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Dependent Care and Work-Life Outcomes : Comparing Exceptional Care and Typical Care Responsibilities

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DEPENDENT CARE AND WORK-LIFE OUTCOMES: COMPARING
EXCEPTIONAL CARE AND TYPICAL CARE RESPONSIBILITIES

by

LISA MAUREEN STEWART

A dissertation submitted in partial fulfillment of the
requirements for the degree of


DOCTOR OF PHILOSOPHY
in
SOCIAL WORK AND SOCIAL RESEARCH

Portland State University
2009

DISSERTATION APPROVAL

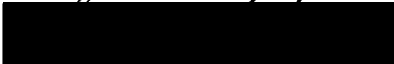
The abstract and dissertation of Lisa Maureen Stewart for the Doctor of Philosophy in Social Work and Social Research were presented April 29, 2009, and accepted by the dissertation committee and the doctoral program.


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ABSTRACT

An abstract of the dissertation of Lisa Maureen Stewart for the Doctor of Philosophy in Social Work and Social Research presented April 29, 2009.

Title: Dependent Care and Work-Life Outcomes: Comparing Exceptional Care and Typical Care Responsibilities

Exceptional care responsibilities describe the experiences of caring for a dependent with a chronic illness or disability (Roundtree & Lynch, 2006). To date research on exceptional care responsibilities has occurred outside of the traditional work-life field. This study positions exceptional care responsibilities as a type of dependent care that goes beyond that of typical care responsibilities and argues efforts are needed both within the workplace and the community to address the challenges faced by employees with disability-related dependent care responsibilities.

The influence of supports within the workplace on the work-life barriers and related outcomes of employees with typical care and exceptional care responsibilities was examined through a secondary analysis of the 2002 National Study of the Changing Workforce (NCSW; Families and Work Institute, 2004) using bivariate and multivariate techniques to identify significant predictors. Once the significant predictors were identified subsequent models were developed and tested for measurement and structural equivalence using multiple-group structural equation modeling techniques.

A sub-sample of data from wage and salaried workers who acted as parents of children under the age of 18 years of age was analyzed ($n = 1,902$). Fifty one percent were female, 76% were legally married or living with a partner. Seventy four percent of the sample of parents were white, 11% were African American, 9% were Hispanic/Latino and 4% were of other ethnicities. The median child age of the youngest child among all caregivers was 9 years. Approximately, 10% of the parents in the sample had exceptional care responsibilities ($n = 196$), defined as having care responsibilities for a dependent (child, adult or older adult) with a disability or chronic condition.

Key findings suggest that different types of disability-related dependent care can be conceptualized as a single construct, exceptional care. The results of the multiple groups structural equation models suggest that the work supports and barriers exert varying degrees of influence on family and life satisfaction, satisfaction with work, and stress that are different compared to employees with typical care responsibilities. Implications for measurement in work-life research, and policy that supports flexibility within the workplace and the community are discussed.

DEDICATION

To my grandmother Marion Eleanor McFarlane Greaves (1922-2000)—who managed exceptional care responsibilities and employment at a time when there were few supports for disability-related dependent care.

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Chapter 1: Introduction

Work-life integration represents the ability to successfully balance the demands of paid work with the rest of one's relationships, activities, and responsibilities (Lewis, Rapoport, & Gambles, 2002). Much of the scholarly literature written over the past 25 years has attempted to identify and assess both the negative and positive aspects of work and family on the well-being of individuals (Barnett, 1998; Beutell & Wittig-Bergman, 1999; Greenhaus, & Parasuraman, 1999; Grzywacz & Bass, 2003; Haas, 1999; Kirchmeyer, 1992; Pedersen-Stevens, Kiger & Riley, 2006; Rothbard, 2001). To date research on work-life issues facing employees has largely focused on the experiences of dual-earner, white, middle-class couples with children with typical development (Higgins, Duxbury, Lee, & Mills, 1994; Marshall & Barnett, 1993; Pedersen Stevens & Riley, 2006; Roehling, Moen, & Batt, 2003; Sweet, Swisher, & Moen, 2005). Recent lines of research have begun to delve into the work-life challenges of working class families (Dodson & Dickert, 2004; Lindhorst & Mancoske, 2006; Perry-Jenkins & Folk, 1994; Taylor & Barusch, 2004) and ethnic minorities (John, Shelton & Luschen, 1995; Reid Keene & Prokos, 2007; Landry, 1994; Roehling, Hernandez Jarvis & Swope, 2005) and those caring for aging parents and/or relatives (Chapman, Ingersoll-Dayton, & Neal, 1994; Gibeau, Anastas, & Larson, 1987; Ingersoll-Dayton, Neal, & Hammer, 2001; Reid Keene & Prokos, 2007; Scharlach & Boyd, 1989; Wagner & Neal, 1994).

The inclusion of diverse work-life experiences into the research base is a reflection of several socio-demographic shifts which are having a profound impact on

the workforce itself. First, the current workforce is aging, meaning that more workers are leaving the workforce than are entering it. An estimated 20% of the population is expected to be 65 or older by the year 2030 (Bronfenbrenner, McClelland, Wethington, Moen, & Ceci, 1996). Second, advances in medical technology are providing individuals with disabilities and chronic conditions better quality of life and longer life spans. This not only contributes to the changing demographics of the workforce, but also increases care demands on family members for longer periods of time (Warfield, 2005). For older adults, this care is typically provided by adult children, who attempt to combine both childrearing and eldercare with paid employment (Ingersoll-Dayton et al., 2001). For children and related adults living with chronic diseases or mental health or behavioral disorders, care is now most often provided by the family in the home instead of in a hospital or institution (Warfield, 2005).

Four questions guided the development of this research project: First, what does dependent care encompass and how does it interact with work? Second, can different types of particularly demanding dependent care be conceptualized within a single construct called exceptional care? Third, are exceptional care responsibilities different from typical care responsibilities? Fourth, are the barriers to work-life integration faced by employees with exceptional care responsibilities different from those faced by employees with typical care responsibilities? This research project explores these issues and demonstrates that research is needed to determine the effects of workplace supports and work-life integration outcomes for employees who have different types of exceptional care responsibilities. Moreover, comparisons need to be

made between employees with typical care responsibilities and those with exceptional care responsibilities that reflect an understanding of the challenges involved in negotiating work and complex dependent care.

Dependent Care

Dependent care is defined as the provision of informal care to family members who can be children, adults, or older adults (Stebbins, 1991). Historically, dependent care has been viewed as being the responsibility of women, who, for the earlier part of the last century, remained within the home providing care to children and older family members while men engaged in paid work outside of the home. Responsibility for dependent care was not always viewed as gender specific: prior to industrialization, work and family responsibilities were interchangeable with men and women engaging in labor in and around the home (Rosenzweig, Barnett, Huffstutter, & Stewart, 2008; Wharton, 2006). Technological advances of the Industrial Revolution and the promises of wages in exchange for labor drew men away from work in the home and created a division of labor based on gender (Jacobsen, 2007). Women's work during this time period remained centered on the production of goods within the home and childrearing (Rosenzweig et al., 2008; Wharton, 2006). This separation of work from family life allowed employers to structure the type, duration, and benefits associated with paid work on the assumption that men did not have child care responsibilities within the home (Rosenzweig et al., 2008).

Typical Care Responsibilities

Typical care responsibilities refer to the general care experiences of parents of children with typical development and to a limited extent, the care of older adults. For children, typical care involves providing daily assistance and adult supervision, such as preparing children for school in the morning, arranging transportation to and from school, helping out with homework, and nurturing. Physical and emotional care of children with typical development increases at times, such as during infancy, having several young children, but generally lessens over time as children mature into adolescence and adulthood.

The care of older adults, which is often known as elder care, encompasses the physical and emotional care of an older adult over 65 years of age, who is most likely a parent. Typical elder care can be *instrumental* as seen through the provision of financial support, transportation to and from medical appointments, grocery shopping or social activities and *emotional* as seen through the support provided by phone calls or visits (Neal & Hammer, 2007). Elder care can increase over time as the older adult ages and can involve intense episodes that result from challenges encountered with chronic conditions (Neal & Hammer, 2007).

The unprecedented entry into the workforce by women during the 1960's and 1970's signaled a shift in the social expectations that labor within the home be the sole responsibility of women (Jacobsen, 2007). Employment rates for married women with children have increased from 43.3% in 1970 to 59.3% in 2005 (U.S. Census Bureau, 2007). Further, women are delaying childbirth which has led to the prevalence of

more women who are part of the “sandwich generation,” caring for both young children and older adults (Neal & Hammer, 2007). Recent demographic trends suggest that dual-earner couples with children in the home now represent 64% of all workers who are parents and 57% of those with children under the age of 6 (Roehling & Moen, 2003). The increased presence of women in the workforce has helped to decrease, but not eliminate, assumptions about gender-based roles that still operate within family and work settings (Rosenzweig et al., 2008).

As more women entered and remained within the workforce, the provision of dependent care became an issue faced by both employed mothers and organizations which employed women. In response to the growing demands within the labor force for workplace adjustments, organizations began to act in response to the needs of employed women (and later men) through the provision of child care resources, referrals, on-site child care centers, and the development of family-friendly policies assisting parents to make adjustments within their work schedules to care for a sick child or breakdowns in childcare arrangements. As the population has aged and as more and more women delayed childbirth, the challenges associated with caring for young children and older parents has led to the development of resources within the workplace to support employees providing dependent care for both children and older adults (Neal & Hammer, 2007). In spite of the development of “family-friendly” organizations in recent years, the absence of a cohesive system of supports for typical care remains and is a result of the historical assumptions of care work in relation to women’s roles as mothers, daughters, and daughters-in-law (Stebbins, 2001). The

current shape and scope of family-friendly policies are responsive to the needs of employees with typical care responsibilities. Recently, work-life scholars have begun to question the adequacy of work-life policies for employees with diverse dependent care responsibilities (Neal, Chapman, Ingersoll-Dayton, & Emlen, 1993; Neal & Hammer, 2007; Rosenzweig, Brennan, & Ogilvie, 2002; Warfield, 2005). This is seen through the development of a research base that has examined the work-life challenges associated with being a part of the “sandwich generation,” who juggle full time employment and care responsibilities for their children and older relatives (Chapman, Ingersoll-Dayton & Neal, 1994; Neal & Hammer, 2007), as well as a similar line of research examining the needs of employees with children who have physical, emotional or behavioral disabilities (Brennan & Brannan, 2005; Lewis, Kagan & Heaton, 2000a ; Rosenzweig & Huffstutter, 2004) and those providing care for young adults or adults who are middle age (Essex & Hong, 2005; Home, 2004). The research base related to child and eldercare has been instrumental in the development of specific policies that address employees who have these responsibilities. Absent from these newer workplace policies and practices are those that reflect the needs of parents who provide care for dependents with chronic conditions, especially those with young children with disabilities. The research base and the organizational policies themselves, suggest that disability-related dependent care is viewed as a different entity than childcare or eldercare by those who enact family-friendly policies within organizations (Brennan, Rosenzweig, Huffstutter, Stewart, & Coleman, 2007). Eldercare itself lacks definitional agreement with some research defining this type of

care in terms of activities one provides as a caregiver and/or the number of hours one provides in care to an older adult (see Neal & Hammer, 2007; Williams, 2005). The lack of clarity within the concept of eldercare is problematic as the lines between what is measured as *typical* care of older adults versus the *exceptional* care of older adults are unclear. Further, in examining the research on disability-related care and a type of eldercare in particular, the dependent care associated with providing care to children *and* elders, the similarities in outcomes such as increased stress and conflict related to dependent care responsibilities suggests that they may in fact be reflective of a concept called *exceptional care* (Neal, Chapman, Ingersoll-Dayton, Emlen, & Boise, 1993; Neal & Hammer, 2007; Sahibzada, Hammer, Neil, & Kuang, 2005). To date intellectual work has not advanced the concept of exceptional care as a feature of dependent care, nor have conceptual efforts been made to position disability-related dependent care in relation to its similarities and differences with typical care and this represents a significant gap in the knowledge base.

Exceptional Care Responsibilities

Exceptional care responsibilities is a concept that refers to the experiences of caring for a dependent with a chronic illness or disability (Roundtree & Lynch, 2006). The dependent receiving care may be (a) a child or adolescent, (b) an adult relative who is a child or a spouse or, (c) an elderly relative, who is a parent. Exceptional care responsibilities differ from typical care responsibilities in several significant ways. It can include care that is constant and escalates over time, involves a significant amount of time and energy, can become harder as time goes on, is often crisis driven, and the

individual receiving care grows increasingly dependent (Roundtree & Lynch, 2006). Exceptional care responsibilities requires intense physical, emotional, and financial resources. This type of care require that the primary caregiver and the family make numerous adjustments in both the work and home settings (Roundtree & Lynch, 2006). Other challenges associated with exceptional care includes the person providing the care have specialized knowledge related to the chronic condition, extensive collaboration with health professionals, and the acquisition of specialized home care skills (Hill & Zimmerman, 1995; Leiter, Krauss, Anderson, & Wells, 2004). Exceptional care responsibilities are intensified by an absence of supports in the workplace and the community to assist individuals and families (Brennan & Brannan, 2005; Gareis & Barnett, 2008; Rosenzweig & Huffstutter, 2004).

Exceptional Care Responsibilities and Employment

An estimated 44 million Americans are providing care to adult family members (National Alliance for Caregiving and AARP, 2004). Approximately 21.8% of U.S. households care for children with special needs (Department of Health and Human Services, 2007). Current estimates suggest that 9% to 13% of households with individuals between the ages of 30 to 60 are dual-earner, sandwiched-generation couples, caring for both an aging parent and raising children (Neal & Hammer, 2007). For families with children who have disabilities, a national population survey found that over half of mothers with children who have disabilities were employed either full or part time (Leiter, Krauss, Anderson, & Wells, 2004). There is no consensus on the total number of families caring for a dependent with a disability. Reasons for this lack

of agreement is due to the different ways in which disabilities and disability care are defined and counted (Brennan & Brannan, 2005; Neal & Hammer, 2007).

Studies that have examined the impact of having a younger child (0 to 5) with a disability on maternal employment has found that compared to mothers of young children with typical development, mothers of children with special needs have more difficulty in maintaining continuous employment (Ward, Morris, Atkins, Morris, & Oldham, 2006). Maternal participation in the labor force is even lower for single mothers of children with disabilities, who must assume full responsibility for care, household chores, and paid work (Powers, 2003; Rosenzweig et al., 2008). For mothers of children with disabilities, comparisons of work force participation with mothers of children with typical development indicates that they face many structural barriers in attempting to combine paid work with caregiving (George, Vickers, Wilkes & Barton, 2008; Ward, 2005). Many mothers report having to quit work to care for their children, reduce the number of hours worked, or change jobs to accommodate care demands (Freedman, Litchfield, & Warfield, 1995; George et al., 2008; Porterfield, 2002; Rosenzweig & Huffstutter, 2004; Thyen, Kuhlthau, & Perrin, 1999). This pattern is maintained throughout the life course, as studies of families with children with developmental disabilities have found that mothers tend to remain out of the workforce (Essex & Hong, 2005; Home, 2004). Reasons for maternal under-employment are linked to the cultural assumptions about gender and the role of women as caregivers; namely, that women should remain in the home providing care

for their children. For mothers with children who have disabilities, research suggests that these assumptions are magnified (Kagan, Lewis, & Heaton, 1998).

Other studies find support for a lack of fit between work and exceptional care responsibilities. Employees with exceptional care responsibilities are often unable to balance employment and caregiving due to an absence of adequate child or eldercare options, insufficient leave time, or workplace adjustments to meet episodic care needs (Lewis, Kagan & Heaton, 2000a; Neal et al., 1993; Rosenzweig, Brennan, & Ogilvie, 2002; Ward et al., 2006). A recent survey of caregivers with exceptional care responsibilities found that only 59% stated that they were currently employed, and of those working 62% reported that their caregiving responsibilities have affected their work (National Alliance for Caregiving and AARP, 2004). Fifty-seven percent of caregivers in the study reported needing to arrive late, leave early or take time off, 17% reported taking a leave of absence, 10% reported having to reduce work hours, 6% reported having to quit work, and 4% reported having to turn down a promotion to meet their exceptional care responsibilities (National Alliance for Caregiving and AARP, 2004). Reduction in work hours and lack of participation in the labor force can result in high levels of personal distress, poverty and isolation, reducing community participation by individuals with exceptional care responsibilities (Brennan & Brannan, 2005; Neal et al, 1993; Neal & Hammer, 2007; Powers, 2003). Participation in community has been found to be a substantial element to work-life integration (Bowen, Richman, & Bowen, 2000; Kagan, Lewis, & Brennan, 2008; Sweet, Swisher, & Moen, 2005; Voydanoff, 2007). Despite the advances within the

workplace in relation to the development of policies and supports for typical care responsibilities, the same cannot be said for exceptional care responsibilities. The absence of such supports reflects the cultural assumption regarding illness and disability. Specifically it is assumed that if a family member has a disability, then it is the mother, daughter or daughter-in-law's responsibility to provide care at home (Essex & Hong, 2005). Yet as the evidence base will show, most families are often unable to live on the earnings provided by a single income. This leads to challenges for employees with exceptional care responsibilities as they require specific supports to meet both their care responsibilities and employment.

Work-life Integration

A central concept for employees with typical care responsibilities and those with exceptional care responsibilities is work-life integration. Work-life integration refers to the ability of individuals to manage the demands of the workplace with those other life domains, roles, and responsibilities within their communities (Barnett, Gareis, & Brennan, 1999; Gareis & Barnett, 2008; Lewis, Rapoport, & Gambles, 2003; Rosenzweig et al., 2008). Work-life integration incorporates issues of equity, diversity, and the community context, while acknowledging the entrenched nature of work in culture and society (Rosenzweig et al., 2008). Within the concept of work-life integration lies the work-family interface, an aspect of work-life that encompasses the interactions between the workplace and the family. The interface between work and family refers mainly to the challenges associated with combining work with family roles and has historically been focused on difficulties encountered by mothers

of children with typical development when they combine work with family care (Rosenzweig et al., 2008). Conceptual efforts are currently being made to expand the focus of work-family to that of work-life as a response to the diverse experiences that impact one's life (Lewis, Rapoport, & Gambles, 2003; Gareis & Barnett, 2008).

Work-family fit is hypothesized to be a mechanism through which work-life integration is achieved for individuals with care responsibilities (Barnett, Gareis, & Brennan, 1999). This fit is achieved through flexibility within both the work and family structures (Barnett, Gareis, & Brennan, 1999). Conceptualized as the extent to which individuals realize the various components of their work-family strategies, as well as those of their other members of their family social system, work-family fit suggests that an individual will experience compatibility and low distress when available work, family and community supports are in place (Barnett, Gareis, & Brennan, 1999). High distress and conflict are thought to occur when these supports do not permit strategies to be realized (Barnett, 1998).

Research examining the needs of employees with typical care responsibilities has delineated a number of supports needed for optimal work-life integration (Higgins, Duxbury, Lee, & Mills, 1994; Marshall & Barnett, 1993; Pedersen Stevens & Riley, 2006; Roehling, Moen, & Batt, 2003; Sweet, Swisher, & Moen, 2005). Workplaces have begun to respond to the needs of employees raising children through the provision of family-friendly policies and workplace practices that support parents' need for flexibility and as a result aid in them achieving a positive work-life fit. However, recent studies on the needs of employees with exceptional care

responsibilities have shown that often these policies are not reflective of the needs connected to disability-related care (Lewis, Kagan, & Heaton, 2000; Rosenzweig & Huffstutter, 2004; Warfield, 2005). One reason that workplaces have not realigned to the needs of caregivers with exceptional care responsibilities is the stigma attached to caring for a person with a disability (Rosenzweig, Brennan, Malsch, Stewart & Conley, 2007).

Courtesy Stigma and Exceptional Care Responsibilities

Goffman (1963) ascribed the stigmatizing experiences felt by family members of individuals with disabilities as courtesy stigma. Courtesy stigma refers to the attitudes caregivers of people with a disability face from greater society regarding their family members' health status (Corrigan & Miller, 2004; Ostman & Kjellin, 2002; Shibre et al., 2001; Struening et al., 2001; Wahl & Harman, 1989). This type of stigma expressed in feelings of shame by family members of individuals with disabilities and is linked to discrimination seen in the avoidance of families with relatives who are disabled (Corrigan & Lundin, 2001; Corrigan & Miller, 2004; Shibre et al., 2001). Research on the impact of stigma on families who have a child with a mental health disability suggests that they experience more than 40 times more shame than families who have a member with cancer (Ohaeri & Fido, 2001). Studies on courtesy stigmatization and mental health have indicated that parents are held responsible by others for their child's mental health disorders (Shibre et al., 2001); or blame is attributed to poor parenting skills (Struening et al., 2001). The lack of formal policies within the workplace to support employed families with disability-related

dependent care has been attributed to courtesy stigma (Rosenzweig, Brennan, Huffstutter, Coleman & Stewart, 2007). Courtesy stigma is also suggested when exceptional caregivers (particularly those with children with chronic illnesses, or with physical or emotional disabilities) choose not to disclose their child's illness to supervisors and coworkers, nor invoke work-place policies until a crisis occurs (Rosenzweig et al., 2007). The absence of supports within the workplace and a growing unwillingness among caregivers to lose out on job opportunities, promotions, and benefits has exerted pressure on the legal system to respond to growing employee complaints. These complaints center on wrongful termination or demotion due to the employees' family responsibilities and result in an increasing number of lawsuits (Williams, 2006). It is because of these developments pertaining to family responsibility discrimination that workplaces may finally be forced to make adjustments for exceptional care responsibilities.

