilitating participation in the family role.

Construct Validity Assessment

The results from construct validation efforts provide some limited support for the newly developed measure. For work constructs and nonwork constructs, some of the relationships obtained provide partial evidence of construct validity. Ten of the 26 predicted relationships were supported.

With respect to the findings regarding the relationship between work-family conflict and work-family facilitation, the work-family facilitation subscales were, in general, unrelated to work-family conflict. Only one significant relationship was found: there was a weak, positive correlation between family-work conflict and work-to-family facilitation. Perhaps, for this sample, individuals experiencing more family-work conflict are more cognizant of and rely on the skills, experiences, and attitudes associated with their work role to facilitate their family life. The lack of a relationship between work-conflict and work-facilitation provides support for the belief that conflict and facilitation are independent of each other and that they can occur simultaneously. In addition, these results contribute to demonstrating the discriminant validity of the measure.

With respect to the relationship between work constructs and work-family facilitation, only three of the ten predicted relationships were significant. Consistent with prior research, work overload was inversely related to family-to-work facilitation (Voydanoff, 2004a). Individuals who reported lower overall work overload also tended to have higher levels of family-to-work facilitation. This suggests that the more family

facilitates one's abilities to participate in their work role the better able they are to manage work overload.

In addition, consistent with prior research, work autonomy and job satisfaction had a positive correlation with work-to-family facilitation (Brookwood, Hammer, & Neal, 2003; Fisher-McAuley et al. 2003; Voydanoff, 2004a, 2004b), providing additional support for construct validity. These results demonstrate that individuals who report higher overall work autonomy and job satisfaction also tend to have higher levels of work-to-family facilitation. This expands on the work by Brookwood, Hammer, and Neal (2003), who studied four dimensions of job quality (job security, pay, challenge, and supportive environment) and the work by Grywacz and Marks (2000a), who studied two dimensions of job quality (decision latitude and pressure at work). Thus, as suggested by Brookwood, Hammer, and Neal (2003), work-to-family facilitation can possibly be increased by making changes to the quality of one's job, such as increasing autonomy.

For the relationship between work-family facilitation and nonwork constructs, four of the 12 predicted relationships were significant. Consistent with previous research, psychological distress was inversely related to family-to-work facilitation (Grywacz, 2000; Stephens & Franks, 1995), life satisfaction had a positive relationship with both work-to-family facilitation and family-to-work facilitation (Hanson, Colton, & Hammer, 2003; Wayne, Randal, & Stevens, 2003), and family satisfaction had a positive correlation with family-to-work facilitation (Wayne, Musisca, & Fleeson, 2003).

These results contribute to the growing evidence that there are unique correlates of each direction of work-family facilitation. Work-to-family facilitation was related to job satisfaction, while family-to-work was not. In addition, family-to-work facilitation

was related to family satisfaction, while work-to-family facilitation was not. These results are consistent with previous research and provides support for the proposal of Wayne, Randal, and Stevens (2003), that when individuals make attributes about the benefits of one role to the other, this primarily results in a more positive affect and behavioral investment in the role seen as providing the benefit. Consistent with previous research, work autonomy was related to work-to-family facilitation and adding to the existing research family to work facilitation was not related to work autonomy. Previous research has not examined this relationship. These results contribute to the evidence that there are different correlates for each direction of facilitation. .

In addition, this study adds to the existing research on the correlates of family to work facilitation. Previous research has not examined the relationship between work overload and family to work facilitation. As noted previously, because work overload tends to lead to both psychological and physical unavailability at home and has a negative effect on the quality of the family role, then family-to-work facilitation may be less likely to occur.

Finally, this study contributes to the research by providing additional support for the relationship between facilitation and life satisfaction. Consistent with the study by Sumer and Knight (2001), both directions of facilitation had a significant positive correlation with life satisfaction.

The lack of support for work hours and work-schedule flexibility may be due to the characteristics of the participants' work organization. For example, according to discussions with the university's personnel office, for most support positions at the university, overtime is prohibited (employees are required to take time off at a later date),

and while having a policy allowing for flexible work schedules, very few units have approved flexible work schedule on a permanent basis. Because 51% of the sample held non-supervisory positions, it is possible that there is a restriction in range for responding to the work hours and work schedule flexibility items, which may have resulted in deflated correlations (Nunnally, 1988). For instance, for work hours (number of hours spent in work activities in the work place and at home plus time spent per week commuting), for this sample there is a large response range, 36.25 to 77.5 hours, with a mean of 50.06 and standard deviation of 8.25. Examination of the present sample's reported work hours shows that 70% of the subjects reporting fewer than 50 work hours per week, indicating that only a portion of the potential range is used, mostly in the middle with a few extremes.

With respect to the predicted positive relationships between family-to-work facilitation and the work constructs job satisfaction and work autonomy, contradictory results have been reported in the facilitation research. For work autonomy, none of the studies reviewed specifically examined the relationship between work autonomy and family-to-work facilitation. Support for this prediction was drawn from research on work-family fit, which found work autonomy had a positive correlation with work-family fit. With regard to job satisfaction, while some researchers have report a positive relationship between family-to-work facilitation and job satisfaction (Brookwood, Hammer, & Neal, 2003), others have not found such support (Wayne, Musisca, & Fleeson, 2003; Wayne, Randal, & Stevens, 2003). Additional research is required to examine further whether and how work autonomy and job satisfaction are related to family-to-facilitation.

Although the predicted significant negative correlation between psychological distress and work-to-family facilitation was not found, the relationship between these two variables was, as previously noted, in the predicted direction and approached significance. Additional research is required to further examine this relationship.

As stated previously, existing measures of work-to-family facilitation and family-to-work facilitation have varied widely in terms of reliability and validity, potentially affecting the predictive validity of these scales. The measures developed in the present study have some distinct advantages over work-to-family facilitation and family-to-work facilitation scales used in previous research.

First, some studies have used two to three item measures of the constructs (Stephens, Franks, & Atienza, 1997; Voydanoff, 2004a, 2004b). It is widely held that such measures suffer from poor reliability and may not adequately assess the domain of the construct (Nunnally, 1978; Schriesheim et al., 1993). The measures developed here are multi-item, exhibit adequate levels of internal consistency, and assess the domain of some commonly agreed on aspects of work-to-family facilitation and family-to-work facilitation.

Second, other studies have used measures that have not been subjected to rigorous scale development (Brookwood, Hammer, & Neal, 2003; Voydanoff, 2004a, 2004b). Although these measures do seem to possess adequate content and internal consistency, they have not been scrutinized as rigorously with respect to construct validity as the work-to-family facilitation and family-to-work facilitation subscales presented here. Furthermore, the coefficient alpha estimates of these other work-to-family facilitation and family-to-work facilitation measures were generally lower than the coefficient alpha

estimates of the work-facilitation subscales developed in this study. For example, Wayne, Musisca, and Fleeson (2004) reported alpha estimates of .72 and .68 for four-item measures of work-to-family facilitation and family-to-work facilitation. Grzywacz (2000) reported alpha estimates of .70 and .73 for four-item measures of work-to-family facilitation and family-to-work facilitation. As stated above, coefficient alpha of .94 for work-to-family facilitation and .92 for family-to-work facilitation were found in this study.