Family Responsibility Discrimination

Family responsibility discrimination refers to employment-based discrimination because of an individual's care responsibilities for a child, elder parent, or family member with a disability (Williams, 2006). Family responsibility discrimination involves employers' biased assumptions that employees will be less committed or reliable at work because of their family roles and it is heightened when the employee has a child with a disability (Williams, 2006). Recent legal cases however, suggest a shift within the legal system in favor of employed family members with exceptional care responsibilities. Sillbaugh (2003) reports an increase

in cases before the U.S. Supreme Court pertaining to the termination of employed caregivers on the basis of discrimination; a finding that is supported by Sill's (2006) report of a 400% growth in lawsuits filed by workers between 1996 (97 cases) to 2005 (481 cases). The courts are siding favorably with the plaintiffs with recent awards of averaging approximately \$100,000 and going as high as \$25 million (Sill, 2006).

The recent judgments favoring employed caregivers, signal a legal precedent suggesting that the legal system views the termination of employment due to one's family responsibilities as a form of prejudice. As such, family responsibility discrimination could now be viewed in the same light as gender, racial or sexual discrimination with all the same rights and protections. The shift in the legal view of family responsibility discrimination arrives at a time when support is growing for families with exceptional care responsibilities seen through other statutes and laws that provide for (a) prohibitions against discrimination and retaliation, (b) short term leaves, and (c) protection of medical and other employment benefits (Williams & Segal, 2003). The "association provision" of the Americans with Disabilities Act (ADA) is particularly useful as this protects caregivers against discrimination at work based on employees' association with a person who has a disability. Other protections for employees with family responsibilities are found in the short-term leave provided through the Family Medical Leave Act (FMLA) and health benefits that restrict employers from discriminating against caregivers regarding their employer-funded health insurance through the Employee Retirement Income Security Act (Schoeff, 2007; Sill, 2006; Williams & Segal, 2003; Williams, 2006). While the current legal

protections are minimal, they do signal a shift in how the legal system now looks at caregiving. Yet, further analysis will suggest that more concrete policy efforts are needed to ensure that employees with exceptional care responsibilities are able to effectively balance the demands of work with those of care through the provision of paid supports and increased ability to use flexible work arrangements.

The aging population, the increase in number of children with serious illnesses or disabilities surviving into adulthood, and the number of children with serious emotional or behavioral disorders living outside of institutions implies that exceptional care responsibilities are growing. This growth, coupled with the fact that more women are entering and remaining in the workforce, suggests that a considerable proportion of the adult working population will be providing care that will require significant accommodation within the workplace in order for employees to meet both the demands of their family and work responsibilities. Research in this area that attempts to define disability-related dependent care is timely and needed to not only identify similarities and differences within care experiences, but to also examine the associations between specific risk and protective factors and related work-life outcomes faced by families who have exceptional care responsibilities, while attempting to maintain paid employment.

Chapter 2: Literature Review

The literature that guided this study is drawn from the theories and research relating to the workplace, the work-family interface, and work-life outcomes found in the work and family domains as they are relevant to both employees with typical care and those with exceptional care responsibilities. The review will establish that employees with exceptional care responsibilities, compared to those employees with typical care responsibilities, face unique challenges in integrating work and family responsibilities.

Theories Related to the Workplace

Five theories were selected to explain the role of informal support within the workplace, the function of family-supportive supervisors, the development of family-friendly policies and practices, and the influence of workplace culture on actual use of family-friendly policies within organizations. The theoretical developments reflect the work-life field's growing understanding of how individual and group identities interact, and how organizational policies and practices are interpreted and influenced by both individual and organizational outcomes. While the theories are used to explain the behavior and actions of employees with typical care responsibilities within organizations, efforts are made to extend the theories to enrich our understanding of how employees with exceptional care responsibilities may face additional barriers within the workplace because of their care responsibilities.

Social Identity and Relational Demography Theories

Social identity and relational demography theories are explanatory theories that have been used to articulate the provision of family-related support by supervisors (Foley, Linnehan, Greenhaus, & Weer, 2006) and co-workers. Social identity is defined as those features of an individual's self-concept that are based on group membership (Tajfel, 1981; Tajfel & Turner, 1979). Specifically, social identity theory posits that individuals try to maintain a social identity and enhance their self-esteem through a positive comparison between an in-group and a relevant out-group (Tajfel & Turner, 1979). For example, managers who hold positive feelings and affiliations with their subordinates based on a shared identity, will extend empathy to employees and are more likely to provide family-related support when the employees disclose that they need assistance (Foley, Linnehan, Greenhaus, & Weer, 2006).

Social identity theory has been found useful in predicting interpersonal attraction towards similar others within the workplace, namely between co-workers and supervisor-subordinate dyads, (Ashforth & Mael, 1989; Brewer & Miller, 1984; Tsui & Gutek, 1999). It has also been applied to explaining how demographic similarity relates to work-related processes and outcomes particularly how individuals tend to identify more closely with other members who share their racial/ethnic and gender category (Elsass & Graves, 1997). Favoritism and interpersonal attraction have been linked as outcomes of this identification bias (Ashforth & Mael, 1989; Brewer & Miller, 1984; Tsui & Gutek, 1999).

Research on shared social identity and use of flexible work arrangements in contrast, has produced mixed results (Behson, 2005; Blair-Loy, & Wharton, 2002; LaPierre & Allen, 2006). In their study of a single firm, Blair-Loy and Wharton (2002) found no support for the idea that individuals within workgroups who share similar attributes use more flexibility. In fact, the opposite was found to occur, with women who work in male-dominated groups 67% more likely to use both policies and flexible work arrangements than women within the entire organization while women within workgroups that were predominantly female were 33% less likely to use flexibility in comparison to all women within all workgroups. Further, being female and having a male supervisor increased the likelihood of using family care policies (Blair-Loy & Wharton, 2002).

Social identity theory suggests that employees with exceptional care responsibilities who identify strongly with this type of caregiver role would not experience a strong affiliation with their supervisors and co-workers who do not share this attribute. In addition, social identity theory would hypothesize that supervisors and coworkers would not have a close interpersonal attraction to a subordinate or colleague with exceptional care responsibilities if they did not self-categorize as having similar responsibilities. A prediction could be made that employees with exceptional care responsibilities would perceive less empathy and support from their supervisors and colleagues if they did not have exceptional care responsibilities, and would feel they had more empathy and support for those with exceptional care responsibilities.

Relational demography is an extension of social identity, self-categorization theory, and the similarity-attraction paradigm (Sacco, Scheu, Ryan, & Schmitt, 2003). As an explanatory theory, relational demography suggests that perceived similarity among coworkers can have a profound impact on work-related outcomes such as feeling connected and supported at work (Veccio & Bullis, 2001). The similarity-attraction paradigm posits that individuals who are similar across demographic dimensions tend to exhibit similar beliefs and more common life events, and thus find interacting with one another less stressful than those who do not share similar demographic attributes (Sacco, Scheu, Ryan, & Schmitt, 2003; Tsui, Porter, & Egan, 2002; Vecchio & Bullis, 2001).

Evidence supporting this proposition was found by Wesolowski and Mossholder (1997) who surveyed 170 supervisor-subordinate dyads within two companies and found that relational demographics accounted for a significant proportion of the variance in job satisfaction and in perceptions of procedural fairness. Further, another study has found that perceived similarity influenced work-related outcomes based on the extent to which an individual's social identities were aligned to their demographic characteristics (Foley, Linnehan, Greenhaus, & Weer, 2006; Tsui et al., 2002). Specifically, individuals who perceived that they shared similar identities with coworkers and superiors were more likely to report higher satisfaction with work and decreased intentions to leave an organization than those who did not share demographic attributes (Foley et al., 2006). To date no research has applied these theoretical tenets to examine the relationship between exceptional care responsibilities

on employees' perceptions of support for flexibility and availability of family-friendly policies and the relationship of both to work-life outcomes. However, relational demography would suggest that having exceptional care responsibilities would result in employees with exceptional care responsibilities indicating a perception of lower support from supervisors and coworkers who do not experience this type of dependent care.

Social Exchange Theory

Social exchange theory (Homans, 1958) is useful in understanding the relationship between the availability of family-friendly supports and positive attitudes towards one's workplace (Sinclair, Hannigan, & Tetrick, 1995). The idea that the relationships between organizations and individuals center around an exchange of commitments, which in turn influence behaviors and attitudes, is the basis for social exchange theory (Sahibzada, Hammer, Neal, & Kuang, 2005). These relationships involve obligations that are not specified ahead of time, require a degree of trust between employers and employees (Blau, 1964), and consist of the general expectation of reciprocity (Turnley, Bolino, Lester, & Bloodgood, 2003). According to social exchange theory any breach in the psychological contract between employers and employees leads to perceptions of inequity in the relationship. This imbalance will lead to efforts on the part of the employee to take actions to remediate the balance (Robinson, 1996). For example, if employees perceive a benefits package provided by their employer as more than was promised they will in return have more positive attitudes toward their organization (Lankau, 1997) and will increase their contributions

to their employer (Wayne, Shore, & Linden, 1997). Conversely, when employees perceive that their employers have under-fulfilled their relational contract with a benefit package that does not meet their needs, an attempt will be made to balance the relationship by decreasing their contributions or holding a less positive attitude toward their employers (Carrell & Dittrich, 1978; Goodman & Freidman, 1971).

Social exchange theory has been used to explain the relationship between the availability of workplace supports and the outcomes of job enrichment, satisfaction, and performance, as well as organizational citizenship behavior (Robinson, Kraatz, & Rousseau, 1994; Sinclair, Hannigan, & Tetrick, 2005). These outcomes have been linked to “sandwich” generation employees, which one might argue is a type of exceptional care (Huang, Hammer, Neal & Perrin, 2004; Sahibzada, Hammer, Neal, & Kuang, 2005), but not extended to include other diverse caregiving situations that relate to caring for family members with disabilities. Employees with exceptional care responsibilities might be predicted to report less job satisfaction and less organizational commitment if their work organizations had family-friendly policies but that they did not have provisions for their specific needs (such as access to childcare for children with behavioral challenges, or care provision for adults with disabilities or older adults needing care). Conversely, social exchange theory suggests that when the benefit packages and flexible work arrangements did meet the needs of employees with exceptional care responsibilities, higher levels of job satisfaction and organizational commitment would be reported.

Organizational Justice Theory

Family-friendly policies determine which employees have access to benefits such a paid leave of absence, dependent care benefits, or flexible work arrangements (Grandley & Cordeiro, 2002). Perceptions of equity and fairness regarding differential access to these work-life supports are thought to influence organizational outcomes as suggested by organizational justice theory (Cropanzano & Ambrose, 2001; Grover, 1991). Organizational justice theory explains how employees rate both their own and others' ability to enact workplace policies as a function of the policies being perceived as fair. Organizational justice theory suggests that perceived fairness of the use of family friendly policies within an organization is linked to distributive and procedural justice (Byrne & Cropanzano, 2001).

Distributive justice implies that individuals evaluate organizational fairness based on economic and socio-emotional outcomes through an analysis of the distribution principles of equity, equality, and need (Grandey & Cordeiro, 2002). From an equity principle perspective, people perceive organizational fairness in terms of an outcome/input ratio (Adams, 1963; Grover, 1991) suggesting that individuals who use family-friendly policies are more likely to rate them as more fair compared to those who do not use them (Grover, 1991). According to the equality principle the distribution of resources within an organization should be equal across all individuals implying that family-friendly policies should be designed and available to support all employees regardless of whether they access the policies. Finally, the need principle within the distributive justice proposition suggests that family friendly policies are

enacted by those who need them (Grover, 1991; Swanberg, Pitt-Catsoupes, & Drescher-Burke, 2005). These three tenets of the distributive aspect of social justice theory suggests that employees with exceptional care responsibilities who have access to family-friendly policies, who view them as meeting their needs, and who are able to use them to meet their family care responsibilities will rate those organizations more favorably.

Procedural justice addresses the perceived fairness of the procedures that are followed in allocating resources within an organization (Granley & Cordeiro, 2002). Procedural justice influences an individual's perception of fairness regarding his or her organization's family-friendly policies. A sense of fairness is increased when employees feel that they have a say in the process, that the policies are applied consistently and accurately, and that they are representative of their best interests (Leventhal, 1976). Research has supported the distributive justice proposition that if desired allocations or allocation procedures are viewed as unfair, negative attitudes, withdrawal, and counterproductive behaviors can occur (Granley & Cordeiro, 2002). For example, in their study that examined the presence of family-friendly policies and the relationship to positive organization outcomes, Granley and Cordeiro (2002) found that perceived fairness of those policies may influence their utilization and effectiveness. They suggest that perceived fairness is linked to the extent that an employee's need to enact the policy is seen by other employees as intentional or non-intentional (Granley & Cordeiro, 2002; Grover, 1991). Intentional causes, such as needing time off to care for a sick child or relative, can be perceived by co-workers as

an unfair enactment of a benefit (Grover, 1991). Unintentional enactment of a policy occurs in the case of a catastrophic accident or unexpected death and would result in the perceived fair use of a leave benefit (Grover, 1991).

Organizational justice theory is central in understanding why many employees with exceptional care responsibilities do not use the family-friendly packages offered by their employers and view them as inadequate (Rosenzweig et al., 2007).

Organizational justice principles has been applied extensively with employees who have typical care responsibilities (Rhoades & Eisenberger, 2002; Swanberg, Pitt-Catsouphes, & Drescher-Burke, 2005), but only sparingly with employees who have exceptional care responsibilities, specifically those employees caring for young children with disabilities and older adults (Kagan, et al. 1998; Neal & Hammer, 2006; Roundtree & Lynch, 2006; Sahibzada, Hammer, Neal, & Kuang, 2005). It is likely that employees with exceptional care responsibilities who work in organizations with family-friendly policies and practices that address their needs would be more likely to rate them as being more fair than those employees working in organizations who do not have adequate family-friendly policies and practices. Further, the procedural justice proposition suggests that employees with exceptional care responsibilities would consider policies fair if they could use them and unfair if they could not.

Institutional Theory

Institutional theory posits that in order for family-friendly policies to be used by employees they need to become part of the taken-for-grantedness of organizational life (i.e. the culture of the organization; Mennino, Rubin, & Brayfield, 2005).

Institutional theory proposes that institutions are resistant to change; they are transmitted across generations, that maintain and reproduce beliefs, values, and behaviors (DiMaggio & Powell, 1991; Scott, 2001). The transmission and reproduction of these beliefs, values, and behaviors is hypothesized to occur through three basic features of institutions called the regulative, normative, and cultural-cognitive components (Scott, 2001). Individual and group behavior is constrained and regulated through rule setting, monitoring, and sanctioning found within the regulatory practices of an institution (Scott, 2001). In contrast, the prescriptive, evaluative, and obligatory dimension to social life is thought to be governed by the normative practices found in the day to day behaviors of individuals within an institution (Scott, 2001). The cultural-cognitive component is hypothesized to represent the deepest level of institutions. Within this feature of institutions lie the pre-conscious, taken for granted assumptions and beliefs held by individuals who work within institutions (DiMaggio & Powell, 1991).

This broad organizational theory has been used predominantly to explain the presence of family-friendly policies not only as responses to the economic needs of institutions, such as recruiting and retaining talented labor (Mennino, Rubin, & Brayfield, 2005), but also “in response to memetic pressures to maintain legitimacy within organizational fields in which incorporating family-friendly policies is normative” (Mennino et al., 2005, p.109).

Institutional theory suggests that in organizations that have adopted family friendly policies, these policies may go unused if they were implemented for symbolic

rather than substantive reasons (Edelman, Uggen, & Erlanger, 1999). Further, research has supported the proposition that controversial or ambiguous policies within organizations are likely to have more of a symbolic effect and be in direct conflict with more entrenched organizational norms such as “an overtime culture” and a belief in the value of “face time” (Blair-Loy & Wharton, 2002; Fried, 1998; Perlow, 1997; Wesphal & Zajaz, 1994). Institutional theory indicates that it is the individuals who control the normative and cultural-cognitive functions of the institution who can bring about change.

This theory suggests in those organizations with family-friendly policies that have been adopted as a symbolic act, the culture of the organization inhibits employees with exceptional care responsibilities from invoking the policies to meet the needs of their families. Within organizations who have adopted these practices for substantive reasons one would expect that employees with both typical care and exceptional care responsibilities would feel encouraged by supportive supervisors and coworkers to use family-friendly policies and resources. Furthermore, even within those organizations with decidedly un-family friendly cultures, institutional theory would propose that having a supervisor who is family-supportive should result in employees reporting an ability to use flexibility.

Workplace Supports

Work-life integration is conceptualized as the extent to which individuals are able to optimally combine work with the rest of life (Lewis et al., 2003). A historical shift in the labor force during the 1980's saw greater percentages of women entering

and remaining in the workforce after childbirth (Jacobsen, 2007). This in turn forced organizations to respond to the challenges that employed women faced in negotiating work with child care responsibilities through the development of formal workplace supports (Rosenzweig et al., 2008).

Formal Supports

The tensions associated with the number of women remaining in the workforce led to the creation of on-site child care, child care referral, and sick child services to meet the demands of employees (Major, Cardenas, & Allard, 2004). As the workforce aged during the mid-nineties, and women delayed childbirth into their thirties, newer challenges facing organizations began to surface. These newer challenges pertained to the care of young children and or older adults. Pressures exerted on organizations by employees coupled with the development of a more specialized workforce forced organizations to develop a host of formal organizational supports in an effort to attract and retain talented and highly skilled employees (Major et al., 2004). Formal workplace supports that had typically encompassed childcare were now extended to include personal wellness programs, eldercare services and flexible work options. Organizations adopting these programs became known as “family-friendly” (Major et al., 2004; Rosenzweig et al., 2008). The underlying goal of family-friendly workplace policies and practices is to reduce the rising costs associated with employee absenteeism, presenteeism, and turnover and to increase employee retention, and has often been referred to as the “business case” for family-friendly policies (Konrad & Mangel, 2000). Family friendly initiatives are articulated

by employers as programs designed to help employees balance work and family roles and encompass a broad array of supports for employees with typical life experiences and care responsibilities (Granley & Cordeiro, 2002; Kossek, 2006). U.S. federal policies have guided the development of programs and benefits including the Family and Medical Leave Act (FMLA) requiring businesses with more than 50 employees to provide 12 weeks of unpaid leave of absence for family or personal needs, discretionary policies offered by organizations, and health care benefits that extend to employees' family members (Granley & Cordeiro, 2002). Parker and Allen (2001) propose two broad categories of family-friendly policies within organizations: alternative work arrangements (flextime, telecommuting, part-time) and dependent care support (on-site facilities, subsidization, or information about child or elder care, parental leave). Health or stress management programs are sometimes also included as family-friendly programs (Zedeck & Mosier, 1990).

Yet, research has shown that availability of family-friendly policies and benefits may not be enough. In her study exploring the links between formal and informal flexibility policies and perceived family-friendliness of an organization, Eaton (2003) reported that the existence of formal policies alone was not enough to predict a positive workplace culture among employees in seven biomedical firms. Instead perceptions of family-friendliness were tied to employees' perceptions regarding their ability to use the policies (Eaton, 2003). Her findings reflect what others have reported. Specifically, that use of flexible work arrangements are tied to more positive ratings of organizational culture and satisfaction with work (Allen,

2001; Hammer, Neal, Newsom, Brockwood, & Colton, 2005; Thompson, Beavais, & Lyness, 1999).

Informal Workplace Supports

Informal supports relate to the emotional and functional support of coworkers and supervisors. Informal support has been found to be a significant predictor in work satisfaction and intentions to quit (Bardoel, 2003; Blay-Loy & Wharton, 2002; Ducharme & Martin, 2000; McGuire, 2007). For example, Blair-Loy and Wharton (2002) suggest that when organizational policies are controversial or ambiguous, within-organization politics may exert greater influence on work outcomes. Thus the extent to which the policies are used depends upon the political power of the individuals trying to encourage or discourage their institutionalization. They found that having powerful supervisors and coworkers increased actual use of formal organizational policies such as dependent care benefits and flexible scheduling. Other studies on the role of the human resource professionals and managers in implementing family-friendly policies and practices have supported these findings (Bond et al. 2003; Drew & Murtagh, 2005).

In contrast, Bardoel (2003) found that certain managerial factors such as perceived organizational benefits, organizational concerns, and high-performance organizations account for 26% of the variance in organizational family-friendly practices. Managerial factors such as supervisory attitude and support for work-life strategies contributed approximately 7% to the variance in organizational family-friendly practices (Bardoel, 2003).

Studies that have examined the relationship between coworker support and work outcomes find that higher levels of coworker support are associated with greater satisfaction with work and lower intentions to quit one's organization (Ducharme & Martin, 2000; Lakey & Cohen, 2000; McGuire, 2007). Moreover, coworker support is hypothesized to serve as a buffer against work and family demands (McGuire, 2007). In her qualitative study that examined the dimensions of social support provided by one's coworkers, McGuire (2007) found that coworkers exerted six types of social support functions: sharing, listening, counseling, nonwork services, encouragement and caretaking. She hypothesizes that each of these social functions help employees to connect with one another in a personal and informal manner (McGuire, 2007).

The Impact of Formal Policies

Findings from national surveys of employers have found significant differences exist between small to medium sized employers and large scale employers on their provision of family-friendly policies (Bond, Galinsky, Kim, & Brownfield, 2005). For example, in the National Study of Employers (2005) Bond et al. found that of those employers who employed more than 50 employees, 86% allowed for some workers to take time off then return to work after childbirth and adoption and 83% allowed for employees to take time off for education or training to improve their job skills. The study also found that the proportion of employers offering similar options to all employees, was significantly lower (3% to 63%). When compared with the responses of an earlier study of employers, two family-friendly policies were found to have changed: (a) the percentage of employers allowing some employees to change

starting and quitting times (31% in 2005 versus 23% in 1998) and (b) the percentage of employers allowing some employees to compress their workweek (44% in 2005 versus 37% in 1998, Bond et al., 2005). Yet, more recent findings suggest that this increase in availability of flexibility has since leveled off (Georgetown Law Center, 2009).