Limitations and Future Research

The study presented here is not without limitations. First, all measures relating to variables other than work-to-family facilitation and family-to-work facilitation in this study were of a self report nature, and this study was nonexperimental in design. Because only experiments can offer evidence of causality, all that can be concluded from this study is that the work-to-family facilitation and family-to-work facilitation are related to these work and nonwork constructs at one point in time. A second limitation is that the measures of the variables studied were from the same questionnaire which leaves the findings open to the standard criticism associated with most self-report survey research, that one is simply correlating one part of a questionnaire with another. As noted by Frone, Russell, and Cooper (1992a), the magnitude of the relationships may be inflated because of common method variance. Response consistency effects may also be present, because of general personality dispositions, which could cause an inflation in the magnitude of the relationships (Thomas & Ganster, 1995). A more rigorous study should involve multiple methods to gather data, such as subjects completing diaries detailing the frequency with which certain events or activities occur over a given period of time;

having both the subject and spouse or other family member completing comparable surveys on such family characteristics as family support or division of household responsibilities; and supervisors providing data on work variables such as decision latitude and organization support.

An additional limitation based on the characteristics of the sample may be bias associated with nonresponse. As noted previously, the response rate was only 8%. As noted by Donald (1960, cited in Fowler, 1988), one clear generalization for mail surveys is that people who have a particular interest in the subject matter of the research are more likely to return questionnaires than those who are less interested in the subject matter. Therefore, the subject matter of this research may not have been of interest to this sample and could have biased the results.

Future research needs to further establish the discriminant validity of the scales, i.e., that work-family facilitation does not correlate significantly with variables from which it should differ, such as work-family conflict. In addition, validation of the scales across numerous occupations and organizations is needed to determine validity generalization, i.e., that the relationships reported in this study between work-family facilitation and the work and non-work variables are the same across studies and populations. It is hoped that further validation will lend confidence to the use of the scales, as well as add to the generalizability of work-to-family facilitation and family-to-work facilitation research.

Future research should also explore additional antecedents of work-family facilitation. Research on the antecedents of facilitation is sorely missing. The lack of support for the predicted relationship between work-family facilitation and parental

demands, number of children living at home, and number of hours spent in household chores may be due to the measurement of these constructs. For example, parental demands and number of hours spent in household chores was based on the participants' self-reported number of hours engaged in each activity. Future research should focus on better measures of intrafamily functioning in order to examine whether and how role responsibilities and demands are related to work-family facilitation.

In order to compete successfully in the job market, organizations may need to develop personnel strategies and policies that enhance family facilitating work. This involves identifying the mechanisms by which skills, experiences and attitudes transfer to enhanced work life. Rather than focusing on parental demands or age and number of children, future research should focus on the relationship between other family characteristics and facilitation. Several researchers have outlined the characteristics of strong, healthy families. For example, Stinnett and DeFrain (1985) identified six "strengths" that are present in "healthy families": 1) commitment, 2) appreciation, 3) communication, 4) time together, 5) spiritual wellness, and 6) coping with crisis. Olson, McCubbin, Barnes, Larsen, Muxen, and Wilson (1983) outlined seven marital and family strengths: 1) family pride, 2) family support, 3) cohesion, 4) adaptability, 5) communication, 6) religious orientation, and 7) social support. Attention should be paid to how certain family and marital strengths are associated with levels of facilitation between family and work.

In addition, other family characteristics that should be considered include employment status of spouse, blended families, responsibility for grandchildren, and responsibility for aging parents. According to the United States Census Bureau, in 2000

there were approximately 28.3 million dual earner families with their own children under the age of 18, while there were approximately 16.7 million families with children under the age of 18 where only the husband or wife was employed (2001, Table 2). In addition, there has been an increase in the number of single parents who maintain families. In 2000 the number of families maintained by women was 12.7 million, while the number of families maintained by men was 3.5 million (U.S. Census Bureau, 2001, Table P063). In addition, 2000 U.S. Census data shows that 42% of grandparents (over 2 million) are responsible for their own grandchildren under 18 years of age, over 1.3 million of which are in the paid labor force (U.S. Census Bureau, 2001, Table PCT018). Finally, increasingly adult children are being called upon to provide some sort of care and support to aged parents (Barber, 1980). In order to identify the family characteristics that lead to enhanced work life, research on the dynamics of work and family life needs to include an examination of the different family types and the family network structures (extended network, family of origin network, and conjugal network) in the different family types.

Future research should also include additional personal traits. Research has demonstrated that personality traits such as extroversion and neuroticism are related to facilitation between the work and family roles (Grzywacz & Marks, 2000b; Wayne, Musisca, & Fleeson, 2003), that there are differences in facilitation based on attachment style (Sumer & Knight, 2001), and that coping strategies are differentially related to facilitation (Wayne, Randal, & Stevens, 2003). However, there has been no research on the relationship between facilitation and such personal traits as hardiness, work ethics, gender role attitude, and temperament. As proposed by Grzywacz and Marks (2000b), different individual characteristics may moderate the effect of contextual factors on

work-family interactions, and hence facilitation. If the goal is to understand the negative and positive interactions in the work-family interface, knowledge of how individual characteristics account for the propensity of individuals to experience or report work and family conflict or facilitation is needed.

Finally, future research is needed to focus on identifying work role experiences in different vocations that may contribute to facilitation. As noted by Greenhaus and Powell (in press), studies suggest that many individuals experience work-family facilitation, however they do not necessarily indicate the types of role experiences that produce positive experiences and outcomes in the role. If work characteristics of certain occupations lend themselves to increased or decreased facilitation and conflict, then identifying those work characteristics may be useful in the design of workplace interventions intended to increase facilitation and reduce conflict. For example, role experiences and skills transferred from occupations in the hospitality industry may be quite different from role experiences and skills transferred from occupations in the engineering field.

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Appendices

Appendix A. Focus Group Recruitment Materials

Focus Group Telephone Recruitment Screening Script

Hello. My name is Sheila Holbrook, a graduate student in the Industrial/Organizational Psychology program of the University. I am working on my dissertation. My dissertation topic is the development and initial validation of a scale to measure work-family facilitation. I am going to be bringing together some people like you who work at the University for small group discussion to talk about work and family life.

An audiotape will be made of the session. After the session the audiotape will be kept in a secure location and will not be made available to anyone. A transcript will be made of the discussion. Your name will not be included in the transcript. The audiotape will be erased as soon as the transcript has been completed. The transcript will be used by me to assist in the development of items to include on the work-family facilitation scale. Some of the statements you make may also be included in my dissertation or a future paper submitted for publication as examples of work-family facilitation. If used in my dissertation or published paper, it will be presented in such a way that it will not be personally identifiable. However, confidentiality cannot be guaranteed for information you share in the discussion group, as I will have no control over the other participants. All participants will be asked at the beginning of the session to respect the privacy of fellow participants by not repeating anything discussed by others during the session. Would you be interested in participating in one of these discussion groups?

Must be Yes or terminate.

Eligibility requirements: work at least 35 hours per week and have at least one child under the age of 18 living in their home.

Screening Questions

Name: _____ Work Phone: _____

Department: _____

Mail Point: _____

I do have a couple of things that I need to check on.

1. Sex (by aural observation)
2. Do you have children under the age of 18 living at home? Must be Yes or terminate

Appendix A (Continued)

3. During the average week, how many hours do you work? Must be 32 hours or more or terminate.
4. What about your age? Are you in your 20s, 30s, 40s, . . .?
5. Marital Status?

Invitation

I would like you to come for a discussion regarding work and family life. Your participation is voluntary and you can withdraw from the project at any time. This discussion will be held at _____ on _____ at _____ and will last approximately 2 hours. I am interested in your opinions and experiences with respect to work and family life. Would you be willing to participate?

I will be mailing you an informed consent form prior to the session for your review. I will discuss the informed consent form with you in more detail on _____.

Focus Group E-Mail Recruitment

Hello. My name is Sheila Holbrook, a graduate student in the Industrial/Organizational Psychology program of the University. I am working on my dissertation. My dissertation topic is the development and initial validation of a scale to measure work-family facilitation. I am going to be bringing together some people like you who work at the University for small group discussion to talk about work and family life. I am contacting you to see if you would be interested in participating in one of these discussion groups.

I have scheduled several times on campus to hold discussion groups. It would take approximately 1 hour of your time, perhaps a little more depending on how the discussion progresses. I am interested in your opinions and experiences with respect to work and family life. Would you be willing to participate? I would appreciate your calling me at _____.

In anticipation of your assistance, I extend my sincerest appreciation.

Appendix B. Focus Group Acknowledgement Letter,
Acknowledgement E-Mail, and Informed Consent

Focus Group Acknowledgement Letter

Dear :

I write to confirm your participation in a focus group as a part of my dissertation project for the purpose of gathering information from you regarding your opinions and experiences with respect to work and family life. As I mentioned when we spoke, my dissertation topic is the development and initial validation of a scale to measure work-family facilitation. The things you say in response to the questions I will be asking will be recorded and analyzed by me to identify major themes that will form the basis for questions on the work-family facilitation scale. Participation is voluntary and you can withdraw from the project at any time. The focus group will be held at _____ on _____ at _____ and will last approximately one hour.

I am enclosing an informed consent form for your review prior to the session. I will discuss the informed consent form with you in more detail on .

If you have any questions concerning this survey, please do not hesitate to contact me at _____ or my major professor, Dr. Carnot Nelson, Department of Psychology, _____.

In anticipation of your assistance, I extend my sincerest appreciation. Thank you for your time and effort.

Sincerely,

Focus Group E-Mail Acknowledgement

I write to confirm your participation in a discussion group as a part of my dissertation project for the purpose of gathering information from you regarding your opinions and experiences with respect to work and family life. As I mentioned when we spoke, my dissertation topic is the development and initial validation of a scale to measure work-family facilitation. The things you say in response to the questions I will be asking will be recorded and analyzed by me to identify major themes that will form the basis for questions on the work-family facilitation scale. Participation is voluntary and you can withdraw from the project at any time.

The discussion group will be held in the _____ on _____ at 12:00 and will last approximately one hour.

Appendix B (Continued)

I am attaching an informed consent form for your review prior to the session. I will discuss the informed consent form with you in more detail at the discussion group session.

If you are not able to attend the discussion group on the date/time noted above, additional sessions are scheduled (also at noon) on the following dates/locations:

If you have any questions concerning the discussion group, please do not hesitate to contact me at _____ or my major professor, Dr. Carnot Nelson, Department of Psychology, _____.

Thank you for your time and effort.

E-mail sent if individual did not show up during scheduled time and who requested that I contact them via e-mail rather than by telephone.

I am sorry you were not able to participate in the discussion group schedule on March 24 as a part of my dissertation project for the purpose of gathering information from you regarding your opinions and experiences with respect to work and family life. If you were not able to attend because of work or family responsibilities that arose that prevented your participation, I do have additional discussion sessions scheduled and, if you are available to participate in one of the sessions it would be greatly appreciated. Sessions are scheduled to begin at noon on the following dates and locations:

I hope that you will be able to attend one of these sessions.

Informed Consent

Social and Behavioral Sciences
University of South Florida

Information for People Who Take Part in Research Studies

The following information is being presented to help you decide whether or not you want to take part in a research study. Please read this carefully. If you do not understand anything, ask the person in charge of the study.

Title of Study: Development and Initial Validation of the Work-Family Facilitation Scale

Principal Investigator: Sheila K. Holbrook

Study Location(s): University of South Florida, Tampa Campus

Appendix B (Continued)

You are being asked to participate because you are a full-time employee (working at least 35 hours per week) and have at least one child under the age of 18 living in your home.
General Information about the Research Study

The purpose of this research study is to develop and validate self-report scales of work-family facilitation and family-work facilitation.

Plan of Study

You are being asked to participate in two parts of the study. For the first part of the study you are being asked to participate in a discussion group. You will be asked about work and family life balance and positive influences work and/or family has on the other domain. The discussion session will take approximately one hour. An audiotape will be made of the session. A transcript will be made of the discussion will be made from the audiotape. The audiotape will be erased as soon as the transcript has been completed. The transcript will be used by me to assist in the development of items to include on the work-family facilitation scale. Some of the statements you make may also be included in my dissertation or a future paper submitted for publication as examples of work-family facilitation. If used in my dissertation or published paper, it will be presented in such a way that it will not be personally identifiable. All participants will be asked at the beginning of the discussion session to respect the privacy of fellow participants by not repeating anything discussed by others during the session.

For the second part of the study you are being asked to complete a survey and to provide feedback regarding the survey content (i.e., readability, item clarity) It will take approximately 30 minutes of your time to complete the second part of the study.

Benefits of Being a Part of this Research Study

By taking part in this research study you may increase your overall understanding of how your job experiences, skills or attitudes have made it easier for you to perform your family-related responsibilities and/or how family experiences, skills or attitudes have made it easier for you to perform your work-related responsibilities.

Risks of Being a Part of this Research Study

Confidentiality cannot be guaranteed for information you share during the discussion session, as I will have no control over participants once they leave the meeting room.

Appendix B (Continued)

Confidentiality of Your Records

Your privacy and research records will be kept confidential to the extent of the law. Authorized research personnel, employees of the Department of Health and Human Services, and the USF Institutional Review Board and its staff, and other individuals acting on behalf of USF, may inspect the records from this research project.

The results of this study may be published. However, the data obtained from you will be combined with data from others in the publication. The published results will not include your name or any other information that would personally identify you in any way.

The audiotape made of the discussion session will be kept in a secure location and will not be made available to anyone. A transcript will be made of the discussion. Your name will not be included in the transcript. The audiotape will be erased as soon as the transcript has been completed. Your comments and answers to questions asked during the discussion session will only be identified by a tracking number.

Volunteering to Be Part of this Research Study

Your decision to participate in this research study is completely voluntary. You are free to participate in this research study or to withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive, if you stop taking part in the study.

Questions and Contacts

- If you have any questions about this research study, contact Sheila Holbrook at _____ or Dr. Carnot Nelson at _____.
- If you have questions about your rights as a person who is taking part in a research study, you may contact the Division of Research Compliance of the University of South Florida at (813) 974-5638.

Consent to Take Part in This Research Study

By signing this form I agree that:

- I have fully read or have had read and explained to me this informed consent form describing this research project.
- I have had the opportunity to question one of the persons in charge of this research and have received satisfactory answers.