Workplace Culture and Use of Flexible Work Arrangements

Research has shown that despite the efforts of employers to implement family-friendly policies, many go unused (Allen, 2001; Eaton, 2003; Georgetown Law Center, 2009; McDonald, Brown, & Bradley, 2005; Thompson, Beauvais, & Lyness, 1999). Identified dimensions of workplace culture which may affect the use of family-friendly policies pertain to organizational time demands, career consequences for using work-family benefits and managerial support (Lee, MacDermid, & Buck, 2000; Thompson, Andreassi, & Prottas, n.d.).

Evidence supporting the idea that workplace culture relates significantly to use of formal policies is found in a number of studies. A higher percentage of variance in employee use of flexibility was due to workplace culture variables than the presence and number of policies alone (Bailyn, 1993; Haar, 2004; Lambert, 1990; Schriber & Gutek, 1987; Thompson, Beauvais, & Lyness, 1999). Research on workplace culture indicates that the relationship between workplace culture and use of flexibility can be direct (Allen, 2001; Thompson et al., 1999) or indirect through having a supportive supervisor (Allen, 2001). Thompson et al. (1999) reported that benefit utilization was greater among employees who perceived more supportive workplace cultures, even

after controlling for benefit availability and demographics, and explained approximately 3% of additional variance in benefit utilization in a non-representative sample of 276 employees. Further, of the predictors within workplace culture, using benefits was significantly associated with having a supportive supervisor.

For employees with exceptional care responsibilities, research has not been extended to fully examine the impact of workplace culture on use of flexible work arrangements. A single study by Sahibzada et al. (2005) reported that among caregivers with differing care roles (no dependent care, child care, eldercare and both child and eldercare), work culture had a significant effect on use of flexible work arrangements. However, disability-related dependent care was not specifically included in the analyses. This is a significant gap in our understanding of how workplace culture facilitates or impedes employees with exceptional care demands in meeting their complex care responsibilities. As the literature review on the work-family interface will demonstrate, employees with exceptional care responsibilities face greater role strain and family-related work disruptions than employees with typical care responsibilities, and this coupled with an absence of supports in the workplace and community leads to negative personal, family, and work outcomes.

The Work-Family Interface

Key to understanding the unique challenges that employees with exceptional care responsibilities face when attempting to combine paid employment with caregiving are the theories that underlie the work-family interface. This intersection between one's work and family roles has been shown to be a significant component of

work-life integration among employees with dependent care responsibilities (Lewis et al., 2003; Rosenzweig et al., 2008). Theoretical developments over the past two decades have provided a rich understanding of how roles affect one's ability to achieve work-family fit and through fit, work-life integration. Foundational to the current study are the work-family interface theories of: role conflict, and border, and boundaries. The two theories will illustrate how employees with typical care and exceptional care utilize flexibility within the work and family domains to manage work and family demands. Employees who have exceptional care responsibilities it is argued must make further adaptations within the family domain to meet their complex care responsibilities because of the absence of specialized supports within the workplace and the community. These adaptations result in an increased risk of negative personal and employment outcomes among employees with exceptional care responsibilities.

Role Theory

A concept that is central to understanding the work-family interface is role-integration as it relates to the psychological and institutional boundaries found within roles. Role theory posits that human activity involves living up to the social roles, or expectations, of others (Pleck, 1977). The specific assumptions of role theory suggest that individuals (a) define roles for themselves and others based on social learning and reading, (b) form expectations about the roles that they and others will play, (c) subtly encourage others to act within the role expectations they have for them, and (d) act within the roles they adopt (Greenhaus & Beutell, 1985; Merton, 1957). From a

structural perspective, roles are the culturally defined norms—rights, duties, expectations, and standards for behavior—associated with a given social position (Grosswald, 2003; Linton 1945). Additionally, statuses such as gender, ethnicity, sexual orientation, and social class are also thought to shape roles (Lopata, 1991). Theoretical developments regarding the impact of roles on the work-life domain have suggested two divergent paths: one of conflict and the other of facilitation (Greenhaus & Beutell, 1985; Greenhaus & Powell, 2006; Grzywacz, 2002). Later developments in role theory have suggested that it is not the number of roles that a person occupies that can lead to conflict but instead it is the quality of roles that is critical in determining working employees with dependent care responsibilities' outcomes (Greenhaus & Singh, 2003; Grosswald, 2003; Neal & Hammer, 2007).

Role Conflict

Underlying the conflict approach to role theory is the “assumption that work and family are in basic conflict” and that “human energy is fixed and limited” (Barnett & Gareis, 2006, p. 209). Role theory suggests that when individuals take on multiple roles that are incompatible, it leads to inter-role conflict (Katz & Kahn, 1978). Work-family conflict is seen as a type of inter-role conflict that can happen when the demands of one role (work or family domain) are not compatible with the demands of another role (family or work domain; Barnett & Gareis, 2006; Greenhaus & Beutell, 1985). This approach is referred to as the “scarcity hypothesis” and suggests that the more roles that an individual (most often a woman occupies) the greater the pressure on her resources, and the less energy she will have to devote to other roles (Barnett,

Marshall, & Singer, 1992; Greenhaus & Parasuraman, 1999; Marks, 1977). Included within the conflict approach to role theory is the identification of conflict based on time, stress/strain and behavior (Greenhaus & Beutell, 1985; Greenhaus, Allen, & Spector, 2006). Time based demands from one role are thought to create conflict in another role by reducing the amount of time one can allocate to it (Westman, 2005). Stress and strain-based conflict results when the level of stress or strain from one role interferes with the ability to perform in another (Greenhaus & Beutell, 1985). Behavior based conflict in contrast, relates to the incompatibility of behavior between one role and the other. Conflict theory would suggest that employees with exceptional care responsibilities, by the nature of the complexity and extent of demands within their family role, would experience higher degrees of conflict between work and family roles than employees with typical care responsibilities.

Border and Boundary Theory

Work-family border theory (Clark, 2000) and boundary theory (Ashforth, Kreiner, & Fugate, 2000) address the integration and blurring of boundaries in work and family life and have been used to explain both family members' adaptation strategies as a means to reduce conflict and increase integration, as well as to support the rationale for flexibility within the workplace. Work-family border theory specifically relates to work and family domains whereas boundary theory focuses on outcomes such as the meanings people assign to home and work (Nippert-Eng, 1996) and the ease and frequency of transitioning between roles (Ashforth et al., 2000). Border and boundary theory describe the conditions under which varying degrees of

work-family integration are likely to improve or reduce individual functioning, by specifying how people construct, maintain, negotiate, and cross boundaries or borders between work and family. Specifically, that (a) keeping work and family segmented makes it easier to manage work-family borders, and (b) integrating work and family facilitates transitions between these domains (Ashforth et al., 2000; Clark, 2000; Kreiner, 2002; Nippert-Eng, 1996). Either strategy can improve the well-being of employees depending on the characteristics of employees (e.g. good time managers, self-directed). Some of these characteristics involve: the distinctive meanings employees attach to work and family (ability to recognize these as similar roles) and their preferences for integration versus segmentation and contextual factors such as “family friendly” workplace norms and policies, long or irregular work hours, or social support from supervisors, coworkers, and family, and the fit between their preferences and the boundaries allowed by their social context (Desroscher & Sargent, 2003). The integration-segmentation distinction is not an either-or state but rather a continuum in boundary theory (Desroscher & Sargent, 2003).

Flexibility and permeability are two mechanisms through which integration of border/boundaries are thought to occur. Flexibility refers to the ability of the boundary to expand or contract to accommodate the demands of one domain or another (Ashforth et al., 2000; Barnett, 1998; Clark, 2000; Hall & Richter, 1988; Kanter, 1977; Pleck, 1977; Kossek, 2006; Nippert-Eng, 1996; Olson-Buchanan & Boswell, 2006). Permeability refers to the extent to which a boundary allows aspects of one role or domain to enter another (Ashforth et al., 2000; Clark, 2000; Hall &

Richter, 1988; Pleck, 1977). Clark (2000) suggests that when two or more roles are flexible *and* permeable, they are considered to be blended. Ashford et al. (2000) refer to this as role integration which is hypothesized to occur more often in integrated domains (i.e. domains with highly permeable boundaries; Ashforth et al., 2000; Nippert-Eng, 1996).

Conversely, when boundaries are highly segmented, as seen in the presence of distinct schedules, set behavior scripts and people, transitions between domains require more effort (Nippert-Eng, 1996). Adaptive strategies used by families attempting to manage actual or anticipated conflict reflect attempts to manage boundaries through accommodation, compensation, and segmentation (Greenhaus & Singh, 2003; Rosenzweig et al., 2008).

Flexibility within the workplace is viewed as one place in which adaptations are needed in order for employees to manage their work and family responsibilities to achieve work-family fit and through this, work-life integration. While a significant amount of research linking the mechanisms through which flexibility is optimized or hindered has been conducted among employees with typical care responsibilities: the same is not true for exceptional care responsibilities. As the research base on flexibility for exceptional care will show, the mechanisms through which employees use to optimize their flexibility are different from those used by employees with typical care responsibilities.

Research on Flexibility

Flexibility within the work domain has been seen as the primary means through which employees can manage family-related work disruptions (Barnett, 1994; Bond, Thompson, Galinsky, & Prottas, 2003; Emlen, 2008; Hill, 2008; Schor, 1991) and achieve positive work-life fit (Barnett, 1998). Hill et al. (2008) suggest that flexibility be viewed as an attribute of the environment that enables “proximal processes” which are defined as increasingly complex person to environment interactions that contribute to positive outcomes for employees, their families, and organizations. Emlen (2008) proposes that three sources of flexibility exist for employees: work, family, and childcare arrangements. He has argued that having at least one of the three sources is necessary for the well-being and productivity of employed caregivers; flexibility from all three is thought to be optimal (Barnett & Garies, 2006; Emlen, 2008; Rosenzweig, Brennan, & Ogilvie, 2002).

For employees raising children with typical development, flexibility at work allows them to leave work early, arrive late, or remain at home when breakdowns in childcare or child illnesses occur (Bond et al., 2003). These breakdowns are typically infrequent and are usually of short duration. For employed caregivers with exceptional care responsibilities, breakdowns in care can be frequent, are cyclical or irregular, and can involve long periods of time away from work (Roundtree & Lynch, 2006; Ward et al., 2006). This is especially relevant to employees with children who have emotional and behavioral disorders because of the absence of specialized supports within schools and child care centers (Friesen, Brennan, & Penn, 2008).

For families with exceptional care responsibilities, typical adaptive strategies have involved parents often seeking out employment that is compatible with their caregiving demands (Brennan et al., 2008; Rosenzweig et al., 2002, 2008). Rosenzweig et al. (2002) investigated the strategies that parents of children with mental health disabilities used and their views about how caregiving responsibilities could successfully fit together with work, and found that parents often sought out employment that was compatible with the demands of caring for a child with a mental health disability. This often involved employment with fewer time demands and requirements (Rosenzweig et al., 2002). These findings complement the results found by Lewis et al. (2000a) among dual and single earner couples with a child with a disability, who identified four different strategies that parents employed in order to integrate the demands of work with those of family. Two of the strategies specific to families with children who had disabilities involved using either a modified single earner pattern or flexible-dual earner pattern (Lewis et al, 2000). This finding was also reported in work by Boushey (2006) who reported that among families whose children have disabilities, typical adaptive strategies involve both parents engaging in work with non-overlapping schedules, due to the lack of appropriate or affordable child care meeting their children's special needs in the community.

In their analysis of caregivers of children with emotional and behavioral disorders Brennan et al. (2008) found that flexibility within the family schedule to meet work responsibilities was a more significant contributor to fit than flexibility in work to meet family responsibilities. The authors suggest that employees with

exceptional care responsibilities may have already made adjustments to their work situations to fit the needs of their families (Brennan et al., 2008).

These patterns were also found among a national sample of caregivers in the sandwich generation. For example, Neal and Hammer (2007) reported that caregivers indicated decreasing time-demands at work through flexibility, finding employment that allowed for flexibility, and using family-friendly policies as strategies for reducing strain caused by family demands. Adaptive strategies accounted for a small but significant amount of variance in work-family conflict and family-to-work spillover after personal characteristics and role quality variables were controlled. This demonstrates the importance of different types of strategies (personal, work, family) to achieve work-life integration.

Current research suggests that adaptations for employees with exceptional care responsibilities go beyond the use of traditional flexible work arrangements offered by employers, as these are often insufficient to meet the complex demands of exceptional care. Although in its initial stages research on the impact of adaptive strategies used by employees with exceptional care responsibilities to manage their family demands, suggests that usable flexibility within the family and work domain are key to parents' ability to manage exceptional care responsibilities and employment and through this, achieve positive work-life outcomes (Hertz, 1997; Lewis, Kagan, & Heaton, 2000b; Pedersen Stevens, Kiger, & Riley, 2006; Zvonkovik, Greaves, Schmiege, & Hall, 1996). Investigations have not yet included national samples which would allow comparison between employees with typical care and exceptional care responsibilities.

Moreover, the emerging domain of the community and its influence on work-life integration outcomes for employees with typical care and exceptional care responsibilities suggests that community supports may be the key ingredient for maintaining optimal work-family fit among employees with exceptional care responsibilities.

Theory and Research Related to Work-Family Outcomes

Research on the effects of combining impact of work and family on individual, family, and workplace outcomes is extensive. An understanding of specific contextual factors influencing outcomes among employees with exceptional care responsibilities is important to extending policies, practices, and services that meet their needs. The influence of the concept of flexibility in the family, workplace, and community domains on work-life integration is first discussed using the ecological systems theory adapted by Hill (2008) and Voydanoff (2001, 2007) to demonstrate the importance of aspects of flexibility across domains for employed caregivers with exceptional care responsibilities and to situate work-life within a framework that can help organize the various constructs found within the work, family, and community, linking them to work-life outcomes.

Ecological Systems Theory

Ecological systems theory (Bronfenbrenner, 1989) explains the interface between work, community, and family and illustrates the concept of community integration and the use of flexibility as a mechanism for achieving work-family fit, an aspect of work-life integration. Community integration refers to the extent to which

one can participate in community organizations, informal neighborhood and friendship relationships (Voydanoff, 2007). The better integrated one is within one's community the more one's community resources can provide important supports to coordinate one's work and family responsibilities (Voydanoff, 2007). The theory proposes that aspects of work, family, and community occur at multiple ecological levels. These levels are conceptualized as systems that interact with one another according to their nearness to the individual. At the innermost level is the microsystem, which consists of patterns of activities, roles, interpersonal relationships that are experienced in an array of face-to-face relationships (Voydanoff, 2007). The mesosystem is the next level which represents a series of micro systems that are interlinked (Voydanoff, 2007). The exosystem represents external environments which indirectly influence both meso- and micro-systems, such as how an individual's workplace can affect his or her family life (Voydanoff, 2007). Last, the macro system is the system in which all other levels operate (Bronfenbrenner, 1989). The macro system contains the beliefs, values, and institutional patterns that set the context for human development (Voydanoff, 2007). Within the work-life macro system lie the beliefs about men and women's roles in relation to work and family, and beliefs about illness, disability, and aging. These beliefs are coupled with values that are enacted through institutions such as the workplace or seen through provision (or lack thereof) of support for families with exceptional care.

Within ecological systems theory community as a mesosystem is thought to encompass not only physical spaces in which families are located, but also

relationships, and resources that affect a family's ability to participate fully in community life (Rosenzweig et al., 2007). Community is hypothesized to provide family members with a psychological feeling of inclusion and belonging that supports complete participation in workplaces and work roles and is not constrained by caregiving responsibilities (Rosenzweig et al., 2007).

Aspects of community that have been identified delineate six concepts reflecting the community micro system: community social organization, social networks, social capital, sense of community, formal volunteering and helping and community satisfaction (Voydanoff, 2001, 2007; Sweet, Swisher, & Moen, 2005). It can also include "community care work" (Kagan, Lewis, & Brennan, 2008). Facets of community thought to affect employees with typical care and exceptional care responsibilities within this study are informal instrumental support and emotional support from family and friends. The context of community within ecological systems theory seen through the aspect of social support would suggest that exceptional caregivers who indicate high levels of social support within their social networks of family and friends would experience lower-levels of stress and dissatisfaction in managing their family roles and higher levels of life and family satisfaction. Low levels of support among family and friends may contribute to negative work and family outcomes.

Flexibility as explained by ecological systems theory, is an attribute of the environment that allows for "proximal processes" which are identified as more complex person-environment interactions that are hypothesized to positively affect

individuals, families and their organizations (Hill et al., 2008). Flexibility within the workplace, from an ecological perspective, is viewed as “a social or contextual attribute of workplaces that is constructed from both structural (policy availability and the basic nature of tasks performed) and interactional factors (supportive culture and leader-subordinate trust)” (Hill et al., 2008, p. 184). These two factors create a set of boundaries for flexibility that contribute to variation in workplace flexibility (Hill et al., 2008). Flexibility as it relates to exceptional care responsibilities within the context of ecological systems theory suggests that employees with these types of care responsibilities will be limited by structural and interactional factors. Whether these are similar to or different from employees with typical care has not yet been determined.

Research on Work-Family Outcomes

Employees with Typical Care Responsibilities

Work-family conflict has been the most studied outcome in relation to its impact on employees with typical care responsibilities and reflects a growing understanding of the way in which one’s social roles interact with each other. Research examining the effects of work-family conflict is broad (Barnett, 1998; Baltes et al. 1999; Kossek, 2006; Kossek & Ozeki, 1999). Work-family conflict is viewed as bidirectional with work interfering with family and family interfering with work (Netemeyer, Boles, & McMurrin, 1996). This bidirectional view supports border and boundary theory in particular relation to the proposition that individuals have different preferences regarding permeability and flexibility of work and family borders

(Desrochers & Sargent, 2003) and that they employ communication strategies across boundaries to meet their individual needs and preferences (Rosenszweig et al., 2008). Studies have consistently found that work-family and family-work conflict, although interconnected, result in different outcomes (Frone, Russel & Cooper, 1992; Frone, 2003; Kossek & Ozeki, 1998; Thompson & Prottas, 2005). For example, Frone (2003) reports that work stressors are stronger predictors of family outcomes than work outcomes and family stressors are more predictive of work outcomes than work stressors.

Characteristics of the Workplace and Work-Family Conflict

Antecedents of work-family conflict have been associated with a number of environmental variables within the work domain (work stressors, time pressures, unsupportive supervisor, organizational culture, absence of formal supports, ability to use flexibility, Frone, 2003; Major, Kelin, & Ehart, 2002). Research has demonstrated that it is workplace conditions such as flexibility and control that reduce work-family conflict (Barnett & Gareis, 2002; Galinsky, Bond, & Friedman, 1996; Hill, 2005). Long work hours and heavy job demands have also been found to increase conflict (Drew & Murtag, 2004; Prottas & Thompson, 2006). Outcomes associated with work-family conflict suggest that high levels of work-family conflict results in high levels of employee stress and low levels of well-being (Baltes et al, 1999; Kossek & Ozeki, 1998; Thompson & Protas, 2005) and greater intention to leave employment (Kossek & Ozeki, 1998). Work-family conflict has also been linked to low job satisfaction rates and loss of employee productivity (Greenhaus, Collins, & Shaw,

2002). Most studies have found support for a direct relationship between work-family conflict and work-life integration outcomes finding linkages between high levels of work-family conflict and stress, burnout, drug and alcohol use, lowered life satisfaction, marital dissatisfaction, job dissatisfaction and intentions to quit (Aryee, 1992; Burke, 1988; Hill, 2005; Kossek & Ozeki, 1998; Thomas & Ganster, 1995; Youngblood & Chambers-Clark, 1984).

Several studies indicate that other job variables can moderate the relationships between job conditions and work-family conflict. For example, studies on work-family conflict have yielded consistent findings of a positive relationship between number of hours worked, lack of job autonomy, and work-family conflict (Clark, 2001; Frone, Yardley & Markel, 1997; Grzywacz & Marks, 2000; Thompson, Beauvais & Lyness, 1999). Work-family conflict has been shown to be a stronger predictor of work-life outcomes than family-work conflict (Anderson, Coffey & Byerly, 2002; Kossek & Ozeki, 1998).

Formal workplace policies have been found to exert both direct and indirect effects on work-family conflict, and both personal outcomes and organizational outcomes. Workplace flexibility allows employees to have a degree of control over work location, timing, and process which in turn has been linked to lower stress, higher job satisfaction, and a greater commitment to employers seen through greater affective commitment and lower turnover intentions (Appelbaum, Bailey, Berg, & Kealleberg, 2004; Kossek, 2006; Thompson & Protas, 2005). Halpern (2005) found that the number of time-flex policies offered by an organization directly affected

commitment to employer and work related stress, and was indirectly related to cost to the organization through commitment to employer, suggesting that the greater number of flextime policies an organization has, organizational cost through missed time and inability to make deadlines is decreased.

The finding that formal flexible work arrangement policies and increased employee satisfaction and retention were also reported in a study using the dataset used in this dissertation. Thompson and Prottas (2005) found that the availability of family benefits was associated lower employee stress, turnover intentions and higher life satisfaction. A direct and negative effect was found between the presence of formal family-friendly policies and work-life conflict, stress, family satisfaction, and marital satisfaction by Hill (2005) in an earlier national sample of employees. Further, there is increasing evidence within the general work-life literature that availability of formal policies and flexibility significantly interacts with work-family conflict for caregivers with increased family demands. Anderson et al. (2002) reported finding an interactive effect between family benefits and family responsibility and work-family conflict with (a) the presence of children under 18 and having responsibility for a child with a disability (b) and the presence of children under 18 and having responsibility for a non-elderly adult with a disability.

Characteristics of the Family and Family-Work Conflict

Family-work conflict occurs when the demands found within the family role interfere with the demands in one's work role (Greenhaus & Beutell, 1985). Family-work conflict has received less attention than work-family conflict. Kossek and Ozeki

(1998) reported estimates of a medium effect of family-work conflict on work-life outcomes such as job satisfaction and life satisfaction in their meta-analysis of 32 published work-life studies.

Other research has found support for the notion that it is women who experience greater family-work conflict (Gutek, Searle, & Klepa, 1991; Noor, 2002). Also affecting family-work conflict are the number of hours worked and whether one is primarily responsible for child care (Barnett & Gareis, 2006). Netermeyer et al. (1996) reported a negative correlation for both life and marital satisfaction with family-work conflict in three separate samples. Further studies of family-work conflict identified predictors of family-work conflict through path analysis, demonstrating that parental overload was positively associated with marital dissatisfaction whereas the presence of a spouse and family support was positively related to family satisfaction (Frone, Yardley, & Markel, 1997).

Identified demographic characteristics have also been found to exacerbate family-work conflict among typical parents such as: being female, number of children in the home, number of young children in the home, being more educated, and being part of a dual-earner couple (Barnett, 1994; Bolger et al., 1989; Campbell, Campbell, & Kennard, 1994; Eagle, Miles, & Icenogle, 1997; Frone, Russell, & Cooper, 1997; Frone, Yardley, & Markel, 1997; Greenhaus & Parasuraman, 1999; Hammer, Neal, Newsom, Brockwood, Colton, 2005; Mennino, Rubin, & Brayfield, 2005).

Availability of Formal Family-Friendly Policies, Work-Family Conflict, Family-Work Conflict and Gender

Studies on whether family friendly-benefits are more beneficial for women than men have yielded consistent results that both women and men perceive family-friendly policies as women's policies and that it is women who are more likely to use such policies (Menino, Rubin, & Brayfield, 2005). For example Duxbury and Hill (1991) found significant differences between fathers and mothers in predicting the strength of various paths in a work-family model.

Shockley and Allen (2007) reported that in their sample of 230 employed women who had at least one child at home, had a spouse who worked, and who themselves worked over 20 hours a week, the availability of flexible work arrangements was less strongly related to family-work conflict than to work-family conflict and that the differences between the correlations was significant. This result provides support for the domain specificity hypothesis of boundary theory which suggests that flexible work arrangements involve adjustments to the work role and that such policies are more influential in reducing conflicts that originate in the work domain (Shockley & Allen, 2007). Adjustments within the work-role are directly a result of the interactive effect between family responsibility and flexibility. Shockley and Allen (2007) also found that when family responsibility was high, greater access to flexibility was associated with less family-work conflict among women. They suggest that flexible work arrangements are uniformly beneficial for women with greater family obligations. Similar findings have also been found in studies of the

influence of workplace supports on family-work conflict (Hill, 2005; Young, Baltes, & Pratt, 2007).

Research on actual use of flexible work arrangements has been linked to work-related outcomes and has been found to be a stronger predictor of work-life conflict than the availability of supports alone (Anderson, Morgan, & Wilson, 2002; McDonald et al., 2004; Thompson et al., 1999). Specifically, use of flexibility has been tied to increased job satisfaction, decreased work-family conflict, reduced absenteeism, and increased organizational commitment (see Baltes, Briggs, Huff, Wright, & Newman, 1999 for review). Unlike availability of family-friendly policies which are linked to symbolic structures within organizations, utilization is tied to organizational norms and culture (Bond, 2003; Kossek, 2006). Several studies have found either nonexistent or weak relationships between benefits offered and used by employees and work-family conflict (Anderson, Coffey & Byerly, 2002; Batt & Valcour, 2003; Thompson & Prottas, 2005).

Informal workplace supports refer to informal occupational and organizational norms most often found with the presence of supportive supervisors and coworkers and employees' own ability to negotiate work adjustments to address their family needs (Bardoel, 2003; Roehling, Roehling, & Moen, 2001). These supports are thought to affect the use of family-friendly policies and flexible work arrangements which in turn are thought to decrease work-family conflict. Using a national sample of 3, 551 employees, Behson (2005) reported that managerial support explained a significant proportion of the variance in work-family conflict.

One study that specifically differentiated between the effects of instrumental and emotional support of families on work-life outcomes found support for a moderated effect of social support on work-life conflict. Lapierre and Allen (2006) reported that in their sample of 230 employees from multiple organizations, work-supportive family members and family-supportive supervision had moderated effects on time- and strain-based conflict as well as affective and physical well-being among employees in the sample. The extent to which having work-supportive family members affected time and strain-based family-work conflict was also significant through their ability to provide instrumental support.

Employees with Exceptional Care Responsibilities

Outcomes related to the impact of work-life supports for employees with exceptional care responsibilities suggest the importance of the connection between work, family, and community in managing the complexity of providing disability-related care while maintaining employment. Two factors operating to constrain employees with exceptional care responsibilities are caregiver strain and frequency of family-related work disruptions due to exceptional care responsibilities. These factors have a profound influence on employees' personal, family, and work outcomes.

Caregiver Strain

Caregiver strain refers to the demands, responsibilities, difficulties, and negative psychological consequences of caring for relatives with special needs (Brannan & Helfinger, 2001; Schene, Tessler, & Gamache, 1994). Research on the lives of families with exceptional care responsibilities has found that caring for family

members with exceptional care needs often results in high levels of caregiver strain which in turn leads to elevated levels of work-family conflict (Brandon, 2000; Brennan & Brannan, 2005; Cuskelly, Pullman, & Hayes, 1998; Dowling & Dolan, 2001; Hammer et al., 2005; Lewis et al., 2000a, 2000b; Porterfield, 2002; Rosenzweig et al., 2002; Warfield et al., 2005). The burden of caring for a family member with a disability typically falls on the mother who often will reduce or remove herself from paid employment to provide care (Booth & Kelly, 1998; Lewis et al., 2000a; Neal & Hammer, 2007). Further, employment has been found to increase caregivers' vulnerability to caregiver burden, fatigue, depression, and to decrease physical and emotional well-being (Neal, Chapman, Ingersoll-Dayton, & Emlen, 1993).

Three important findings regarding caring for child with a disability have been consistently found in the literature: having a child with a disability, and the type and severity of the disability, influence employment status (Dowling & Dolan, 2001; Leiter et al., 2004; Warfield, 2005; Ward et al., 2006), child behavior problems and extent of family support influence parental workforce participation (Brennan & Brannan, 2005) and characteristics of the work environment influence parental well-being (Warfield, 2005). Studies have found that when compared to families with children with typical development, having a child with extensive disabilities is associated with greater maternal caregiving (Erickson & Upshur, 1989; Harris & McHale, 1989) and greater maternal stress (Wallander, Pitt, & Mellins, 1990).

Studies on employment and caregiving for a child with special needs repeatedly find a negative relationship between employment and having a child with a

disability (Meyers, Lukemeyer, & Smeeding, 1998). Employment effects have been found to be greater among mothers of children with severe conditions and for low-income families (Salkever, 1982; Thyen, Terres, Yazderdi, & Perrin, 1998). These effects have also been found among caregivers of children with certain types of disabilities. Barnett and Boyce (1995) reported finding that compared to mothers with typically developing children, mothers of children with Down's Syndrome decreased their paid time in employment by seven hours a week. This finding is echoed in the work of Seltzer, Greenberg, Floyd, Pettee, and Hong (2001) who reported that parents of children with developmental disabilities persistently reduce their hours of work over their adult life course.

For employees who have children with severe emotional and behavioral challenges, personal strain and employment patterns often are reflective of their child's symptomology and lack of specialized supports in the community. In their study of 2,585 caregivers of children with emotional and behavioral challenges, Brennan and Brannan (2005) found that parenting a child with more serious mental health difficulties results in greater personal strain for parents and increased work-life conflict. Exploring key factors known to affect the employment through structural equation modeling, the authors reported that symptom severity significantly predicted adequacy of childcare, frequency of child absences from school, and caregiver strain from missed work. More significantly, the results of the analysis suggest that these variables significantly predicted workforce participation even when controlling for caregiver education, child's age, and number of children in the household. These

three factors have been demonstrated to impact parental employment for parents of minor children in general (Ciabattari, 2007; O'Connell, 2002) and have been reflected in the findings of dual-earner sandwich generation caregivers (Hammer et al., 2005; Neal & Hammer, 2007).

Family-Related Work Disruptions

Family-related work disruptions are an antecedent to family-work conflict (Barnett & Gareis, 2006). For employed family caregivers family-related work disruptions involve getting calls at work to handle problems related to dependent care such as breakdowns in child-care, eldercare, a sick child, coordinating medical appointments, or after-school activities. Family-related work disruptions are a cause of concern for employers as they can lead to distraction at work, poor employee performance and absenteeism (Barnett & Gareis, 2006; Noor, 2003). Family-related work disruptions are a strong predictor of the need to use flexibility (Barnett & Gareis, 2006; Blair-Loy & Wharton, 2002). Further, family-related work disruptions are thought to exert a direct influence on work-family and family-work conflict in situations where the availability and use of flexible work arrangements are low (Anderson, Coffey, & Byerly, 2002). Research on outcomes associated with family-related work disruptions has demonstrated that family disruptions are an aspect of family-work conflict that impact stress among employed typical and exceptional caregivers (Barling & MacEwen, 1991; Barnett & Gareis, 2004; Neal & Hammer, 2007; Rodgers, 1992).

For employees with exceptional care responsibilities family-related work disruptions can occur more frequently, are a result of both the extent of the child's or elder's disability or illness, family adaptive strategy, and available supports in the community (Brennan et al., 2008; Neal et al., 1993; Rosenzweig et al., 2002; Starrels, Ingersoll-Dayton, Dowler, & Neal, 1997). Frequent disruptions often result in employed caregivers having to take time off, reduce employment, and face being disqualified from work-related benefits such as healthcare. Also, as a result of an inability to use flexibility, some even lose their jobs altogether (Barrah, Shultz, Baltes & Stoltz, 2004; Leiter et al., 2004; Lewis et al., 2000; Neal et al., 1993; Neal & Hammer, 2007; Rosenzweig & Huffstutter, 2004; Ward et al., 2004).

For working families with children who have disabilities, research has shown that work-life conflict is elevated with parents reporting high degrees of personal stress and financial hardship as a result of being unable to access flexibility in an effort to manage family-related work disruptions (Lewis, Kagan, & Heaton, 2000a). For example, in a qualitative study of 40 parents who had children with disabilities Lewis, Kagan and Heaton (2000a) found many parents reported that employers were often unwilling to grant flexibility due to a perception that work and family should be kept separate. Many of the families within the study reported employers not allowing them to take personal calls at work. This inability for parents to be accessible during the day led to high work-life conflict as it meant that they were unable to attend to the complex needs of their child such as scheduling appointments with specialists, arranging transportation, and attending school (Lewis et al., 2000a). The authors

argue that access to the telephone for personal calls for working parents of children with disabilities is an essential strategy for these families to achieve equitable balance between their work and family needs (Lewis et al., 2000a).

Informal Social Support

For families caring for children with disabilities, research has shown that social support is another key area of support in managing work and family needs. However, among employees with exceptional care responsibilities, instrumental social support is thought to be more restricted, especially for those caregivers who are single, and who parent a child with an emotional or behavioral disorder (Rosenzweig et al., 2008). Further, when caregiving crises occur within the family, it is often social involvement which is reduced (Neal & Hammer, 2007).

In their longitudinal study of dual-earner sandwich generation couples, Neal and Hammer (2007) found that often women caregivers decreased their social involvement as a coping strategy to deal with high caregiving demands. Not surprisingly, these decreases were also found to be related to negative outcomes, such as poor work-family fit, lower well-being, and poorer work-related outcomes (Neal & Hammer, 2007).

The Present Study

The present study examines different types of caregiving experiences by first examining different types of disability-related dependent care such as the care of a child, adult or elder with a disability to variables related to formal support, informal support, work-family conflict and family-work conflict. It also explores outcomes such as stress, satisfaction with family, life and work to determine if differences exist among these types of dependent care responsibilities through a secondary analysis of the 2002 National Study of the Changing Workforce (NSCW). The influence of socio-demographic characteristics on the supports and barriers within the workplace, and on the work-family outcomes of employees with exceptional care responsibilities are then examined and compared to the same outcomes for parents with typical care responsibilities using both lower and higher order statistical techniques. Last, the moderating effects of specific supports thought to increase the use of flexible work arrangements (FWA) and the impact of FWA on work-family conflict, family-work conflict were explored in an effort to determine if differences existed between the predictors and outcomes for parents with typical care responsibilities and parents with exceptional care responsibilities. A conceptual map of work-life integration for employees with typical care and exceptional care responsibilities demonstrates the various supports, barriers, and outcomes that were examined in the current research study (Figure 1). On the left are the socio-demographic characteristics that are thought to influence the need for support. Next to the socio-demographic characteristics are the workplace supports that have been shown in the literature to

promote positive or negative work-life outcomes. Next to the work-life supports, are two short-term outcomes that have received significant attention in the literature as they have been linked to negative outcomes among employees. Last are the long-term outcomes which have been linked to both work-to-family and family-work conflict.

The major research questions include:

- (1) Do employees with different types of exceptional care responsibilities such as caring for a child, adult with a disability or caring for a child and an elder report similar work-life supports, barriers (work-family, family-work) and work-family outcomes (loss of employment, loss of income or benefits because of unscheduled family-related absences, stress, life satisfaction, and work satisfaction)?,
- (2) Are the work-family supports, barriers and outcomes similar for employees with typical care compared to those with and exceptional care responsibilities?,
- (3) How do participant socio-demographic characteristics (gender, age, ethnicity, income, marital status, number of children in the household, number of children under the age of six) and whether respondent assumes primary responsibility for child care influence the strength of prediction of workplace supports on work-family outcomes for employees with typical care and exceptional care responsibilities?,
- (4) Does being an employed parent with exceptional care responsibilities interact with other socio-demographic characteristics once the socio-demographic characteristics have been controlled?
- (5) When workplace supports and the use of flexible work arrangements are considered, how do family-related work disruptions, number of hours worked, loss of

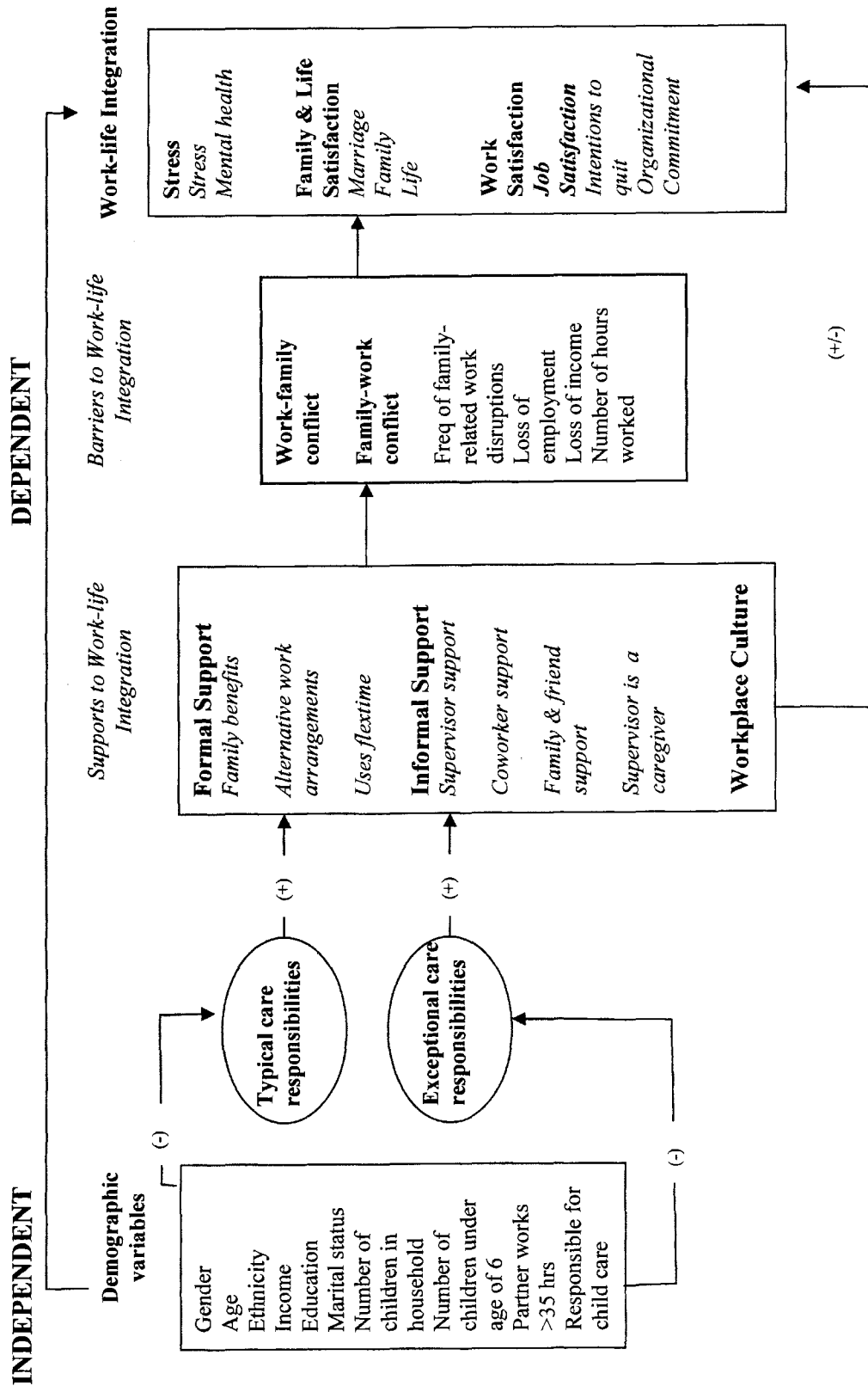
employment and loss of benefits impact the barriers and outcomes to work-life

integration for employees with typical care and exceptional care responsibilities?,

(6) Does having a supervisor who is a caregiver influence the use of flexible work arrangements by employees with typical care and exceptional care responsibilities?

(7) Are there differences in the way that work-family supports and work-life barriers operate on outcomes for employees with typical and exceptional care responsibilities?

Figure 1. Research Conceptual Map



Chapter 3: Research Methodology

This study used data from a national cross-sectional survey of the workforce in the United States. The 2002 National Study on the Changing Workforce (NSCW), is the third in a series of four nationally representative telephone surveys of the U.S. workforce (1992, 1997, 2002, 2007) sponsored by the Families and Work Institute (Bond et al., 2003; Families and Work Institute, 2008) and conducted by Harris Interactive Inc. The sampling frame used in the study was an unclustered random probability sample, stratified by region. Participation in the survey was limited to individuals who worked at a paid job or income producing business, were 18 years of age and older, were non-institutionalized, were members of the civilian population, resided in the contiguous 48 states, and lived in a household with a telephone. When more than one eligible person resided in the household, one was randomly selected for interviewing. Interviews were approximately 40 minutes in length and participants were paid a \$25 incentive to participate that they could keep or donate to one of seven charities. The size of the total sample was 3,504, representing a 61% participation rate (Bond et al., 2003). For this analysis, only the data from wage and salaried workers were analyzed ($n = 2,810$) as self-employed individuals can often set their own hours and do not have direct supervisors, hence formal workplace policies, informal workplace supports and workplace culture are not related to their work-life outcomes (Barrah et al., 2004).

Participant Characteristics

The following characteristics describe the sample of wage and salaried employees ($n = 2,810$). Forty-eight percent of the total sample was female. Sixty eight percent of the sample were married or living with a significant other, 18% were single and never married and 16% were separated, divorced or widowed. Seventy-four percent of the sample identified as white, 10.4% as African American, 9.8% as Hispanic and 4.8% as other. Thirty-one percent of the total sample had their high school diploma, 30% had some college or technical training, 19% had a Bachelor's degree and 11% had less than high school, approximately 9% had professional degrees or a doctorate. Median total family income for the sample was \$50,000. Sixty-seven percent of the sample indicated they were parents of a child of any age ($n = 1,902$).

Only participants who responded that they acted as parents for minor children were selected for the sample as previous research has suggested that eldercare is perceived differently than child care (Rosenzweig et al., 2007). The sub-sample of parents ($n = 1,902$) used for the study were slightly different than the overall sample of wage and salaried employees. Fifty one percent were female, 76% were legally married or living with a partner. Seventy four percent of the sample of parents were white, 11% were African American, 9% were Hispanic/Latino and 4% were of other ethnicities. Median family income was \$53,040. Thirty one percent of the sample of parents had a high school diploma, 30% had some college or technical training, 18% had a four year college degree, and 9% had a master's level or professional degree.

The median child age of the youngest child among all caregivers was 9 years. An average of two children under eighteen lived in the home.

Testing for differences between the sub-sample and the overall sample

To determine if the sub-sample differed from the larger sample of wage and salaried employees (participants who were not parents), the sub-sample (participants who were parents) were compared to the larger sample on key socio-demographic and outcome variables through an examination of t-tests (for continuous variables) and chi-squares (for nominal or ordinal variables). Table 1 shows the mean (*M*), standard deviation (*SD*), mean differences, and effect sizes (Cohen’s *d*) between the parent and non-parents among the sample of wage and salaried workers. Odds ratios are provided in text for dichotomous variable comparisons. Guidelines for the interpretation of Cohen’s *d* are: 0.2, small, 0.50, moderate, 0.80 large, 1.3, very large (Tabachnick & Fidell, 2001).