Appendix B (Continued)

- I understand that I am being asked to participate in research. I understand the risks and benefits, and I freely give my consent to participate in the research project outlined in this form, under the conditions indicated in it.
- I have been given a signed copy of this informed consent form, which is mine to keep.

Signature of Participant Printed Name of Participant _____
Investigator Statement

I have carefully explained to the subject the nature of the above research study. I hereby certify that to the best of my knowledge the subject signing this consent form understands the nature, demands, risks, and benefits involved in participating in this study.

Signature of Investigator Printed Name of Investigator _____
Date

Appendix C. Focus Group Discussion Guide

Thank individuals for participating.

Introductions of purpose: My dissertation topic is the development and initial validation of a scale to measure work-family facilitation. The things you say in response to the questions I will be asking will be recorded and analyzed by me to identify major themes that will form the basis for questions on the work-family facilitation scale. Participation is voluntary and you can withdraw from the project at any time.

Discussion of informed consent: You are agreeing to participate in a discussion group in connection my dissertation project, the development of a scale to measure work-family facilitation. You will be asked about work and family life balance and positive influences work and/or family has on the other domain. The discussion session will take approximately two hours. An audiotape will be made of the session. After the session the audiotape will be kept in a secure location and will not be made available to anyone. A transcript will be made of the discussion. Your name will not be included in the transcript. The audiotape will be erased as soon as the transcript has been completed. The transcript will be used by me to assist in the development of items to include on the work-family facilitation scale. Some of the statements you make may also be included in my dissertation or a future paper submitted for publication as examples of work-family facilitation. If used in my dissertation or published paper, it will be presented in such a way that it will not be personally identifiable. However, confidentiality cannot be guaranteed for information you share in the discussion, as I will have no control over participants once you leave this room. I ask that you all respect the privacy of your fellow participants by not repeating anything discussed by others during the session.

Groundrules:

Only one person speaking at a time.

No side conversations.

Everyone participates.

No one person dominates the conversation.

No judgments are made about any comments made.

Instructions:

If the group runs out of things to say, just remember that what I am interested in how work and family life influence each other and I want to hear as many different things as possible.

If your experience is a little different from what others are saying, then that is exactly what I want to hear from you. You may think your experience is different from everyone else's, but you may find that the same thing has happened to other people but no one else would have mentioned it if someone didn't start the ball rolling.

Appendix C (Continued)

I need to hear as many different things from as many of you as time allows. There really aren't right or wrong answers in this area – if there were, I'd go to experts and they'd tell me the answers. Instead, I'm here to learn from your experiences.

Opening question:

Tell us your name, where you work, and one thing you'd like us to know about your spouse or child – one thing that they do that makes you smile.

Introductory question:

When you hear the words work-family balance, what comes to mind?

Key questions:

1. What sorts of job experiences, skills or attitudes have made it easier for you to perform your family-related responsibilities?
2. What sorts of family experiences, skills or attitudes have made it easier for you to perform your work-related responsibilities?

Ending question:

Of all the things we discussed on the topic of work and family making it easier for you to perform your responsibilities in the other domain, which one thing has been the most benefit to you?

Summary question:

Summarize key questions and big ideas that emerged from the discussion.

Is this an adequate summary?

Final question:

Have we missed anything?

Appendix D. Subject Matter Expert Instructions and Rating Scale

The purpose of this questionnaire is to determine what component of work-family facilitation is being described by various statements. Beginning on the next page is a list of statements that can be classified as expressing or measuring work-to-family facilitation (work facilitating family) or family-to-work facilitation (family facilitating work). The statements come from existing work-family facilitation and positive spillover scales, items that were constructed based on a review of the literature and items that were constructed based on focus groups held with men and women who are employed full time and have at least one child under the age of 18 living in their home. I believe that you can help advance knowledge of the intersection of work and family by indicating the degree to which each statement is concerned with work-to-family facilitation and family-to-work facilitation. I appreciate and thank you in advance for your participation.

INSTRUCTIONS:

For each of the statements which appear on the following two pages:

- A. Carefully read each statement.
- B. Decide on the extent to which the statement refers to the component of work-family facilitation you are being asked to rate.
- C. For each statement, circle the number that indicates the extent to which the statement reflects the component of work-family facilitation you are rating. Use the following response scale: 1 = not at all representative, 2 = somewhat representative, 3 = moderately representative, 4 = very representative, and 5 = completely representative.

Please read and rate all of the statements, being careful not to omit or skip any.

Now, begin on the next page. Please remember to rate each statement carefully and not omit or skip any. Use the definition of work-family facilitation component at the top of each page in making your rating for that page. Thanks again.

[One definition will appear on the top of each page, followed by the response categories and the work-family facilitation items.

Work-to-Family Facilitation: Role facilitation in which the experiences in the job, job skills, and emotional gratification from the job facilitate performing family-related responsibilities/activities.

Family-to-Work: Role facilitation in which the experiences in the home, family skills, and emotional gratification from the home facilitate performing work-related responsibilities/activities.]

1	2	3	4	5
Not at all representative	Somewhat representative	Moderately representative	Very representative	Completely representative

Appendix E. Letter to Selected Respondents and Informed Consent

Letter to Selected Respondents

Dear USF Staff:

You are invited to participate in an research study that looks at work and family issues which staff deal with on a daily basis. With the assistance of the Division of Human Resources, you have been selected for this study. All individual data obtained in this study will remain confidential. Your participation in this study is completely voluntary. Your decision to participate or not participate will have no effect on your employment status at USF.

I would appreciate your taking approximately 40 minutes of your time to complete the attached survey. Please return the completed questionnaire in the envelop in which you received the materials using the attached mailing label; this will ensure confidentiality.

If you have any questions concerning this survey, please do not hesitate to contact me at _____ or Dr. Carnot Nelson, Department of Psychology, _____. The completed questionnaire should be returned no later than _____.

In anticipation of your assistance, I extend my sincerest appreciation.
Thank you for your time and effort.

Sincerely,

Sheila K. Holbrook
Graduate Student
Industrial/Organizational Psychology
Department of Psychology

Informed Consent

Social and Behavioral Sciences
University of South Florida

Information for People Who Take Part in Research Studies

The following information is being presented to help you decide whether or not you want to take part in a minimal risk research study. Please read this carefully. If you do not understand anything, ask the person in charge of the study.

Appendix E (Continued)

Title of Study: Development and Initial Validation of the Work-Family Facilitation Scale
Principal Investigator: Sheila Holbrook
Study Location(s): University of South Florida, Tampa, Florida

You are being asked to participate because you are a full-time employee (working at least 35 hours per week) and have at least one child under the age of 18 living in your home.

General Information about the Research Study

The purpose of this research study is to develop and validate self-report scales of work-family facilitation and family-work facilitation.

Plan of Study

You are being asked to complete a survey and return it through intercampus mail to the principal investigator. It will take approximately 40 minutes of your time to complete the survey.

Benefits of Being a Part of this Research Study

Taking part in this research study may not benefit you personally.

Risks of Being a Part of this Research Study

I do not anticipate your experiencing any negative effects as a result of your participation in the study.

Confidentiality of Your Records

Your privacy and research records will be kept confidential to the extent of the law. Authorized research personnel, employees of the Department of Health and Human Services, and the USF Institutional Review Board and its staff, and other individuals acting on behalf of USF, may inspect the records from this research project.