Table 1. Selected Demographics, WFC, FWC and Work-Life Outcomes for Parent Sample and Non-Parent Sample

	Parent N = 1902	Non-Parent N = 906	Statistical Comparison with Independent Samples T-Test	
	Mean (SD)	Mean (SD)	Mean Diff.	Cohen’s <i>d</i>
Age	43.25 (10.92)	35.31 (14.42)	-14.58***	.77
Education	3.18 (1.54)	3.31 (1.55)	2.09*	.07
Family income	\$64, 824.04 (\$51, 824.06)	\$47, 176.47 (54,407.04)	-8.14***	-.31
WFC	12.64 (4.57)	11.94 (4.51)	-3.82***	-.18
FWC	10.57 (3.62)	9.80 (3.37)	-5.45***	-.20
WLO: Marriage, family & life satisfaction	3.17 (0.66)	3.22 (.68)	1.88	-.14
WLO: Work satisfaction	10.01 (1.82)	9.61 (1.92)	-5.27***	-.26
WLO: Stress (standardized)	0.0018 (1.80)	0.0035 (1.74)	ns	--

Note. *p<.05 **p<.01 ***p<.001

Gender

A chi-square test of independence was performed to examine the relationship between gender and whether the respondent was a parent or not. The relationship between gender and acts as a parent was significant, $\chi^2(1, N = 2808) = 9.862, p < .05$. Women were 1.29 times more likely to report they acted as a parent than men.

Age

As expected the mean age of parents in the sample was significantly higher ($M = 43.25$ years, $SD = 10.92$) than the mean of the non-parents in the sample ($M = 35.31$ years, $SD = 14.42$; $t(1405) = -14.57, p < .001$). The magnitude of the difference in means was large (Cohen's $d = .77$).

Education

There was no statistically significant difference in education between the parent and non-parent participants in the sample.

Marital Status

There was a small difference in marital status between parents (79% married or cohabitating) and non-parents (21% married or cohabitating; $\chi^2(1, N = 2,800) = 29.41, p < .05$). Participants who indicated they were single were 2.5 times less likely to be parents than participants who indicated they were married or cohabitating.

Ethnicity

There was no statistically significant difference between ethnicity and whether participants responded they were a parent or not.

Family Income

Family income between parents and non-parents in the sample was also different: the mean income of non-parents ($M = \$47,176.00$, $SD = \$54,407$) was less than the mean income of parents ($M = \$64,824.00$, $SD = \$51,824$); $t(1405) = -8.14$, $p < .001$. The magnitude of the differences was moderate (Cohen's $d = .31$).

Work-Family Conflict

There was a small but significant difference in work-family conflict (WFC) among parents and non-parents with the mean of parents' reported WFC being higher ($M = 12.63$, $SD = 4.56$) than non-parents ($M = 11.93$, $SD = 4.51$; $t(1785) = -3.821$, $p < .001$). The magnitude of the effect was small (Cohen's $d = .18$).

Family-Work Conflict

There was a significant difference between the means of parents and non-parents in reported family-work conflict (FWC). The mean for FWC for parents was higher ($M = 10.57$, $SD = 3.62$) than for non-parents ($M = 9.80$, $SD = 3.37$; $t(1874) = -5.448$, $p < .001$). The magnitude of the effect was small (Cohen's $d = .20$).

Family and Life Satisfaction

A significant difference in mean scores between non-parents ($M = 3.22$, $SD = .676$) and parents ($M = 3.16$, $SD = .659$; $t(2785) = 1.876$, $p < .05$) was found for marriage, family, life satisfaction measure. Participants who were not parents reported higher levels of satisfaction with family and life. The magnitude of the effect was small (Cohen's $d = .14$).

Work Satisfaction

Parents' reported work satisfaction ($M = 10.01$, $SD = 1.82$) was higher than that of non-parents ($M = 9.61$, $SD = 1.91$; $t(1690) = -5.273$, $p < .001$). The magnitude of the effect was small (Cohen's $d = .25$).

Stress

There was no significant difference in scores for parents ($M = .0035$, $SD = 1.73$) and non parents in the sample ($M = .0018$, $SD = 1.79$; $t(2757) = .024$, $p = .981$) in relation to overall stress.

The results of the t-tests suggest that the parent sample is different from the non-parent sample on the key variables of interest particularly on satisfaction with family and life and satisfaction with work. Thus, the generalizability of the findings are limited to wage and salaried parents.

Measurement

All items used in this study are from the National Study of the Changing Workforce (NSCW; Families and Work Institute, 2004) and are located in Appendix A: Table A-1.

Employees who Have Typical Care and Exceptional Care Responsibilities

Participants were grouped into two categories: typical care (TCR) and exceptional care responsibility (ECR). Participants who answered "yes" to "Are you a parent or guardian of a child of any age?" and "yes" to "one or more children 18 years of age or younger living at home for at least half the year" and "no" to "Do you provide special assistance or care for a disabled, emotionally disturbed or seriously ill

child in your home” and “no” to “Do you provide special assistance or care for a disabled, seriously ill non-elderly adult relative in your home” and “no” to “Do you provide special assistance or care for a relative or in-law 65 years or older- helping them with things that are difficult or impossible to do for themselves?” were coded as “Typical care (TFC),” the referent category. Additional criteria were added to refine this category and include those respondents who also answered “no” to “Did you take time off work or work fewer hours during the past year than you would otherwise have done to be able to provide this attention and care?” and “no” or “irregular” to “Are you helping on a regular or only intermittently when special needs arise” after initial tests of the exceptional care group revealed that there were differences between the disability-dependent care groups.

To examine whether types of exceptional care responsibilities have similar or different effects among employees with different types of disability-related care responsibilities three variables were created: (1) Exceptional care: child with a disability or chronic condition, (2) Exceptional care: child care and adult with a disability or chronic condition, (3) Exceptional care: child care and older adult with a disability or chronic condition.

Participants who answered “yes” to “Are you a parent or guardian of a child of any age?” and “yes” to “one or more children 18 years of age or younger living at home for at least half the year” and “yes” to “Do you provide special assistance or care for a disabled, emotionally disturbed or seriously ill child in your home” were coded as (1) Exceptional care: child with a disability or chronic condition.

Participants who answered “yes” to “Are you a parent or guardian of a child of any age?” and “yes” to “one or more children 18 years of age or younger living at home for at least half the year” and “yes” to and “yes” to “Do you provide special assistance or care for a disabled, seriously ill non-elderly adult relative in your home” were coded as (2) Exceptional care: child care and adult with a disability or chronic condition.

Participants who answered “yes” to “Are you a parent or guardian of a child of any age?” and “yes” to “one or more children 18 years of age or younger living at home for at least half the year” and “yes” to “Do you provide special assistance or care for a relative or in-law 65 years or older- helping them with things that are difficult or impossible to do for themselves?” were coded as (3) Exceptional care: child care and elder (sandwich generation). When the analysis of variance tests were performed on the three disability related groupings the third category (sandwich generation) was significantly different from the first two categories. This suggested that disability-related dependent care is very different from the care of older adults in general. A decision was made to refine the sandwich generation group to include only those employees who were providing high levels of care similar to that found with caring for a family member with a disability. This was achieved by only selecting those participants who answered “yes” to “Did you take time off work or work fewer hours during the past year than you would otherwise have done to be able to provide this attention and care?” and “regular” to “Are you helping on a regular or only

intermittently when special needs arise.” The new category was coded as (3R)

Exceptional care: child care and elder with a disabling or chronic condition.

Once this distinction in grouping was made and the analyses were rerun, the similarities between the three types of exceptional care responsibilities were evident. This suggests that different types of disability-related dependent care can be conceived as a dimension of dependent care that has similar supports, barriers and outcomes. This reflects what Neal et al. (1993) found when they examined different kinds of caregiving experiences among a sample of 9,573 employees in Portland, Oregon.

Workplace Supports

The following section describes the different measures that were used to measure formal and informal work supports. Observed reliabilities of all scales are reported in Chapter 4.

Formal Family-Friendly Benefits

Following the work of Thomas and Ganster (1995) and Thompson and Prottas (2005) two types of family benefits were assessed: formal family benefits offered and availability of alternative work arrangements. Although not a measure of actual use of family benefits, availability appears to symbolize for all employees that their organization cares about their well-being (Thompson & Prottas, 2005).

The family benefits index consisted of 7 items related to types of benefits offered. Questions regarding type of benefits offered ranged from asking participants “Does your organization have a program or service that helps employees find child

care if they need it?” to “Does your organization have a program that helps employees get information about elder care or find services for elderly relatives if they need them?” Responses were categorized in the original dataset as 1= yes, 0 = no and were summed for this study to create a formal family benefits index (0-7). Items that had a “don’t know” (coded as user-missing) were left as they appeared in the dataset as a non-response.

Availability of alternative work arrangements consisted of 7 items that assessed available alternative work arrangement within the respondent’s organization. Questions ranged from asking participants whether they could “choose [their] own starting and quitting times” to whether they could “arrange to work for only part of the year in [their] current position?” Responses were categorized in the original dataset as 1 = yes, 0 = no. They were summed for this study to create availability of alternative work schedules index (0-7). Items that had a “don’t know” (coded as user-missing) were left as they appeared in the dataset as a non-response.

Informal social supports

Three types of informal family supports were examined: family and friend support, supervisor support, and coworker support. The three scales were used as measured variables of informal support for all the analyses.

Supervisor support was measured through 11 items that tapped level of perceived support from supervisors for both work and family needs. Sample items from the scale are “ My supervisor keeps me informed of the things I need to know to do my job well” and “I feel comfortable bringing up personal or family issues with

my supervisor.” The range in response values for the scale was: 1 = strongly agree to 5 = strongly disagree. Items were reverse coded and summed to create supervisor support scale (11 - 55). Items that had a “don’t know” (coded as user-missing) were left as they appeared in the dataset as a non-response. Reported coefficient alphas between .89 - .91 for the supervisor support scale have been found in both this and other national samples (Anderson, Coffey, & Byley, 2005; Mennino et al., 2005; Thompson & Prottas, 2005).

Coworker support was measured through 3 items that assessed type of support respondents felt they had from their coworkers. Sample items from the scale are “I feel I am really part of the group of people I work with” and “I have support from coworkers that helps me to manage my work and personal or family life.” As with the supervisor support scale, coworker support response categories ranged from 1 = strongly agree to 5 = strongly disagree. Items were reversed coded and summed to create the coworker support scale (3 - 12). Items that had a “don’t know” (coded as user-missing) were left as they appeared in the dataset as a non-response. Thompson and Prottas (2005) reported a coefficient alpha of .74 for the coworker support scale with their sub-sample of 2,810 wage and salaried employees within the same dataset.

Social support is the extent to which participants perceived that they could draw on informal supports in their network of family and friends in time of need. To date social support has not been assessed using measures from this dataset. Two items were used to assess perceived level of social support: “I have the support I need from family and friends when I have a problem with child care;” and “I have the support I

need from my family and friends when I have a personal problem.” The different value categories within each the items are as follows: 1 = strongly agree to 4 = strongly disagree. Responses from both items were reverse coded and collapsed to form a scale (0 -8) with high values indicating high levels of social support. Items that had a “don’t know” (coded as user-missing) were left as they appeared in the dataset as a non-response. There was a large number of system missing values on the first item as only those participants with children under 13 were asked this question.

Supervisor is a Parent/has Exceptional Care Responsibilities

Additionally, support by supervisor was assessed in relation to whether the supervisor was a parent or had exceptional care responsibilities. Supervisors with exceptional care responsibilities were identified through the participant’s answers to the following question: “Does your supervisor or manager have a significant responsibility for the care of children, elderly or disabled family members?” Responses are coded dichotomously, 1 = yes, 0 = no. However, the variable was dropped from the analyses due to the fact that over half of the participants had responded “don’t know” when asked this question.

Workplace Culture

Workplace culture was measured using responses to 5 items relating to the perceived culture of the organization. Sample items from the scale are “There is an unwritten rule at my place of employment that you can’t take care of family needs on company time” and “At my place of employment, employees who put their family or personal needs ahead of their jobs are not looked on favorably.” The different value

categories within each item ranged from 1 = strongly disagree to 4 = strongly agree. Items were reversed coded and summed to create the workplace culture scale (5 - 20). Items that had a response of “don’t know” (coded as user-missing) were left as they appeared in the dataset as a non-response. Thompson and Prottas (2005) reported a coefficient alpha of .71 for the workplace culture scale with their sub sample of 2,810 wage and salaried employees within the same dataset. Coefficient alphas in earlier versions of the survey have ranged from .74 - .76 (Hill, 2005; Mennino et al., 2005).

Uses Flexible Arrangements

Use of flexible work arrangements was assessed through a single item: “How much do you use the flexible schedule options available to you at work?” Responses were coded on a 5 point Likert scale ranging from 1= A lot to 5=Don’t have any options. Responses were reversed so that higher values indicated greater use. Items that had a “don’t know” (coded as user-missing) were left as they appeared in the dataset as a non-response.

Control Variables

A number of socio-demographic characteristics have been found to influence the need for flexible work arrangements and the presence and use of workplace policies. The following socio demographic variables were included in the analyses: gender, race/ethnicity, age of respondent, total family income, education, marital status, number of children under 18 in household, number of children under 6 in household (see Table 1). Two family variables were also controlled: partner employment (> 35 hours) and whether the respondent was responsible for routine

child care (0, 1). Organization size was included in the early analyses, as size of an organization often predicts both the presence of family-friendly policies and the ability to use flexibility (Bond et al., 2005). This was assessed through one item that asked respondents “Approximately how many employees work for your company or organization for all of the U.S.?”. Response items were: 1 = 50 -74 employees to 8 = 10,000 or more employees.

Work-Life Integration Barriers

Barriers to work-life integration were assessed through two scales: work-family conflict and family-work conflict. Observed reliabilities of the scales are reported in Chapter 4.

Work-Family Conflict

Work-family conflict measures the extent to which work is thought to interfere with family and was measured through 5 items. Sample items from the scale are “How often have you not had enough time for your family or other important people in your life because of your job?” and “How often have you not been in as good a mood as you would like to be at home because of your job?” Response categories to the items ranged from 1 = very often to 5 = never. Items were reversed scored as required and summed to form a scale (5 - 25) with higher numbers indicating higher degrees of conflict. Items that had a “don’t know” (coded as user-missing) were left as they appeared in the dataset as a non-response. Coefficient alphas using this scale have been reported as ranging from .82 to .88 for both this and earlier versions of the

survey (Anderson, Coffey & Byerly, 2005; Behson, 2005; Hill, 2005; Thompson & Prottas, 2005; Voydanoff, 2005).

Family-Work Conflict

Family-work conflict was used to measure participant perception of the extent to which family interferes with work. Five items were used to assess family-work conflict. Sample items from the scale include “How often have you not been in as good a mood as you would like to be at work because of your family life?” and “How often has your family or personal life kept you from doing as good a job at work as you could?” Response categories to the items ranged from 1 = very often to 5 = never. Items were reversed scored as required and summed to form a scale (5 - 25) with higher numbers indicating higher degrees of conflict. Items that had a “don’t know” (coded as user-missing) were left as they appeared in the dataset as a non-response. Coefficient alphas using this scale within this dataset have been reported as ranging from .77 to .87 (Hill, 2005; Thompson & Prottas, 2005; Voydanoff, 2005).

Frequency of family-related work disruptions

Family-related work disruptions are conceptualized as the extent that employed caregivers are interrupted at work to handle problems associated with childcare, transportation issues, illness, and emergencies (Barnett & Gareis, 2006; Brennan & Brannan, 2005; Lewis et al., 2001). Work disruptions were assessed through a composite variable created from four items: the number of times in the past three months participants arrived late or left work early, missed whole or half days, or had to make special arrangements because of childcare breakdowns, and reason why

absences occurred. A composite variable was then created that linked number of times absent to reasons associated with absences so that only those absences related to family care were counted. For the analyses, the family-related responses to the three items was collapsed into one scale ranging in values from 0-279 which indicate number of times family-related work disruptions occurred within the past three months. Items that had a “don’t know” (coded as user-missing) were left as they appeared in the dataset as a non-response.

Loss of Employment as a Result of Family-Related Work Disruptions

Many employed caregivers report loss of employment as an outcome of work disruptions due to exceptional care responsibilities (Rosenzweig & Huffstutter, 2004). The association between exceptional care responsibilities and loss of employment was assessed through a composite variable. In order to be coded as “yes” respondents had to have indicated “yes” to work disruptions. This was achieved by creating a dummy variable that coded those respondents who indicated 0 on number of family-related work disruptions as “no”, and those who indicated 1 or more on number of family-related work disruptions were coded as “yes.” To assess loss of employment, a composite variable was created that counted “yes” to family-related work disruptions (“yes”) and responding “yes” to “Have you ever lost a job because of too many unscheduled absences?” as “yes” to job loss due to work-disruptions. If respondents answered “no” to the second item they were counted as “no” in the composite variable. Items that had a “don’t know” (coded as user-missing) were left as they appeared in the dataset as a non-response.

Loss of Pay or Benefits as a Result of Family-Related Work Disruptions

Research on families with exceptional care responsibilities has shown that many caregivers report loss of income as a result of frequent work disruptions (Rosenzweig & Huffstutter, 2004; Lewis et al., 2000; Ward et al., 2006). The association between exceptional care responsibilities and loss of pay or benefits was assessed through a composite variable. In order to be coded as “yes” respondents had to have indicated “yes” to the work disruptions variable. This was achieved by creating a dummy variable that coded those respondents who indicated 0 on number of family-related work disruptions as “no,” and those who indicated 1 or above on number of family-related work disruptions were coded as “yes.” To assess loss of benefits, a composite variable was created that counted “yes” to family-related work disruptions and “yes” to “Did you lose pay or benefits for missing this time, or were you penalized in some way?” as “yes” (coded as 1) to benefit loss due to family-related work disruptions. If respondents answered “no” to the second item they were coded as “no” (0) in the composite variable. Items that had a “don’t know” (coded as user-missing) were left as they appeared in the dataset as a non-response. This variable was problematic due to the high number ($n = 845$) of respondents who indicated “don’t know” to the base question “Did you lose pay or benefits for missing this time, or were you penalized in some way?”

Work-Life Integration Outcomes

Stress

Poor outcomes related to stress have been linked with an inability to manage both work and family demands. Stress is thought to be an indicator of poor work-family fit (Barnett & Gareis, 1999) and is indirectly related to perceived support within the workplace and directly related to work-life conflict (Hill, 2005). Stress was measured through 7 items (following the procedure outlined by Thompson and Prottas, 2005). Sample items from the scale include “In past month, how often have you been bothered by minor health problems such as headaches, insomnia, or stomach upsets?” and “How often have you felt that difficulties were piling up so high that you couldn’t overcome them?”. Response categories for the items ranged from 1 = very often to 4 = never. Negative items were reverse coded and items were collapsed into a single scale (7 - 35) with higher scores representing higher stress. Items that had a “don’t know” (coded as user-missing) were left as they appeared in the dataset as a non-response. The stress scale has reported good reliability (.85 -.87) in other studies using nationally representative samples (Anderson et al., 2005; Behson, 2005).

Mental health was assessed through two measures that have been shown to work well as initial screening for depression (Thompson & Prottas, 2005; Whooley, Avins, Miranda & Browner, 1997). The two items used to assess mental health were: “During the past month, have you been bothered by feeling down, depressed or hopeless?” and “During the past month, have you been bothered by little interest or pleasure in doing things?” Responses to the two items were collapsed into an index

(0-4) with lower scores representing greater degree of mental health. Items that had a “don’t know” (coded as user-missing) were left as they appeared in the dataset as a non-response. The mental health index was on a different metric from the stress items, so both were standardized before being combined into a scale following the procedures of Thompson and Prottas (2005; $\alpha = .83$). High scores indicate high levels of stress and poor mental health.

Family and Life Satisfaction

Family and life satisfaction was assessed through a composite variable using three items that used a 5 point Likert scale (1 = extremely satisfied, 5 = not too satisfied). Sample scale items include “All in all, how satisfied would you say you are with your marriage/relationship with your partner?” and “All in all, how satisfied would you say you are with your family life” and “All things considered, how do you feel about your life these days?” The responses to the three items were reversed and a composite variable was created by summing the responses to the items and dividing them by three or two depending on whether the respondent was married or single. Items that had a “don’t know” (coded as user-missing) were left as they appeared in the dataset as a non-response. Higher scores indicated higher degrees of satisfaction. Coefficient alpha for family and life satisfaction using this dataset was reported as .73 by Thompson and Prottas (2005).

Work Satisfaction

Work satisfaction was measured through 3 items which assess job satisfaction, intention to quit, and commitment to employer. The responses to the three items were reversed scored, and scaled (1 - 13) with higher scores indicating higher degrees of work satisfaction. Items that had a “don’t know” (coded as user-missing) were left as they appeared in the dataset as a non-response. Coefficient alpha for the work satisfaction scale has been reported at $\alpha = .70$ (Protas & Thompson, 2005). A study that tested the single item measure of commitment to employer reported a reliability at .78 (Thompson, Beauvais & Lyness, 1999).

Preliminary Analyses

The data file containing the variables of interest was screened prior to sample selection for missing data. Patterns of missing values were examined. Most of the variables to be included within the study had less than 5% of the data points missing. For the missing values that exceeded a 5% threshold (number of children under 18, who responsible for child care, spouse/significant other work hours, supervisor support scale items, formal policy items, FWA index items, loss of benefits due to family-related work disruptions) statistical tests were performed through the creation of dummy variables which were coded for missing and non missing values. These dummy variables were tested on outcome variables of interest through an examination of mean differences and effect sizes (see Tabachnick & Fidell, 2001, p. 59 for procedure). Of the variables listed above that exceeded the 5% threshold none yielded

substantial effect sizes, so missing data were not meaningfully related to outcomes of interest. Several different strategies (imputing, recoding) for handling the missing values were employed depending on the variable and whether the missing value was due to the skip pattern within the data set.

Univariate descriptives and bivariate analyses were conducted on continuous variables to ensure normality, linearity, and homoscedasticity and identify the presence and influence of outliers through the analysis of frequency distributions, histograms, scatterplots, and casewise diagnostics (studentized residuals, leverage, Mahalanobis distance values, Cook's Distance). An inspection of the univariate descriptives showed that there were no out of range values and the distributions appeared normal. There were under 10 cases with outliers revealed by studentized residuals and leverage values. Mahalanobis Distance diagnostics revealed 23 cases of multivariate outliers. A closer inspection of each individual case showed that over half of the multivariate outlier cases belonged to employees with exceptional care responsibilities. Hence, all outliers were kept. Multicollinearity and singularity were assessed through bivariate correlation matrices (Pearson's r), VIF and tolerance. The results of the bivariate correlations showed no violations of these two assumptions (see Table 6 for bivariate correlations of variables of interest).

Procedure for Testing the Hierarchical Regression Models

Five hierarchical regression models tested: (a) the influence of demographic factors (step 1), (b) the influence of work-life supports and barriers (step 2), on work-family conflict, family-work conflict, loss of job due to family-related work

disruptions, loss of benefits due to family-related work disruptions, stress, family and life satisfaction, and work satisfaction. At Step 1, the demographic variables were entered into the regression simultaneously, at Step 2 the work-life supports and barrier variables were entered simultaneously. To construct a parsimonious model, that weighed both theoretical and statistical considerations, non-significant independent variables were removed manually one at a time to reach the final models. A decision was made to report analyses that reached trend level significance due to the relatively small sample of employees with exceptional care responsibilities and complexity of the models.

Procedure for Generating the Multiple Group Structural Equation Models

Five multiple groups structural equation models were used to explore whether the hypothesized relationships between work-life supports and outcomes operated in a similar manner for employees with typical and with exceptional care responsibilities. Analyses were completed through the AMOS 17 (Arbuckle, 2008) program, using maximum likelihood estimation which generates estimates that use the full information method (i.e. calculation of parameter estimates all at once, Kline, 2005). Further, the analyses were conducted in two stages (Bentler-Weeks approach, see Byrne, 2001). First, the hypothesized model was tested using data that had been broken out for each group. If proposed models had insignificant fit, each model was respecified using the Lagrange Multiplier (LM) test to determine which causal covariances and paths would contribute the most to a significantly better fitting model. Although this raises the risk of both Type I and Type II errors, the technique is

supported in the literature for exploratory studies (see Byrne, 2001 for studies). Following model building and trimming, each respecified model was rerun with each sample to determine sample specific fit (see Byrne, 2001). Paths that were not statistically significant were not deleted from the model due to the fact that (a) they had prior support in the literature, (b) the purpose of the multiple group models in this study was to test group differences on known constructs and not develop a theoretical model per se. A decision was made to report analyses that reached trend level due to the relatively small sample of employees with exceptional care responsibilities and complexity of the models.

After the baseline models were developed and tested separately they were then run simultaneously with both groups of data (sample of parents with typical care responsibility and sample of parents with exceptional care responsibility).

Chapter 4: Results

The following section describes the results of the analyses by first reporting the exploratory factor analyses (EFA) and confirmatory factor analyses (CFA) of the major scales, then the analysis of variances (ANOVA) testing for differences between the employees who have exceptional care responsibilities for a child with a disability, an adult with a disability or an elder with a disability on the major study variables. The impact of the number of exceptional care responsibilities on the major study variables is then reported. This is followed by the results for the independent samples t-test which explored whether there were differences between employees with typical care responsibilities and exceptional care responsibilities on the major study variables. Next the results from the hierarchical regression models are reported followed by the multiple-groups structural equation models. An overview of the major study results are presented in Table 27.

Exploratory and Confirmatory Factor Analyses of Major Scales Used in the Study

In order to ensure that the constructs used in the analyses were both valid and reliable EFAs and CFAs were conducted to test the factor structures of the scales within the selected sample of parents ($N = 1,902$). Random split-half procedure EFAs were performed on the formal supports, informal supports, workplace culture, family-work conflict, work-family conflict, and the work-life outcomes items with half the sample ($N = 928$). SPSS generates a split-half sample of approximately 50% so sample sizes may vary slightly. Confirmatory factor analyses (CFA) were run to validate the factor structures indicated by the EFAs to diagnose any potential

measurement problems that could affect the proposed structural models and to compare those to previously published analyses ($N = 972$).

Table 2 shows the factor loadings, item means, and standard deviations on the coworker support, supervisor support, WFC, FWC, WPC, work satisfaction, Life Satisfaction and stress and wellbeing scales of the first-half sample. The EFAs used a principle components analysis. Although multiple factor solutions were examined, in keeping with previous research on the scales, only the results for the single-factor solutions are reported. Guidelines for interpreting the factor loadings are .71 and above excellent, .63 - .70 very good, .55 - .62 good, .45 - .54 fair (Tabachnick & Fidell, 2001; Coleman, 2001).

The following section describes the structure proposed by the EFA's, the total variance explained and the reliabilities provided using the first half-sample as well as the overall model fit, fit indices, and factor loadings produced by the CFA's on the second half-sample. Most items examined in the EFA had loadings within the excellent to very good ranges. Excellent to very good loadings were also reflected in the coefficients found within the CFAs using the "hold out" sample and maximum likelihood estimation techniques. CFAs were not produced for coworker support, family and life satisfaction, and the work satisfaction constructs because they had less than three manifest indicators which made the models just identified.

Table 2. Factor Loadings, Item Means, and Standard Errors for the Exploratory Factor Analysis Results of the Major Study Scale Items

Item	Half-sample 1 (N = 928)			Reported α
	PCA	M	SE	
<i>Coworker support</i>	$\alpha = .78$.74 (Thompson & Prottas, 2005)
I feel that I am part of the group I work with	.84	3.57	.75	
I have the support of coworkers I need for job	.87	3.57	.68	
I have the support of coworkers that helps me manage my family life	.78	3.18	.18	
<i>Supervisor support</i>	$\alpha = .91$.91 (Menino et al., 2005)
Supervisor keeps me informed of the things I need to know	.68	3.36	.85	
Supervisor expectations of my performance are realistic	.61	3.56	.75	
Supervisor recognizes when I do a good job	.76	3.45	.78	
Supervisor is supportive when I do a good job	.79	3.53	.75	
Supervisor is fair and does not show favoritism	.75	3.29	.94	
Supervisor accommodates family/personal business	.67	3.56	.76	
Supervisor is understanding when I talk about personal or family issues	.79	3.33	.92	
I feel comfortable bringing up issues with supervisor	.72	3.06	1.05	
Supervisor cares about how work affects family/personal life	.81	3.10	.98	
Supervisor is competent	.68	3.50	.79	
Supervisor is a friend	.67	2.83	1.07	
<i>Work-family conflict</i>	$\alpha = .88$.82 -.88 (Anderson, Coffey, & Byerly, 2005; Behson, 2005; Hill, 2005; Thompson & Prottas, 2005; Voydanoff, 2005)
Not enough time for family because of work	.83	2.48	1.13	
Not have energy to do things with family because of work	.81	2.58	1.17	
How often work kept you from doing good job at home	.83	2.48	1.16	
How often not been in good mood at home because of work	.82	2.58	1.16	
Job kept you from concentrating on important things in life	.79	2.22	1.06	

Table 2 (Continued). Factor Loadings, Item Means, and Standard Errors for the Exploratory Factor Analysis Results of the Major Study Scale Items

Item	Half-sample 1 (N = 928)			Reported α
	PCA	M	SE	
<i>Family-work conflict</i>	$\alpha = .82$.77 - .87 (Hill, 2005; Thompson & Prottas, 2005; Voydanoff, 2005)
Not been in good mood at work b/c of family	.76	2.28	1.00	
Family/personal life kept you from doing good job at work	.80	2.02	.92	
How often have family/personal life drained you of energy needed at work	.77	2.18	1.03	
Family/personal life kept you from concentrating at work	.78	2.15	.94	
Not enough time for job b/c of family	.68	1.86	.85	
<i>Workplace culture</i>	$\alpha = .72$.72 (Thompson & Prottas, 2005)
Unwritten rule that you can't take care of family on company time	.65	2.97	1.09	
Employees that put family first are not looked on favorably	.76	2.90	1.05	
Attitude at work toward family is "now you made your bed now lie in it"	.74	3.14	1.06	
Must choose between advancing at work or family	.68	2.85	1.07	
Managers are honest and ethical	.58	3.19	.94	
<i>Stress</i>	$\alpha = .80$.85 - .87 (Anderson et al., 2005; Behson, 2005)
Bothered by minor health problems	.64	2.34	1.31	
Trouble sleeping	.67	1.87	1.14	
Nervous or stressed	.76	2.84	1.28	
Felt can't control things in life	.64	2.21	1.22	
Confident can handle problems in life	.42	1.83	1.04	
Felt things going your way	.59	2.43	1.04	
Felt difficulties piling up and can't overcome them	.73	1.95	1.13	
MH Index: Feeling down & depressed and little interest or pleasure in doing things	.69	.44	.73	
<i>Family and Life Satisfaction</i>	$\alpha = .70$.73 (Thompson & Prottas, 2005)
How satisfied with marriage/relationship	.86	2.49	1.57	
How satisfied with life	.64	3.26	.69	
How feel about family life these days	.87	2.70	1.22	
<i>Work satisfaction</i>	$\alpha = .66$.70 (Thompson & Prottas, 2005)
How satisfied with job	.82	3.43	.68	
How loyal do you feel towards employer	.74	4.11	.87	
Will you try to find a new job within 1 year?	.74	2.52	.74	

Coworker support

The EFA of the three coworker support items revealed the presence of a simple structure. All three items loaded substantially on one component with an eigenvalue of 2.09. The one component solution explained a total of 69.58% of the variance.

Reliability analysis showed good internal consistency of the items with a Cronbach's alpha coefficient of .78, which was slightly higher than the alpha for the entire sample as reported by Thompson and Prottas ($\alpha = .74$, 2005).

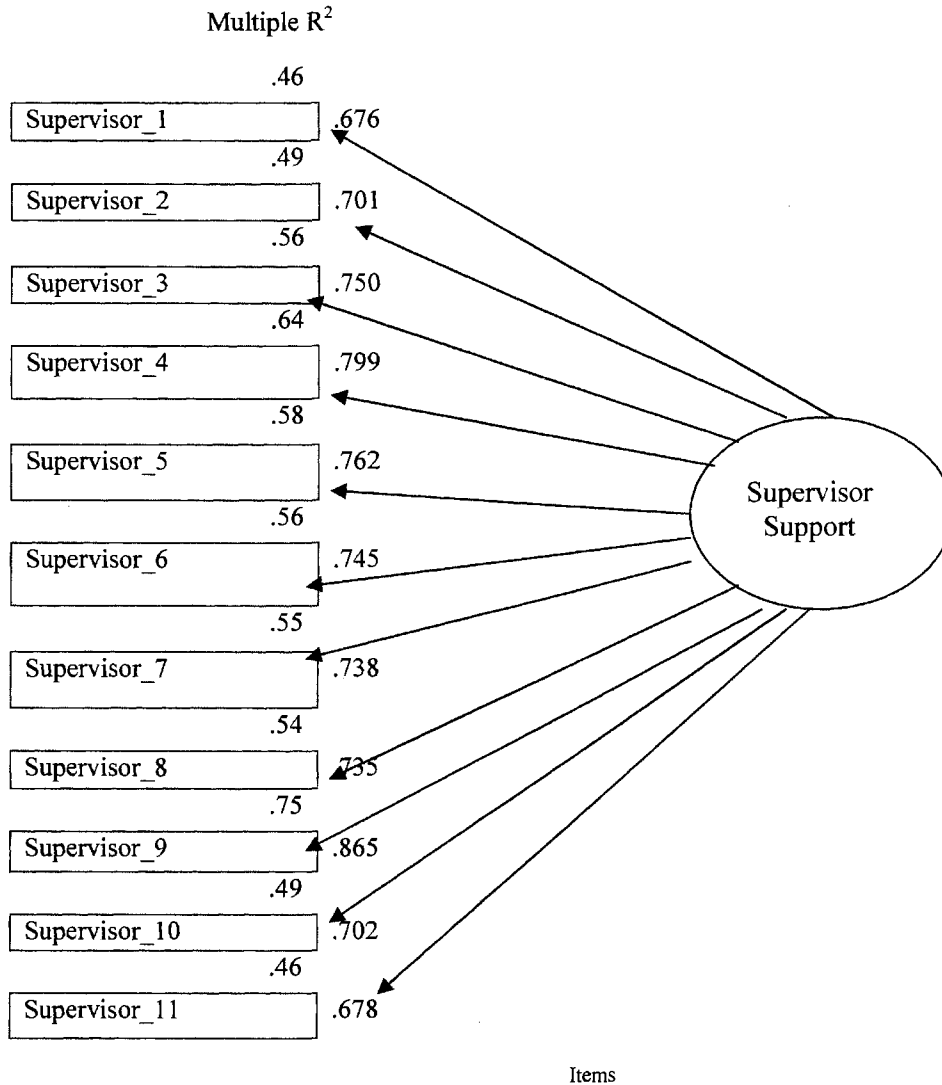
Supervisor support

The 11 items comprising the supervisor support scale reflected a simple structure with a number of strong loadings and all variables loading on one component with an eigenvalue of 5.74. The one-component solution explained a total of 52.21% of the variance. Reliability analysis of the scale items revealed good internal consistency with a Cronbach's alpha coefficient of .91, reflecting what was found by Mennino et al. (2005) using the entire 2002 NCSW sample of wage and salaried employees.

Figure 2 shows the measurement model for the supervisor support scale. The CFA model's fit of the supervisor support construct showed that the measurement model had good fit: $\chi^2(44, N = 972) = 265.97, p < .001$; CFI = .95, RMSEA = .072. The fit statistics values were at the recommended thresholds of .95 but the RMSEA value was above the recommended value of .06 for good fitting models yet still within the range of adequate (Ullman, 2007; Hair et al., 1989). Most of the items had high

loadings on the latent construct, although two of the items had coefficients below the

Figure 2: Confirmatory Factor Analysis of Supervisor Support Items ($n = 972$); $\chi^2(44) = 265.97$, $p < .001$, CFI = .95, RMSEA = .07.



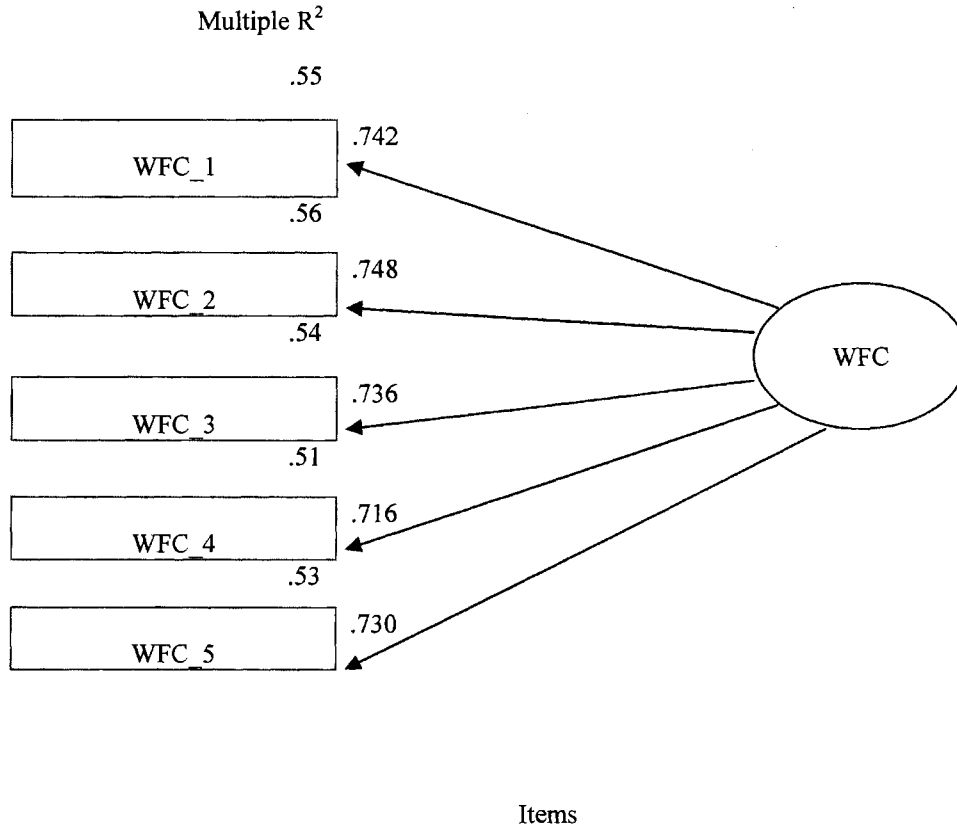
- Supervisor_1 Keeps me informed of thing I need to know to do job well
- Supervisor_2 Expectations of my performance on job are realistic
- Supervisor_3 Supervisor recognizes when I do a good job
- Supervisor_4 Supervisor is supportive when I have a work problem
- Supervisor_5 Supervisor is fair and doesn't show favoritism in responding to personal or family needs
- Supervisor_6 Supervisor accommodates me when I have family or personal business to take care of
- Supervisor_7 Supervisor is understanding when I talk about personal or family issues that affect my work
- Supervisor_8 I feel comfortable bringing up personal or family issues with my supervisor
- Supervisor_9 Supervisor really cares about the effects that work demands have on my personal and family life
- Supervisor_10 Supervisor is very competent in his or her job
- Supervisor_11 I consider my supervisor to be a friend both at work and off the job

Work-Family Conflict

The five items of the Work-Family Conflict scale were entered into the EFA and the one-factor solution revealed the presence of simple structure with the single component showing strong loadings and all five variables loading substantially with an eigenvalue of 3.33. The one factor solution explained 66.53% of the variance. A reliability analysis of the scale items revealed good internal consistency with a Cronbach's alpha coefficient of .88 which was in range with prior reported findings from studies using this dataset (Anderson, Coffey & Byerly, 2005; Behson, 2005 Hill, 2005; Thompspon & Prottas, 2005; Voydanoff, 2005). Cronbach's alpha value for the construct using the second half sample was .92 which was very similar to that found with the first half-sample.

Figure 3 shows the measurement model for the work-family conflict scale. The CFA model's fit of the WFC construct showed that the measurement model had good fit: $\chi^2(5, N = 972) = 12.62, p < .05$; CFI = .99, RMSEA = .02. The fit statistics values were above the recommended thresholds of .95 and the RMSEA value was below the recommended value of .06 indicating good fit (Ullman, 2007). All of the items had high loadings on the latent construct with coefficients above the threshold of .71 indicating good factorial validity.

Figure 3: Confirmatory Factor Analysis of the Work-family Conflict (WFC) items; ($n = 972$); $\chi^2(5) = 12.62, p < .02, CFI = .99, RMSEA = .02$.



WFC_1 How often have you not had enough time for your family or other important people because of your job?

WFC_2 How often have you not had the energy to do the things with your family or other important people in your life because of your job (Reversed)?

WFC_3 How often have you had more energy to do things with your family or other important people in your life because of your job (Reversed)?

WFC_4 How often has work kept you from doing as good a job at home as you could?

WFC_5 How often have you not been in as good a mood as you would like to be at home because of your job?

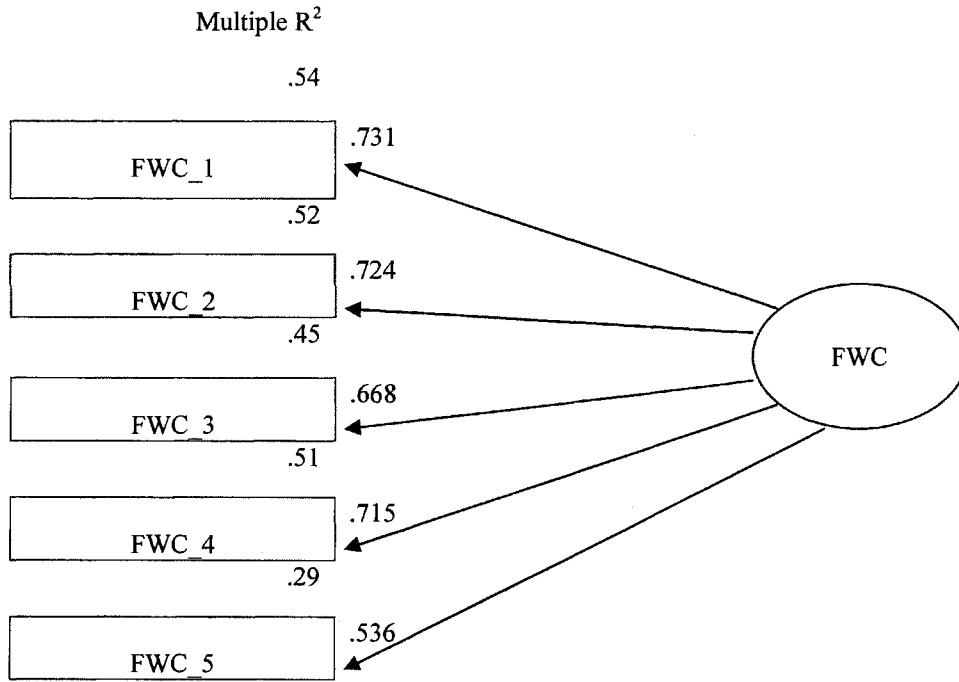
Family-Work Conflict

The EFA of the five FWC items revealed the presence of a simple structure with the majority of items loading somewhat strongly on the one component and an

eigenvalue of 2.88. The single factor solution proposed by the EFA accounted for 57.63% of the variance. Reliability analysis of the scale items showed good internal consistency with a Cronbach's alpha of .82, within the range of reported reliabilities for this scale within other published studies of this dataset (.77 - .87 see Hill, 2005; Thompson & Prottas, 2005; Voydanoff, 2005).