The results of this study may be published. However, the data obtained from you will be combined with data from others in the publication. The published results will not include your name or any other information that would personally identify you in any way.

I do not ask for your name, so the information you provide will be anonymous.

Appendix E (Continued)

Volunteering to Be Part of this Research Study

Your decision to participate in this research study is completely voluntary. You are free to participate in this research study or to withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive, if you stop taking part in the study.

Questions and Contacts

- If you have any questions about this research study, contact Sheila Holbrook, _____ or Dr. Carnot Nelson at _____.
- If you have questions about your rights as a person who is taking part in a research study, you may contact the Division of Research Compliance of the University of South Florida at (813) 974-5638.

Consent to Take Part in This Research Study

By signing this form I agree that:

- I have fully read or have had read and explained to me this informed consent form describing this research project.
- I have had the opportunity to question one of the persons in charge of this research and have received satisfactory answers.
- I understand that I am being asked to participate in research. I understand the risks and benefits, and I freely give my consent to participate in the research project outlined in this form, under the conditions indicated in it.

Signature of Participant

Printed Name of Participant

Date

Please return the signed informed consent with the completed questionnaire. A signed copy of this informed consent form, which will be yours to keep will be returned to you through intercampus mail.

Investigator Statement:

I certify that participants have been provided with an informed consent form that has been approved by the University of South Florida's Institutional Review Board and that explains the nature, demands, risks, and benefits involved in participating in this study. I further certify that a phone number has been provided in the event of additional questions.

Signature of Investigator

Printed Name of Investigator

Date

Appendix F. Follow-up Letter and E-Mail to Participants

Dear USF Staff:

You recently received an invitation to participate in my graduate research study regarding work and family issues by completing a work and family characteristics survey.

If you work full time and have at least one child under the age of 18 living at home, your response to my survey will contribute to the success of my graduate research project. Your participation in this study is completely voluntary.

If you have not had an opportunity to complete the survey, I would appreciate it if you would do so within the next few days and return it to me, along with the signed informed consent form, by campus mail to: Sheila K. Holbrook, Department of Psychology, PCD 4118G. It will only take approximately 40 minutes of your time to complete the survey. If you have misplaced the survey you received, please let me know by calling me at _____ or sending me an e-mail at _____ and I will send you another survey. If you prefer, I can send it to you via e-mail as a word document that you can complete, save, and return to me via e-mail.

If you have any questions concerning this survey, please do not hesitate to contact me at _____ or Dr. Carnot Nelson, Department of Psychology, _____. The completed questionnaire should be returned no later than January 15, 2005.

In anticipation of your assistance, I extend my sincerest appreciation. Thank you for your time and effort.

Sincerely,

Appendix G. Work-Family Conflict and Family-Work Conflict Scales

Work-Family Conflict Scale
(Netemeyer, Boles, and McMurrian, 1996)

1	2	3	4	5	6	7
Disagree Strongly	Disagree	Disagree Slightly	Neutral	Agree Slightly	Agree	Agree Strongly

1. The demands of my work interfere with my home and family life.	1	2	3	4	5	6	7
2. The amount of time my job takes up makes it difficult to fulfill family responsibilities.	1	2	3	4	5	6	7
3. Things I want to do at home do not get done because of the demands my job puts on me.	1	2	3	4	5	6	7
4. My job produces strain that makes it difficult to fulfill family duties.	1	2	3	4	5	6	7
5. Due to work-related duties, I have to make changes to my plans for family activities.	1	2	3	4	5	6	7

Family-Work Conflict Scale
(Netemeyer, Boles, and McMurrian, 1996)

1	2	3	4	5	6	7
Disagree Strongly	Disagree	Disagree Slightly	Neutral	Agree Slightly	Agree	Agree Strongly

1. The demands of my work interfere with my home and family life.	1	2	3	4	5	6	7
2. The amount of time my job takes up makes it difficult to fulfill family responsibilities.	1	2	3	4	5	6	7
3. Things I want to do at home do not get done because of the demands my job puts on me.	1	2	3	4	5	6	7
4. My job produces strain that makes it difficult to fulfill family duties.	1	2	3	4	5	6	7
5. Due to work-related duties, I have to make changes to my plans for family activities.	1	2	3	4	5	6	7

Appendix H. Work Role Overload Scale

Work Overload
(Pareek, 1983)

Each of the statements below is something a person might say about his or her work role. You are to indicate your own personal feelings about your work role by marking how much you agree with each of the statements.

Circle the number next to each statement, based on this scale:

How much do you agree with the statement?

1	2	3	4	5	6	7
Disagree Strongly	Disagree	Disagree Slightly	Neutral	Agree Slightly	Agree	Agree Strongly

1. My work load is too heavy.	1	2	3	4	5	6	7
2. The amount of work that I have to do interferes with the quality I want to maintain.	1	2	3	4	5	6	7
3. I have been given too much responsibility.	1	2	3	4	5	6	7
4. There is a need to reduce some parts of my role.	1	2	3	4	5	6	7
5. I feel overburdened in my work role.	1	2	3	4	5	6	7

Appendix I. Work Autonomy Scale

Autonomy (Hackman and Oldham, 1980)

The following question asks you to describe your job as objectively as you can. Try to make your description as accurate and objective as you possibly can.

You are to circle the number which is the most accurate description of the job you are rating.

How much autonomy is there in the job? That is, to what extent does the job permit a person to decide on his or her own how to do the work?

1	2	3	4	5	6	7
Very little; the job gives a person almost no personal “say about how and when the work is done.			Moderate autonomy; many things are standardized and not under the control of the person, but he or she can make some decisions about the work.			Very much; the job gives the person almost complete responsibility for deciding how and when the work is done.

Listed below are two statements which could be used to describe a job. You are to indicate whether each statement is an accurate or an inaccurate description of the job you are rating.

Please try to be as objective as you can in deciding how accurately each statement describes the job – regardless of your own personal feelings about that job.

Circle the number beside each statement based on the following scale:

How accurate is the statement in describing the job you are rating?

1	2	3	4	5	6	7
Very Inaccurate	Mostly Inaccurate	Slightly Inaccurate	Uncertain	Slightly Accurate	Mostly Accurate	Very Accurate

1. The job denies a person any chance to use his or her personal initiative or discretion in carrying out the work.	1	2	3	4	5	6	7
2. The job gives a person considerable opportunity for independence and freedom in how he or she does the work.	1	2	3	4	5	6	7

Appendix J. Job Satisfaction Scale

Job Satisfaction (Hackman and Oldham, 1980)

Each of the statements below is something that people might say about his or her job. Please indicate how satisfied you are with each aspect of your job listed below. Circle the number next to each statement, based on this scale:

How satisfied are you with this aspect of your job?

1	2	3	4	5	6	7
Extremely Dissatisfied	Dissatisfied	Slightly Dissatisfied	Neutral	Slightly Satisfied	Satisfied	Extremely Satisfied

1. The amount of personal growth and development I get in doing my job.	1	2	3	4	5	6	7
2. The degree to which I am fairly paid for what I contribute to this organization.	1	2	3	4	5	6	7
3. The amount of challenge in my job.	1	2	3	4	5	6	7

Now please think of the other people in your organization who hold the same job as you. If no one has exactly the same job as you, think of the job which is most similar to yours. Please think about how accurately each of the statements describes the feelings of those people about the job.