Figure 4 shows the measurement model for the family-work conflict scale. The CFA model's fit of the FWC construct showed that the measurement model had a nearly identical fit to that of WFC: $\chi^2(5, N = 972) = 12.62, p < .05$; CFI = .99, RMSEA = .04. The fit statistics values were above the recommended thresholds of .95 and the RMSEA value was below the recommended value of .06 indicating good fit (Ullman, 2007; Byrne, 2001). Three of the items had high loadings on the latent construct with coefficients above the threshold of .71 indicative of excellent factorial validity.

Figure 4: Confirmatory Factor Analysis of the Family-work Conflict (FWC) items; ($n = 972$); $\chi^2(5) = 12.62, p < .05$, CFI = .99, RMSEA = .04.



Items

FWC_1 How often have you not been in as good a mood as you would like to be at work because of your personal or family life?

FWC_2 How often has your family or personal life kept you from doing as good a job at work as you could?

FWC_3 In the past three months, how often has your family or personal life drained you of the energy you needed to do your job?

FWC_4 How often has your family or personal life kept you from concentrating on your job?

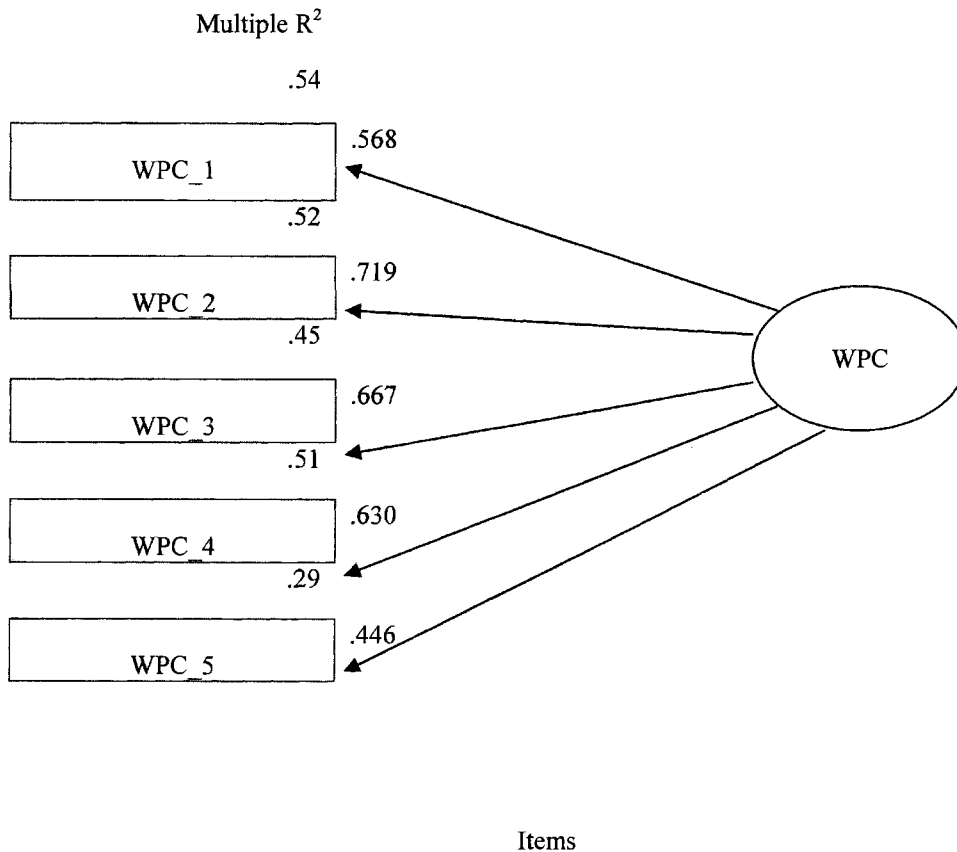
FWC_5 How often have you not had enough time for your job because of your family?

Workplace Culture

The EFA of the five WPC items showed the presence of a simple structure with the majority of items loading strongly on one component with an eigenvalue of 2.34. The one component solution explained a total of 46.73% of the variance. Reliability analysis of the scale items revealed good internal consistency with a Cronbach's alpha of .72, replicating the findings of Thompson and Prottas (2005).

Figure 5 shows the measurement model for the workplace conflict scale. The CFA model's fit of the WPC construct showed that the measurement model had good fit: $\chi^2 (5, N = 972) = 13.23, p < .05$; CFI = .99, RMSEA = .04. The fit statistics values were above the recommended thresholds of .95 and the RMSEA value was below the recommended value of .06 indicating good fit (Ullman, 2007). All of the items loaded significantly on the latent construct with coefficients above the threshold of .71 indicative of excellent factorial validity.

Figure 5: Confirmatory Factor Analysis of the Workplace Culture (WPC) items; ($n = 972$); $\chi^2 (5) = 13.23, p < .05$, CFI = .99, RMSEA = .04.



WPC_1 There is an unwritten rule at my place of employment that you can't take care of family on company time.

WPC_2 At my place of employment, employees who put their family or personal needs ahead of their jobs are not looked on favorably.

WPC_3 If you have a problem managing your work and family responsibilities, the attitude at my place of employment is: "You made your bed now lie in it!"

WPC_4 At my place of employment, employees have to choose between advancing in their jobs or devoting attention to their family or personal lives.

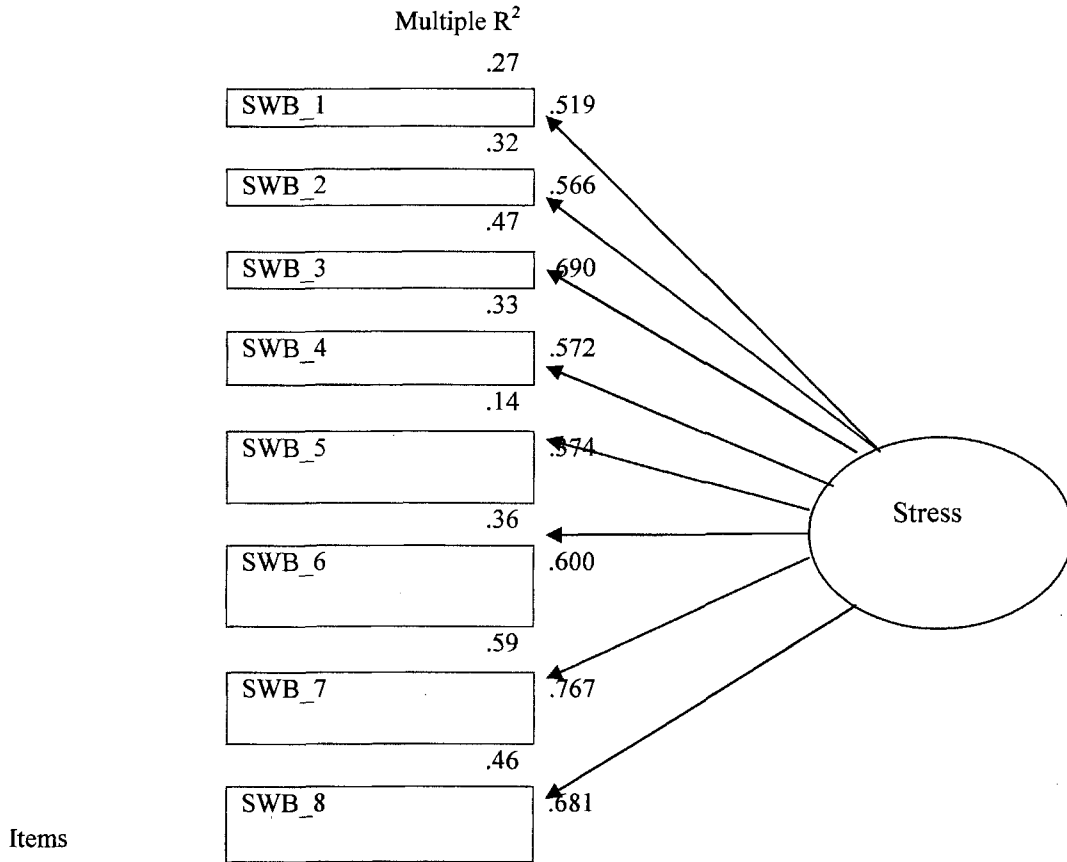
WPC_5 Managers in my organization behave honestly and ethically when dealing with employees and clients or customers (Reversed).

Stress

The EFA of the eight stress scale items showed the presence of a simple structure with all factors loading strongly onto two components. A one-factor solution was forced in order to replicate what has been used and reported in the literature. The single factor solution had strong loadings with an eigenvalue of 3.37. The one component solution explained approximately 42.18% of the variance, slightly less than that explained by the 2 factor solution. Reliability analysis of the scale showed good internal consistency with a Cronbach's alpha of .80, a smaller alpha than has been reported in the literature (.83, Thompson & Prottas, 2005).

Figure 6 shows the measurement model for the stress scale. The CFA model's fit of the stress construct showed that the measurement model had adequate fit: $\chi^2 (8, N = 972) = 131.36, p < .05$; CFI = .95, RMSEA = .08. The fit statistics values were above the recommended thresholds of .95 and the RMSEA value was slightly above the recommended value of .06 for good fitting models but within the acceptable cutoff range $p < .10$ (Kline, 2005). All of the items loaded moderately high on the latent construct with moderately high coefficients (.50 - .70 range) indicating strong factorial validity.

Figure 6: Confirmatory Factor Analysis of Stress Items ($n = 972$); $\chi^2(20) = 131.36, p < .001, CFI = .95, RMSEA = .08$.



SWB_1 In the past month, how often have you been bothered by minor health problems such as headaches, insomnia, or stomach upsets?

SWB_2 In the past month, how often have you had trouble sleeping to the point that it affected your performance on and off the job?

SWB_3 In the past month, how often have you felt nervous or stressed?

SWB_4 In the past month, how often have you felt that you were unable to control the important things in your life?

SWB_5 In the past month, how often have you felt confident about your ability to handle personal problems (Reversed)?

SWB_6 In the past month, how often have you felt that things were going your way (Reversed)?

SWB_7 In the past month, how often have you felt that difficulties were piling up so high that you couldn't overcome them?

SWB_8 Index of two items: (1) During the past month, have you been bothered by feeling down, depressed or hopeless?, (2) During the past month, have you been bothered by little interest or pleasure in doing things?

Family and Life Satisfaction

The EFA of the family and life satisfaction scale items revealed the presence of a simple structure. All three items loaded substantially on one component with an eigenvalue of 1.89. The one component solution explained a total of 62.90% of the variance. Reliability analysis showed adequate internal consistency of the items with a Cronbach's alpha coefficient of .70, which was slightly lower than the alpha of .73 for the entire sample as reported by Thompson and Prottas (2005).

Work Satisfaction

The EFA of the work satisfaction items revealed the presence of a simple structure. All three items loaded adequately on one component with an eigenvalue of 1.79. The one component solution explained a total of 59.49% of the variance. Interestingly the reliability analysis revealed only adequate internal consistency of the items. Cronbach's alpha coefficient was .66, which was considerably lower than the alpha of .73 reported for the entire sample by Thompson and Prottas (2005).

Reliability analyses were conducted on the Formal Benefits Index ($\alpha = .72$) and the Flexible Work Arrangements Index ($\alpha = .63$) to assess how the items performed. An inspection of the inter-item correlations revealed acceptable correlations above the recommended cutoff of .200.

The results of the EFA and CFA analyses suggest that the constructs used in the analyses are valid and reliable for the sub-sample of parents as they reflect similar structures proposed by earlier published work using this dataset.

Descriptive Results for Major Study Variables

Formal Benefits

Of the total sample of parents who were wage and salaried employees ($N = 1902$), 14.3 % responded that they had no formal benefits at their place of employment. Thirty-six percent of parents surveyed had two types of formal benefits and a further 21.8% had three types of formal benefits. Approximately 10% of parents had four types of formal benefits, 6.1% had five types of benefits, 4.1% had six types of benefits and last 2.2% of parents reported they had seven types of benefits. The mean of the formal policy index for parents was 2.52 ($SD = 1.65$) with a range of 0 - 7.

Health coverage for family members was the most widely available formal benefit offered, with 81.3% of parents responding “yes” when asked if their organization offered health coverage for family members. Having children covered under one’s own health plan was the next most common formal benefit offered with 74.6% of the sample responding this was available to them through their employer. The next most common type of formal benefit available to parents was having an employer sponsored tax-free child care account (35.2%), followed by organizational programs that assist employees to find eldercare (22.6%) and childcare (18.1%). Twelve percent of the sample reported their organization provided financial assistance for child care, a further 11% reported organization-sponsored child care center as a formal benefit offered by their employer.

Flexible Work Arrangements

The types of flexible work arrangements available among employees were limited. Approximately one fifth (20.4%) of the sample had no flexible options, while another 19.6% had one option, 17.5% had two and another 16.4% had three FWA options. Twelve percent of the sample of parents reported they had four FWA options, 9% had five and another 4% had six types of flexible work arrangement options. Last, 0.9% of the sample had seven types of FWA options. The mean FWA reported by parents in the sample was 2.29 ($SD = 1.82$) with a range of 0 - 7.

Having the ability to choose one's own start and quit times was the most common flexible work arrangement reported by employees in the sample (42%). The next most common arrangement was working a compressed workweek (41.5%). Switching from full-time to part-time was the next most common kind of flexible work arrangement (37.5%). Approximately 29% reported they had the option of taking care of a sick child without loss of pay and only 23.7% of employees reported they could change their starting or quitting times daily.

Use of Flexibility

Interestingly, 41% of the sample reported they did not have (13.8%) or did not use flexible work arrangements (26.8%). Of those who had flexibility ($N = 1,603$) the average for use of flexibility on a 5 point scale among employees in the sample was very low ($M = 1.97$, $SD = 1.29$). Of those 1,603 parents who reported that they had flexible work options, 23.2% reported they used them "a little," 20.4% reported they

used them “some” and a further 16% reported they used flexible work arrangements “a lot.”

Coworker Support

Perceived level of coworker support among employees was fairly high. Thirty-eight percent of employees surveyed indicated coworker support was 12 on a scale of 12. The mean score for the coworker support scale was 10.29 ($SD = 1.89$) with a range of 3 - 12. Interestingly, 65% of the sample reported they *strongly agreed* that they had the support they needed from coworkers to do a good job, but only 42% strongly agreed that they had the support from coworkers that helped them manage their family life.

Supervisor Support

The mean supervisor support score among parents in the survey was 33.32 ($SD = 6.31$) with a range of 10 - 55, indicating that most employees felt they had a fair degree of supervisor support. For example, in response to the statement “Supervisor is supportive when I have a work problem,” 65.5% of parents responded *strongly agree*. Similarly, when asked whether “Supervisor expectations of my performance are realistic,” 68% of parents responded *strongly agree*. Ratings of perceived support from supervisors regarding the need to take care of family related issues were slightly less positive than ratings of supervisor support for work related issues. For example, in response to the statement “Supervisor is understanding when I talk about family/personal issues,” only 49% *strongly agreed*. Even fewer parents (44%)

strongly agreed with the statement “My supervisor cares about how work affects family/personal life.”

Social Support

Perceived level of social support reported by parents was fairly positive with 21% of the sample reporting eight out of eight on the scale. The mean for the social support scale was high ($M = 5.74$, $SD = 1.95$) with a range of 1 - 8. Perceived social support for personal problems and child care problems had similar levels of agreement. For example, 65% of respondents *strongly agreed* that they felt they could go to friends and family if confronted with a personal problem. Sixty-two percent of those with children under 13 ($N = 806$), *strongly agreed* that family and friends could be counted on to provide childcare.

Workplace Culture

The organizational culture in which employees worked was somewhat positive ($M = 15.07$, $SD = 3.59$) with a range of 5 - 20. Twelve percent of employees in the sample rated their organizational work culture 20 out of 20 indicating a very family-friendly workplace. Another 12% indicated that the work culture of their organization was not family-friendly, seen through their low scores (below 10) on the workplace culture scale. Responses on the individual scale items show that approximately 30% of employees reported work cultures that were decidedly *unfriendly*. For example, when asked to rate their level of agreement with the statement “Employees in this organization must choose between advancing at work or family,” 38% of employees responded they *strongly or somewhat agreed* with the statement. Slightly fewer

employees (35%) *strongly or somewhat agreed* with the statement “Employees who put families first are not looked on favorably.”

Work-Family Conflict

Work-family conflict (WFC) among employees in the sample was moderate, ($M = 12.64$, $SD = 4.57$) with a range of 5 - 25. Overall, most respondents indicated that they *rarely* or *never* felt work conflict with family life. Yet, over one-third of employees responded just the opposite. For example, when asked to rate whether they felt that there was “not enough time for family because of work,” 28.3% responded *sometimes*, 13.6% responded *often* and another 6% responded *very often*.

Family-Work Conflict

Family-work conflict (FWC) was also moderate ($M = 10.57$, $SD = 3.62$) with a range of 5 - 24. Sixty-three percent of employees had scores under 11.00 on the FWC scale indicating low levels of FWC. In contrast, approximately one fourth of the sample of employees had moderate to high levels of FWC. An examination of responses to some of the FWC scales reflects this view. For example, when asked “Have you ever not been in a good mood at work because of family?,” approximately 36% of employees responded *sometimes*, *often*, or *very often*. Similarly, when asked “How often has family or your personal life drained you of energy needed at work?,” 32% responded *sometimes*, *often* or *very often*.

Frequency of Family-Related Work Disruptions (FFRWD)

The average frequency of family-related work disruptions over the past three months for employees was low ($M = 3.36$ times, $SD = 7.70$) with a range of 0 - 100.

Forty-two percent of employees surveyed indicated they had had no FRWD in past three months, 12% indicated they had had one disruption, another 12% indicated they had 2 disruptions, 9% indicated 4 disruptions and another 9% indicated between 4 and 5 FRWD. Thirteen percent of the sample ($N = 245$) had between 7 and 100 FRWD within the past three months.

Family and Life Satisfaction

The scores on the family and life satisfaction scale were high, reflecting high levels of satisfaction among employees ($M = 3.17$, $SD = .66$) with a range of 1 - 4. Of the 76.5% of employees who were in a relationship, 64% responded they were *very satisfied* to *extremely satisfied* with their marriage/relationship. Sixty-four percent of employees responded they were *very satisfied* or *extremely satisfied* when asked to rate their satisfaction about their family life. Fifty-percent of employed respondents indicated they were *very satisfied* with their life and a further 39% indicated they were *extremely satisfied*.

Work Satisfaction

Employees indicated high levels of work satisfaction ($M = 10.01$, $SD = 1.82$) with a range of 3 - 12, seen through the scale of the three items that assessed overall satisfaction with work, loyalty to employer, and intention to quit. Fifty percent of employees indicated they were *extremely satisfied* when asked "How satisfied are you with your job?" and a further 40% indicated they were *very satisfied*. Although loyalty to employer was very high, slightly fewer parents indicated an extremely high degree of loyalty they felt toward their employer. For example, when asked "How

loyal do you feel towards your employer?”, while 41% of employees responded *very loyal*, only 36% indicated they were *extremely loyal*. When asked “How likely are you to look for a new job within the next year”, 66% responded they were *not likely at all* to try to find a new job, while only 14.9% indicated they were *very likely*.

Stress

The standardized stress scale scores suggest that overall, employees reported low to moderate levels of stress ($M = -.0018$, $SD = .99$; range $-1.40 - 3.47$). Responses to individual items reflect this in their slightly left-skewed distributions. For example, when asked “How often do you have trouble sleeping?”, 53% of employees responded *never* and another 19.3% responded *almost never*. In contrast, approximately 15% of employees responded *very often* or *always* when asked if they were “bothered by minor health problems” or “have trouble sleeping.”

Analysis of Variances and Independent Samples T Tests

Research questions 1 and 2 were answered through the use of one-way analyses of variance (for continuous variables), or chi-square (for dichotomous variables). Effect sizes were calculated: η^2 and Cohen’s d for pairwise comparisons and odds ratios for chi-square tests for dichotomous variables.

Research Question 1: Differences between Employees with Different Types of Exceptional Care Responsibilities

All tests were run on the sample of employees who responded that they acted as a parent to a child under 18 years of age and provided care for (a) a child with a disability or chronic condition ($n = 99$), and or (b) an adult with a disability or chronic

condition ($n = 40$) and or (c) care for relative 65 years or older with a disability or chronic condition ($n = 57$) using the additional criteria that the care provided was done on a regular basis and involved the respondent having to decrease time at work to provide the care.

Table 3 shows the scale means and standard deviations for each of the three exceptional care responsibility groups (ECR: child, ECR: adult, ECR: elder) on continuous variables of interest in the study. The omnibus tests for the formal benefits, FWA, co-worker support, social support, supervisor support, workplace culture, use of flexibility, and number of hours worked were not significant indicating that there were no significant differences between the means of the three groups on these variables.