Once again, please circle the number next to each statement, based on this scale:

How much do you agree with the statement?

1	2	3	4	5	6	7
Disagree Strongly	Disagree	Disagree Slightly	Neutral	Agree Slightly	Agree	Agree Strongly

1. Most people on this job are very satisfied with the job.	1	2	3	4	5	6	7
2. People on this job often think of quitting.	1	2	3	4	5	6	7

Appendix K. Family Satisfaction Scale

Family Satisfaction
(Carver and Jones, 1992)

Now please indicate how you personally feel about your family.

Each of the statements below is something a person might say about his or her family. You are to indicate your own personal feelings about your family by marking how much you agree with each of the statements.

Circle the number next to each statement, based on this scale:

How much do you agree with the statement?

1	2	3	4	5	6	7
Disagree Strongly	Disagree	Disagree Slightly	Neutral	Agree Slightly	Agree	Agree Strongly

1. In their treatment of one another, my family is consistent and fair.	1	2	3	4	5	6	7
2. I would do anything for a member of my family.	1	2	3	4	5	6	7
3. I have a good time with my family.	1	2	3	4	5	6	7
4. I always feel my family supports me.	1	2	3	4	5	6	7
5. My family is one of the least important aspects of my life.	1	2	3	4	5	6	7
6. I always know what I can and cannot get away with at my house.	1	2	3	4	5	6	7
7. I am never sure what the rule are from day to day.	1	2	3	4	5	6	7
8. My family is one of the least important aspects of my life.	1	2	3	4	5	6	7
9. I will do anything necessary for any member of my family.	1	2	3	4	5	6	7
10. This is too much conflict in my family.	1	2	3	4	5	6	7
11. I usually feel safe sharing myself with my family.	1	2	3	4	5	6	7
12. I am happy with my family just the way it is.	1	2	3	4	5	6	7
13. Members of my family treat one another consistently.	1	2	3	4	5	6	7
14. There is a great deal about my family that I would like to change.	1	2	3	4	5	6	7

Appendix K (Continued)

1	2	3	4	5	6	7	
Disagree Strongly	Disagree	Disagree Slightly	Neutral	Agree Slightly	Agree	Agree Strongly	
15. With my family I can rarely be myself.	1	2	3	4	5	6	7
16. I am very unhappy with my family.	1	2	3	4	5	6	7
17. I am deeply committed to my family.	1	2	3	4	5	6	7
18. I often find myself feeling dissatisfied with my family.	1	2	3	4	5	6	7
19. My family always believes in me.	1	2	3	4	5	6	7
20. I find great comfort and satisfaction in my family.	1	2	3	4	5	6	7

Appendix L. Life Satisfaction Scale

Life Satisfaction

(Diener, Emmons, Larson, and Griffin, 1985)

Now please indicate how you personally feel about your life.

Each of the statements below is something a person might say about his or her life. You are to indicate your own personal feelings about your life by marking how much you agree with each of the statements.

Circle the number next to each statement, based on this scale:

How much do you agree with the statement?

1	2	3	4	5	6	7
Disagree Strongly	Disagree	Disagree Slightly	Neutral	Agree Slightly	Agree	Agree Strongly

1. In most ways my life is close to my ideal.	1	2	3	4	5	6	7
2. The conditions of my life are excellent.	1	2	3	4	5	6	7
3. I am satisfied with my life.	1	2	3	4	5	6	7
4. So far I have gotten the important things I want in life.	1	2	3	4	5	6	7
5. If I could live my life over, I would change almost nothing.	1	2	3	4	5	6	7

Appendix M. Psychological Distress Scale

Psychological Distress (Radloff, 1977)

Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past week.

Circle the number next to each statement, based on this scale:

1	2	3	4
Rarely or none of the time (less than 1 day)	Some or a little of the time (1 – 2 days)	Occasionally or a moderate amount of time (3 – 4 days)	Most or all of the time (5 – 7 days)

1. I was bothered by things that usually don't bother me.	1	2	3	4
2. I did not feel like eating; my appetite was poor.	1	2	3	4
3. I felt that I could not shake off the blues even with help from my family or friends.	1	2	3	4
4. I felt that I was just as good as other people.	1	2	3	4
5. I had trouble keeping my mind on what I was doing.	1	2	3	4
6. I felt depressed.	1	2	3	4
7. I felt that everything I did was an effort.	1	2	3	4
8. I felt hopeful about the future.	1	2	3	4
9. I thought my life had been a failure.	1	2	3	4
10. I felt fearful.	1	2	3	4
11. My sleep was restless.	1	2	3	4
12. I was happy.	1	2	3	4
13. I talked less than usual.	1	2	3	4
14. I felt lonely.	1	2	3	4
15. People were unfriendly.	1	2	3	4
16. I enjoyed life.	1	2	3	4
17. I had crying spells.	1	2	3	4
18. I felt sad.	1	2	3	4
19. I felt that people dislike me.	1	2	3	4
20. I could not get "going".	1	2	3	4

Appendix N. Demographic Information

1. Age: _____
2. Sex: _____ Male _____ Female
3. Ethnicity:
_____ Asian or Pacific Islander _____ Black
_____ Hispanic _____ White
_____ Other
4. Marital Status:
_____ Married/living as married _____ Separated/divorced
_____ Widowed _____ Single
5. a. How many children do you have living in your home? _____
b. Age(s) of children living in your home _____
6. Level of education:
_____ High school graduate _____ Some college
 or less
_____ College graduate _____ Some graduate or professional school
_____ Graduate or professional degree
7. What kind of work do you do?
_____ Professional _____ Managerial or administrative
_____ Clerical or sales _____ Technical
_____ Semi-skilled/unskilled _____ Other
8. Indicate the type of position you currently hold:
_____ Supervisory _____ Non-supervisory

Appendix N (Continued)

9. How long have you been in your current position? _____ yrs. _____ mos.
10. How long have you been working for our current organization? ____ yrs. ____ mos.

Appendix O. Item Generation

Items Identified in Literature Review.

Family-to-Work Facilitation

Wayne, Randel, & Stevens (2003)

1. Talking with someone at home helps me deal with challenges at work.
2. Spending time at home helps to relieve the stress I feel from work.
3. My family energizes me so I can tackle the challenges of my work.
4. I feel more confident at work when I feel that I am being successful at home.
5. Having a successful day at home puts me in a good mood to better handle my work responsibilities.

Sumer, H. C. & Knight, P. A. 2001

6. Quality of my job performance improves if I am satisfied with my home life.

Stephens et al 1997

7. Knowing that my family is being well cared for puts you in a good mood at work (reworded).
8. I have had more positive feelings about myself at work because I have felt good about myself at home.
9. I have had greater confidence in myself at work because I have been able to handle my family responsibilities well.
10. The positive characteristics I exhibit at home have made me feel better about myself at work (reworded).

Stephens and Franks, 1995

11. My effectiveness in handling my family responsibilities has enabled me to be more effective at work.

The Midlife Development Inventory, n.d.

12. Talking with someone at home helps me deal with problems at work.
13. My home life helps me relax and feel ready for the next day's work.
14. The love and respect I get at home makes me feel confident about myself at work.
15. Providing for what is needed at home makes me work harder at my job.

Marks & MacDermid, 1996

16. I am a better worker because of my family life.

Kirchmeyer, 1992

17. My family gives me ideas that can be applied on the job.
18. My home life develops skills in me that are useful at work.
19. My family life shows me ways of seeing things that are helpful at work.
20. My family life provides me with contacts who are helpful for my work.

Appendix O (Continued)

21. My family gives me support so I can face the difficulties at work.
22. My family experiences help me understand people at work better.
23. Talking with someone at home makes disappointments on the job seem easier to take.
24. Spending time with my family helps me forget problems at work.
25. My home life energizes me so I can tackle the challenges of my job.

Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003

26. The increased competence I gain through family activities helps me fulfill my work responsibilities.
27. Successfully performing tasks in my family life helps me to more effectively accomplish tasks at work.
28. I am better able to perform at my job as a result of skills acquired through my family responsibilities.
29. Abilities developed in my family life help me in my job.
30. When things are going well in my family life, my outlook regarding my job is improved.
31. Values that I rely on to fulfill my family responsibilities make it easier to meet the demands of my job.
32. Values that I learn through my family experiences assist me in fulfilling my work responsibilities.
33. In meeting my job demands, I utilize values developed in my family life.
34. Carrying out my work responsibilities is made easier by using behaviors performed as part of my family life.
35. Behaviors required in my family life lead to behaviors that assist me at work.
36. I often have a positive attitude at work as a result of my family life.
37. Having a good day with my family improves my frame of mind at work.

Work-to-Family Facilitation

Wayne, Randel, & Stevens 2003

1. Talking with someone at work helps me deal with challenges at home.
2. Spending time at work helps to relieve the stress I feel from home.
3. My job energizes me so I can tackle the challenges of my family.
4. I feel more confident at home when I feel that I am being successful at work.
5. Having a successful day at work puts me in a good mood to better handle my family responsibilities.
6. Having a good day on my job makes me a better family member when I get home.

Voydanoff, 2004

7. I have more energy to do things with my family because of my job (reworded).
8. I am in a better mood at home because of my job (reworded).

Appendix O (Continued)

Sumer and Knight (2001)

9. My job develops skills in me that are useful at home.
10. My job shows me ways of seeing things that are helpful outside of work.
11. Quality of my home life improves if I am satisfied with my job.

Stephens et al 1997

12. I have had more positive feelings about myself in my family life because I have felt good about myself at work. (Reworded)
13. I have had greater confidence in myself in fulfilling my family responsibilities because I have been able to handle my job responsibilities well (reworded).

Small & Riley, 1990

14. My job helps me have a better relationship with my family (reworded).
15. I am a better family member because of my job. (reworded).
16. Having a job makes it easier for me to get my household chores done.

The Midlife Development Inventory, n.d.

17. The things I do at work help me deal with personal and practical issues at home.
18. The skills I use on my job are useful for things I have to do at home.
19. The things I do at work make me a more interesting person at home.
20. Having a good day on my job makes me a better companion when I get home.

Kirchmeyer, (1992)

21. My job gives me access to certain facts/information that can be used to improve my home life.

Hanson, G. C., Colton, C. L., & Hammer, L. B. (2003)

22. The increased competence I gain through work activities helps me fulfill my family responsibilities.
23. Successfully performing tasks at work helps me to more effectively accomplish family tasks.
24. I am better able to perform my family responsibilities as a result of skills acquired at work.
25. Abilities developed at work help me in my family life.
26. Values that I rely on to fulfill my work responsibilities make it easier to meet my family responsibilities.
27. Values that I learn through my work experiences assist me in fulfilling my family responsibilities.
28. In meeting my family responsibilities, I utilize values required at work.
29. Carrying out my family responsibilities is made easier by using behaviors performed at work.
30. Behaviors required by my job lead to behaviors that assist me in my family life.

Appendix O (Continued)

31. When things are going well at work, my outlook regarding my family responsibilities is improved.
32. I often have a positive attitude toward my family as a result of my job.
33. Having a good day at work improves my frame of mind concerning family responsibilities.
34. The skills that I have developed at my job help me perform my family responsibilities.

Items Developed Based on Focus Group Content Analysis

Family to Work Facilitation

38. The skills that I have developed at home help me perform my job responsibilities.
39. The skills I use at home are useful for things I have to do at work.
40. The learning experiences that I have in my family life help me effectively perform my work responsibilities.
41. Values developed at home help me in handling my work responsibilities
42. The things I do at home make me a more interesting person at work.
43. The things I do at home help me to deal with personal and practical issues at work.
44. The diversity of my family life helps me deal with personal and practical issues at work.
45. My home life gives me access to resources that can be used to improve my work life.
46. My home life gives me access to certain facts/information that can be used to improve my work life.
47. My family shows me ways of seeing things that are helpful at work.
48. The stability that I get from my family life helps me focus on the demands of my job.
49. The respect I get in my family life makes me feel confident about myself at work.
50. The relationships I have in my family life help me deal with problems at work.
51. Sharing experiences that I have at work with family helps improve my outlook regarding my job.
52. Having a good time with my family after work makes me a better employee when I go to work.
53. Having a good day at home makes me a better employee when I get to work.
54. My family life helps me in dealing with people at work.

Work-to-Family Facilitation

35. The learning experiences that I have at work help me more effectively perform my family responsibilities.
36. Values developed at work help me in handling my family responsibilities.

Appendix O (Continued)

37. The diversity of my work place helps me deal with personal and practical issues at home.
38. The benefits available to me at work make it easier to manage my family responsibilities.
39. Talking with coworkers helps me deal with problems at home.
40. My work experiences help me understand my family better.
41. My job gives me access to resources that can be used to improve my family life.
42. My effectiveness in handling my work responsibilities has enabled me to be more effective at home.
43. My coworkers give me ideas that can be applied outside of work.
44. My contacts with people at work help me to interact better with diverse people outside of work.
45. I get ideas from my job that can be applied at home.
46. Having a job helps me to better appreciate the time I spend with my family.
47. The stability that I get from work helps me focus on my family responsibilities.
48. The respect I get at work makes me feel confident about myself outside of work.
49. The respect I get at work makes me feel confident about myself at home.
50. The relationships I have at work help me deal with problems at home.
51. Spending time at work helps me forget problems at home.
52. Sharing experiences that I have at home with my coworkers helps improve my outlook regarding my family life.
53. The positive characteristics I exhibit at work have made me feel better about myself at home.
54. My coworkers give me support so I can tackle the challenges of my family life.

Appendix P. Items Included on Questionnaire

Family-to-Work Facilitation

- FWF01 Carrying out my work responsibilities is made easier by using behaviors performed as part of my family life. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)
- FWF02 Values that I learn through my family experiences assist me in fulfilling my work responsibilities. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role experiences)
- FWF03 Abilities developed in my family life help me in my job. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)
- FWF04 The skills that I have developed in my family life help me perform my work responsibilities. (Role skills)
- FWF05 Having a successful day with my family puts me in a good mood to better handle my work responsibilities. (Wayne, Randel, & Stevens, 2003, reworded). (Role experiences)
- FWF06 I am better able to perform my work responsibilities as a result of skills acquired through my family responsibilities. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003, reworded) (Role skills)
- FWF07 Talking with a family member helps me deal with problems at work. (The Midlife Development Inventory, n.d., reworded) (Role experiences)
- FWF08 Having a good day with my family improves my frame of mind about my work responsibilities. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003, reworded). (Role attitudes)
- FWF09 I often have a positive attitude toward my work as a result of my family life. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003, reworded) (Role attitudes)
- FWF10 Knowing that my family is being well cared for puts me in a good mood to take care of work responsibilities. (Stephens et al 1997, reworded) (Role attitudes)
- FWF11 My family life develops skills in me that are useful at work. (Kirchmeyer, 1992, reworded). (Role skills)
- FWF12 My family life gives me access to certain facts/information that can be useful in performing my work responsibilities. (Role experiences)
- FWF13 The increased competence I gain through family activities helps me fulfill my work responsibilities. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003) (Role experiences)
- FWF14 The relationships I have in my family life help me to interact more effectively with people at work. (Role experiences)
- FWF15 My family life provides me with contacts who are helpful for my work. (Kirchmeyer, 1992). (Role experiences)
- FWF16 My interactions at work are better because I have felt good about myself at home. (Stephens et al., 1997, reworded). (Role attitudes)
- FWF17 My family gives me support so I can face the difficulties at work. (Kirchmeyer, 1992) (Role experiences)

Appendix P (Continued)

- FWF18 Values that I rely on to fulfill my family responsibilities make it easier to meet the demands of my job. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role experiences)
- FWF19 Talking with my family makes disappointments at work seem easier to take. (Kirchmeyer, 1992) (Role experiences)
- FWF20 The love and respect I get from my family makes me feel confident about myself at work. (The Midlife Development Inventory, n.d.). (Role attitudes)
- FWF21 Talking with someone in my family helps me deal with challenges at work. (Wayne, Randel, & Stevens, 2003, reworded) (Role experiences)
- FWF22 The things I do at home help me to deal with personal and practical issues at work. (Role experiences)
- FWF23 The learning experiences that I have in my family life help me effectively perform my work responsibilities. (Role experiences)
- FWF24 The positive characteristics I have developed at home have made me feel better about my work. (Stephens et al., 1997, reworded). (Role attitudes)
- FWF25 My family experiences help me understand people at work better. (Kirchmeyer, 1992). (Role experiences)
- FWF26 The relationships I have in my family life help me deal with problems at work. (Role experiences)
- FWF27 The respect I get in my family life makes me feel confident about handling my work responsibilities. (Role experiences)
- FWF28 My family shows me ways of seeing things that are helpful at work. (Role experiences)
- FWF29 The stability that I get from my family life helps me focus on the demands of my job. (Role experiences)
- FWF30 The things I do in my family life help me in performing my work responsibilities. (Role experiences)
- FWF31 My family life gives me access to resources that are helpful in my work life. (Role experiences)
- FWF32 Values developed at home help me in handling my work responsibilities (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003, reworded). (Role experiences)
- FWF33 Behaviors required in my family life lead to behaviors that assist me at work. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003) (Role skills)
- FWF34 Values developed in my family life help me to meet the demands of my job. (Role experiences)
- FWF35 Having a good time with my family after work makes me a better employee when I go to work. (Role experiences)
- FWF36 I feel more confident in performing my work when I feel that I am successful in my family life. (Wayne, Randel, & Stevens, 2003, reworded) (Role attitudes)
- FWF37 When things are going well in my family life, I have a better outlook about my work responsibilities. (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003, reworded) (Role attitudes)

Appendix P (Continued)

Work-to-Family Facilitation

- WFF01 Talking with someone at work helps me manage challenging family responsibilities at home (Wayne, Randel, & Stevens, 2003, reworded). (Role experiences)
- WFF02 Behaviors required by my work lead to behaviors that assist me in my family life (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003, reworded). (Role skills)
- WFF03 Having a good day at work improves my frame of mind about taking care of family responsibilities (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003, reworded). (Role attitudes)
- WFF04 I get ideas from my work that can be applied in my family life. (Role experiences)
- WFF05 My job shows me ways of seeing things that are helpful in my family life (Sumer & Knight, 2001, reworded). (Role experiences)
- WFF06 Values developed at work help me in handling my family responsibilities. (Role attitudes)
- WFF07 My work experiences help me understand my family better. (Role experiences)
- WFF08 I feel more confident in performing family responsibilities when I feel that I am successful at work (Wayne, Randel, & Stevens, 2003, reworded). (Role attitudes)
- WFF09 My contacts with people at work help me to interact more effectively with people outside of work. (Role experiences)
- WFF10 In meeting my family responsibilities, I utilize values required at work (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role experiences)
- WFF11 Carrying out my family responsibilities is made easier by using behaviors performed at work (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)
- WFF12 My coworkers give me ideas that can be applied in my family life. (Role experiences)
- WFF13 My effectiveness in handling my work responsibilities has enabled me to be more effective at home. (Role experiences)
- WFF14 My coworkers give me support so I can tackle the challenges of my family life. (Role experiences)
- WFF15 The stability that I get from work helps me focus on my family responsibilities. (Role experiences)
- WFF16 I am better able to perform my family responsibilities as a result of skills acquired at work (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)
- WFF17 The relationships I have at work help me deal with problems at home. (Role experiences)
- WFF18 My job develops skills in me that are useful for completing family responsibilities (Sumer & Knight, 2001, reworded). (Role skills)

Appendix P (Continued)

- WFF19 Successfully performing tasks at work helps me to more effectively accomplish family tasks (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role skills)
- WFF20 My work gives me access to resources that are useful in my family life. (Role experiences)
- WFF21 When things are going well at work, I have a better outlook about my family responsibilities (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003, reworded). (Role attitudes)
- WFF22 My interactions with my family are better because I have felt good about myself at work. (Role attitudes)
- WFF23 The benefits available to me at work make it easier to manage my family responsibilities. (Role experiences)
- WFF24 The increased competence I gain through work activities helps me fulfill my family responsibilities (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003). (Role experiences)
- WFF25 The skills I use at work are useful for things I have to do at home (The Midlife Development Inventory, n.d., reworded). (Role skills)
- WFF26 The learning experiences that I have at work help me more effectively perform my family responsibilities. (Role experiences)
- WFF27 The skills that I have developed at work help me perform my family responsibilities. (Role skills)
- WFF28 Having a successful day at work puts me in a good mood to better handle my family responsibilities (Wayne, Randel, & Stevens, 2003, reworded). (Role attitudes)
- WFF29 Having a good day at work makes me a better companion when I am with my family (The Midlife Development Inventory, n.d., reworded). (Role experiences)
- WFF30 I often have a positive attitude toward family responsibilities as a result of my work (Hanson, G. C., Colton, C. L., & Hammer, L. B., 2003, reworded). (Role attitudes)
- WFF31 I am in a better mood at home to participate in family activities because of my work (Voydanoff, 2004, reworded). (Role attitudes)
- WFF32 Talking with coworkers helps me deal with problems at home. (Role experiences)

About the Author

Sheila Holbrook received a Bachelor's Degree in Psychology, with a minor in Women's Studies, from the University of South Florida in 1988, graduating cum laude. She earned her Master's Degree in industrial/organizational psychology from the University of South Florida in 1998.

Ms. Holbrook has worked at the University of South Florida for over 25 years in various administrative positions where she has been involved in designing and implementing pay for performance, performance management and organizational development, and change initiatives.