The omnibus tests of the family and life satisfaction and the standardized stress scales were significant: family and life satisfaction, $F_{2,191} = 4.18, p < .05, \eta^2 = .04$; stress, $F_{BF\ 2, 193} = 3.89, p < .05, \eta^2 = .01$; Post hoc tests (Bonferroni and Dunnett's C) showed that the means of those respondents who had a child with a disability (ECR: child) were different than those who provided care for an elderly relative (ECR: elder) with small effect sizes. Having a child with a disability resulted in lower mean scores on family and life satisfaction and in higher stress levels than did caring for an elderly adult.

For the comparison between groups on the dichotomous variables (loss of job, loss of benefits because of family-related work disruptions) a χ^2 test of independence

was performed to determine if the groups were different on loss of job or loss of benefits. There was a non-significant trend level relationship between loss of benefits and type of exceptional care responsibility ($\chi^2 = 5.58$, $df = 2$, $p < .10$). Employees who had exceptional care responsibility for a child with a disability were 2.13 times more likely to report they had lost benefits than employees with exceptional care responsibility for an adult over 18 years or an elder. There was no significant relationship between type of ECR and whether one had lost a job due to family-related work disruptions.

Table 3. Bivariate Comparisons of Major Study Variables by Type of Exceptional Care Responsibility.

Source	ECR: Child n = 99		ECR: Adult n = 40		ECR: Elder n = 57		Statistical Comparison with One-Way ANOVA					
	Mean (SD)		Mean (SD)		Mean (SD)		ECR: Child - ECR: Adult	ECR: Child - ECR: Elder	ECR: Child - ECR: Elder	ECR: Adult - ECR: Elder		
	Mean (SD)		Mean (SD)		Mean (SD)		Mean Diff.	Cohen d	Mean Diff.	Cohen d	Mean Diff.	Cohen d
Formal benefits	2.23 (1.81)		2.16 (1.80)		2.28 (1.44)		NS	--	NS	--	NS	--
FWA	2.20 (1.81)		2.49 (1.95)		2.12 (1.81)		NS	--	NS	--	NS	--
Co-worker support	10.32 (2.00)		10.71 (1.76)		10.14 (2.09)		NS	--	NS	--	NS	--
Supervisor support	35.72 (6.98)		37.81 (5.69)		37.08 (6.73)		NS	--	NS	--	NS	--
Social Support ^a	3.89 (1.39)		4.09 (1.06)		3.79 (0.82)		NS	--	NS	--	NS	--
WPC	14.21 (3.85)		14.67 (4.36)		15.15 (3.65)		NS	--	NS	--	NS	--
Uses flexibility	2.41 (1.17)		2.67 (1.02)		2.34 (1.12)		NS	--	NS	--	NS	--
WFC ^a	14.45 (5.01)		14.06 (4.26)		14.20 (4.13)		NS	--	NS	--	NS	--
FWC ^a	12.75 (4.00)		12.13 (3.69)		11.82 (3.17)		NS	--	NS	--	NS	--
FFRWD	4.60 (7.83)		3.92 (4.89)		2.56 (3.95)		NS	--	NS	--	NS	--
Work hours	37.78 (8.32)		38.66 (7.38)		37.11 (8.65)		NS	--	NS	--	NS	--
FL Sat	2.81 (0.74)		3.02 (0.65)		3.14 (0.66)		NS	--	-0.32*	-0.47	NS	--
Work Sat	9.54 (2.70)		10.08 (1.71)		9.98 (1.95)		NS	--	NS	--	NS	--
Stress ^a	0.70 (1.07)		0.38 (1.17)		0.25 (0.79)		NS	--	-0.45*	0.48	NS	--

Note. *p < .05, **p < .01, ***p < .001, † p < .10 ^a Assumptions of equal variance not met, hence pairwise comparisons were made using Dunnett's C procedure.

ECR = Exceptional care responsibilities.

FFRWD = Frequency of family-related work disruptions.

Multiple Versus Single Types of Exceptional Care Responsibilities

Differences between employees in the sample with multiple (two or three types of dependents with disabilities) exceptional care responsibilities versus single exceptional care responsibilities (care of one dependent with a disability) was explored to determine if significant differences existed between number of type of exceptional care responsibilities and the variables of interest.

Table 4 shows the scale means, standard deviations, mean differences and effect sizes for the three groups (ECR: 1 type, ECR: 2 types, ECR: 3 types) on work-life supports, barriers and outcomes. The omnibus tests of means for the formal benefits, coworker support, social support, formal benefits, FWA, use of flexible arrangements, frequency of family-related work disruptions, work-family conflict, family-work conflict, hours worked, stress, family-life satisfaction and work satisfaction were not significant.

The omnibus tests of the means for supervisor support and workplace culture scales were significant (Browne-Forsythe or one-way analysis of variance as indicated): supervisor support $F_{2, 165} = 5.86, p < .05, \eta^2 = .06$; workplace culture $F_{BF 2, 184} = 5.01, p < .05, \eta^2 = .05$. The mean for supervisor support was higher for employees caring for one type of dependent than the mean for parents caring for three types of dependents and the mean for employees caring for two types of dependents was higher than the mean for employees caring for three types of dependents. For

workplace culture, employees with one type of dependent had a higher mean than did the group with three types dependents indicating a more positive workplace culture.

Table 4. Bivariate Comparisons of Major Study Variables by Whether Respondent has Multiple Versus Single Exceptional Care Responsibilities (ECR)

Source	ECR: 1	ECR: 2	ECR:	Statistical Comparison with One-Way ANOVA					
	Type ECR	Types ECR	3 Types ECR	ECR: 1 - ECR: 2		ECR: 1 - ECR: 3		ECR: 2 - ECR: 3	
	n = 162	n = 28	n = 6	Mean	Cohen's	Mean	Cohen's	Mean	Cohen's
	(SD)	(SD)	(SD)	Diff.	d	Diff.	d	Diff.	d
Formal benefits	2.26 (1.63)	1.96 (2.17)	2.66 (1.11)	NS	--	NS	--	NS	--
FWA	2.26 (1.63)	1.96 (2.17)	2.66 (1.11)	NS	--	NS	--	NS	--
Co-worker support	10.38 (1.97)	10.46 (1.94)	9.10 (2.27)	NS	--	--	--	NS	--
Supervisor support	36.93 (6.58)	36.35 (5.49)	27.57 (8.80)	NS	--	9.36**	1.20	8.77*	1.19
Social support	3.85 (1.13)	4.09 (1.49)	4.52 (0.85)	NS	--	NS	--	NS	--
WPC ^a	14.97 (3.73)	13.22 (4.50)	11.17 (2.09)	NS	--	3.81*	1.26	NS	--
Uses flexibility	2.42 (1.09)	2.75 (1.25)	1.60 (0.86)	NS	--	NS	--	NS	--
WFC ^a	14.36 (4.35)	13.89 (6.22)	14.52 (2.73)	NS	--	NS	--	NS	--
FWC ^a	12.20 (3.26)	13.13 (5.92)	12.81 (2.65)	NS	--	NS	--	NS	--
FFRWD	3.73 (6.56)	3.45 (3.57)	9.22 (9.77)	NS	--	NS	--	NS	--
Work hours	37.58 (8.11)	35.00 (9.58)	37.97 (3.79)	NS	--	NS	--	NS	--
FL Sat	2.95 (0.72)	2.96 (0.71)	2.81 (0.68)	NS	--	NS	--	NS	--
Work Sat	1.97 (0.15)	9.97 (1.96)	8.51 (2.06)	NS	--	NS	--	NS	--
Stress	0.12 (1.03)	0.65 (1.18)	0.54 (0.95)	NS	--	NS	--	NS	--

Note. *p < .05, **p < .01, ***p < .001, [†]p < .10 ^a Assumption of equal variance not met, hence pairwise comparisons were made using Dunnett's C procedure.

Post hoc tests showed that the mean for the supervisor support scale was higher for those respondents who had one type of exceptional care responsibility versus the mean for those respondents who had three types of exceptional care responsibilities, with a very large effect size. The mean for supervisor support was also higher for employees with exceptional care responsibilities for two types of exceptional care responsibilities compared to employees with exceptional care responsibilities for three dependents with a very large effect size. For the workplace culture scale, the mean for employees with one type of exceptional care was higher than the mean for employees with three types of exceptional care responsibilities, with a very large effect size.

Despite these significant differences, a decision was made to keep employees with multiple exceptional care responsibilities in the analyses as the number of employees who indicated they had these multiple care responsibilities was extremely small ($n = 6$) given the overall sample of parents who had exceptional care responsibilities ($n = 196$).

Question 2: Comparison of Typical Care Responsibilities to Exceptional Care Responsibilities on Supports, Barriers, and Work-life Outcomes

Table 5 shows the means, standard deviations, mean differences, and effect sizes of the various demographic, work-life support, and work-life barriers and work-life outcomes for parents with typical and exceptional care responsibilities. There were no statistically significant differences between employees with typical or exceptional care responsibilities for the following variables: gender, age, ethnicity, education, marital status, number of children < 6, spouse/partner work hours,

responsibility for child care, respondent work hours, coworker support, supervisor support, flexible work arrangement, and frequency of family-related work disruptions.

Table 5. Bivariate Comparisons of Major Study Variables between Employees with Typical Care Responsibility (TCR) Compared to Employees with Exceptional Care Responsibility (ECR)

	TCR	ECR	Statistical Comparison with	
	N = 1701	N = 196	Independent Samples T-Test	
	Mean (SD)	Mean (SD)	Mean Diff.	Cohen's <i>d</i>
Age	43.28 (10.96)	43.48 (10.28)	NS	--
Family income	\$66,063.05 (\$52,760.79)	\$56,109.34 (41,927.68)	9,953.71**	0.12
Number of children<18	1.23 (1.30)	1.49 (1.99)	.26 ^T	-0.11
Number of children<6	0.36 (0.68)	0.36 (0.69)	NS	--
Spouse/partner working hours	33.37 (21.54)	32.49 (23.76)	NS	--
Hours worked	37.75 (8.51)	37.27 (8.21)	NS	--
Coworker support	10.29 (1.89)	10.35 (1.98)	NS	--
Supervisor support	36.71 (7.03)	36.52 (6.70)	NS	--
Social support	4.29 (1.19)	3.90 (1.18)	.38***	0.20
Flexible work arrangements	2.29 (1.82)	2.24 (1.81)	NS	--
Formal benefits	2.59 (1.67)	2.23 (1.70)	.35**	0.13
Workplace culture	15.13 (3.56)	14.59 (3.90)	.27 ^T	0.09
Uses flexibility	2.28 (1.09)	2.44 (1.12)	-.16 ^T	-0.09
Family related work disruptions	3.31 (3.84)	3.87 (6.40)	NS	--
Work-family conflict	12.43 (4.51)	14.30 (4.60)	-1.87***	-0.25
Family-work conflict	10.34 (3.51)	12.354 (3.72)	-2.02***	-0.35
Family and life satisfaction	3.19 (0.65)	2.95(0.71)	-0.56***	0.23
Work satisfaction	10.04 (1.80)	9.78 (1.98)	.26*	0.09
Stress	-0.060 (0.97)	0.5035 (1.04)	-.56***	0.35

Note. *p < .05 **p < .01 ***p < .001 ^T p < .10

Family Income

Employees with typical care responsibilities reported substantially higher incomes ($M = \$66,063.05$, $SD = \$52,760.79$) than employees with exceptional care responsibilities ($M = \$56,109.34$, $SD = \$41,927.68$; $t(1807) = 2.52$, $p < .05$). The magnitude of the difference in the means was small (Cohen's $d = .12$). A post hoc test to determine if there was an association between type of care responsibility and

employment type (hourly vs. wage) indicated that there was a difference at the level of trend ($p < .10$) that employees who were in the exceptional group were more likely to be employed in jobs that paid hourly wages.

Number of Children Under 18

The mean number of children under 18 for employees with typical care responsibilities was slightly lower ($M = 1.23$, $SD = 1.30$) than the mean number of children under 18 for employees with exceptional care responsibilities ($M = 1.49$, $SD = 1.99$; $t(214.63) = -1.78$, $p < .10$). A non-significant trend level difference was evident.

Social Support

Employees with typical care responsibilities reported higher levels of social support ($M = 4.29$, $SD = 1.19$) than employees with exceptional care responsibilities ($M = 3.90$, $SD = 1.18$); $t(1887) = 4.30$, $p < .001$). The difference in means was small (Cohen's $d = .20$).

Supervisor Support

Both employees with typical care responsibilities and exceptional care responsibilities reported similarly high levels of supervisor support. Employees with typical care responsibilities reported slightly higher levels of supervisor support than employees with exceptional care responsibilities ($M = 36.71$, $SD = 7.03$ for typical care responsibilities; $M = 36.52$, $SD = 6.70$ for exceptional care responsibilities) but these differences were not statistically significant.

Formal Benefits

Employees with typical care responsibilities reported on average having fewer formal benefits than did employees with exceptional care responsibilities ($M = 2.59$, $SD = 1.67$ for typical care responsibilities; $M = 2.23$, $SD = 1.70$ for exceptional care responsibilities; $t(1833) = 2.82$, $p < .01$). The magnitude of the differences in the means was small (Cohen's $d = .13$).

Uses Flexibility

The ability to use flexibility was higher for employees with exceptional care responsibilities ($M = 2.44$, $SD = 1.12$) as compared to employees with typical care responsibilities ($M = 1.28$, $SD = 1.09$; $t(1628) = -1.84$, $p < .10$). It should be noted that on average both groups reported low levels of ability to use flexibility at work. The difference between the two means approached significance. The magnitude of the difference in the means was very small (Cohen's $d = .09$).

Work-Family conflict

Employees with typical care responsibilities reported lower levels of work-family conflict ($M = 12.43$, $SD = 4.51$) than did employees with exceptional care responsibilities ($M = 14.30$, $SD = 4.60$); $t(1881) = -5.45$, $p < .001$. The magnitude of the differences between the means was small (Cohen's $d = 0.25$).

Family-Work Conflict

Family-work conflict was also lower for employees with typical care responsibilities ($M = 10.34$, $SD = 3.51$) than for employees with exceptional care

responsibilities ($M = 12.35.04$, $SD = 3.72$); $t(1877) = -7.56$, $p < .001$). The magnitude of the differences between the means was small to medium (Cohen's $d = -.35$).

Workplace Culture

The mean for the workplace culture scale for employees with typical care responsibilities was higher ($M = 15.13$, $SD = 3.56$) than the mean of employees with exceptional care responsibilities ($M = 14.59$, $SD = 3.90$) indicating that employees with typical care responsibilities felt their workplace culture was more positive than employees with exceptional care responsibilities; $t(223.20) = 1.18$, $p < .10$. There was a non-significant trend-level relationship in the difference between the means. The size of the effect was small (Cohen's $d = .09$).

Stress

The standardized mean of employees with typical care responsibilities was slightly lower ($M = -0.060$, $SD = 0.97$) than the mean of employees with exceptional care responsibilities on the standardized stress and well-being scale ($M = 0.5035$, $SD = 1.04$); $t(1864) = -7.63$, $p < .001$). The differences between the means was statistically significant and the magnitude of the difference between the means of the two groups was small to medium (Cohen's $d = .35$).

Family and Life Satisfaction

Employees with typical care responsibilities reported higher levels of family and life satisfaction ($M = 3.19$, $SD = 0.65$) than did employees with exceptional care

responsibilities ($M = 2.95$, $SD = 0.71$; $t(1884) = 4.96$, $p < .001$). The magnitude of the differences between the two means was small (Cohen's $d = .23$).

Work Satisfaction

The mean of employees with typical care responsibilities on the work satisfaction scale was a bit higher ($M = 10.04$, $SD = 1.80$) than the mean of employees with exceptional care responsibilities ($M = 9.78$, $SD = 1.98$, $t(1885) = 1.92$, $p < .05$). The difference in the means of the two groups was statistically significant. The magnitude of the difference in means was very small (Cohen's $d = .09$).

Hierarchical Multiple Regression Analyses

Bivariate Correlations

Before proceeding to the formal analysis of the hierarchical regression models, the correlation matrix of the major study variables is presented and interpreted to provide a contextual understanding of the interrelationships of the key variables. Table 6 below depicts the correlations for the study variables for the complete subsample of parents ($N = 1,902$). The variable for respondent age had significant positive correlations ($p < .001$) with other demographic variables such as income, workplace culture, family and life satisfaction, and work satisfaction. Age had significant negative correlations ($p < .001$) with number of children under 18, number of children under 6, social support, flexible work arrangements, use of flexibility, work-family conflict, family-work conflict, frequency of family related work disruptions, and stress.

The income variable was significantly and positively correlated ($p < .01$) with work hours, organization size, supervisor support, flexible work arrangements, workplace culture, use of flexibility, family and life satisfaction and work satisfaction. Income was significantly ($p < .001$) and negatively related to number of children under 18, number of children under six, and stress.

The number of children under the age of 18 variable also had a number of significant positive correlations with most of the study variables. Number of children under 18 had significant positive correlations with number of children under six, social support, flexible work arrangements, use of flexibility, work-family conflict, family-work conflict, frequency of family related work disruptions and stress ($p < .01$). Not surprisingly, number of children under the age of 18 was significant and negatively related to family and life satisfaction ($p < .001$).

The number of children under the age of six variable had a number of significant positive correlations with most of the study variables. Number of children under 6 had significant positive correlations with social support, flexible work arrangements, use of flexibility, work-family conflict, family-work conflict, frequency of family related work disruptions, stress, family and life satisfaction ($p < .001$) and work-family conflict ($p < .01$). Number of children under six was negatively correlated to work satisfaction ($p < .001$).

Work hours had a number of significant, but small positive correlations ($p < .001$) with other variables associated with the work domain: organization size, formal benefits, and work-family conflict. Work hours also had a number of small and

negative associations with coworker support, workplace culture, use of flexible work arrangements, and stress ($p < .01$).

Table 6. Bivariate Correlations of Major Study Variables (N = 1902)

Variables	1	2	3	4	5	6	7	8	9	10									
1 Age	1	.180***	-.409***	-.472***	-.068**	.019	.025	-.010	-.372***	.040									
2 Income		1	-.046*	-.038	.091***	.166***	.028	-.033	.069**	.238***									
3 Kids <18			1	.452***	.033	-.030	.030	.020	.262***	-.004									
4 Kids <6				1	.002	.012	.017	.018	.274***	.027									
5 WRKHS					1	.127***	-.064**	-.057*	-.012	.169***									
6 ORGSIZ						1	-.150***	-.179***	-.016	.430***									
7 Cosup							1	.546***	.137***	.015									
8 Supervisor								1	.150***	.040									
9 Social Sup									1	.093***									
10 Formal										1									
11 FWA											1								
12 WPC												1							
13 Iflex													1						
14 WFC														1					
15 FWC															1				
16 FFRWD																1			
17 Stress																	1		
18 MFL Sat																		1	
19 Work Sat																			1
M		43.25	64,824.04	1.26	0.36	37.68	5.69	10.29	36.15	4.25	2.55								
SD		10.92	51,824.06	1.39	0.67	8.47	3.29	1.90	7.43	1.20	1.68								

Note. * p < .05, ** p < .01, *** p < .001

Table 6 (Continued). Bivariate Correlations of Major Study Variables (N = 1902)

Variables	11	12	13	14	15	16	17	18	19
1 Age		.092***	-.084***	-.123***	-.120***	-.218***	-.171***	.092***	.188***
2 Income	.160***		.104***	.055*	-.013	.019	-.202***	.165***	.135***
3 Kids <18	.104***	-.011	.051**	.112***	.111***	.082***	.098***	-.113***	-.044
4 Kids <6	.107***	-.023	.094***	.050*	.031	.122***	.026	.030	-.088***
5 WRKHRS	-.041	-.066**	-.068**	.184***	.038	.009	-.063**	-.002	-.038
6 ORGSIZ	.036	-.161***	.009	.122***	.016	.016	-.018*	.037	-.081***
7 Cosup	.166**	.447***	.073**	-.289***	-.075***	-.052*	-.223***	.218***	.496***
8 Supervisor	.216***	.496***	.109***	-.312***	-.099***	-.024	-.228***	.234***	.454***
9 Social Sup	.120***	.084***	.095***	-.083***	-.070**	.101***	-.156***	.206***	.066**
10 Formal	.141***	.110***	.034	.050***	.002	.008	-.128***	.082***	.098***
11 FWA	1	.235***	.529***	-.102***	-.033	.109***	-.106***	.082***	.172***
12 WPC		1	.156***	-.025	.059***	.150***	-.005	.038	.095***
13 Iflex			1	-.344***	-.173***	-.046*	-.282***	.229*	.494***
14 WFC				1	.580***	.098***	.440***	-.314***	-.339***
15 FWC					1	.176***	.450***	-.361***	-.179***
16 FFRWD						1	.232***	-.156***	-.110***
17 Stress							1	-.540***	-.304***
18 MFL Sat								1	.301***
19 Work Sat									1
M	2.29	1.97	15.07	12.64	10.57	1.20	.0129	3.17	10.01
SD	1.82	1.29	3.59	4.57	3.62	1.38	1.02	0.66	1.82

Note. * p < .05, ** p < .01, *** p < .001

The variable for organization size had significant positive correlations ($p < .001$) with other workplace variables such as formal benefits and work-family conflict. Organization size had significant negative correlations ($p < .001$) with coworker support, supervisor support, workplace culture, work satisfaction, and stress ($p < .05$).

The variable for coworker support had a number of statistically significant positive correlations ($p < .001$) with variables of interest such as supervisor support, social support, flexible work arrangements, workplace culture, family and life satisfaction, work satisfaction and use of flexibility ($p < .01$). Coworker support had highly significant negative correlations ($p < .001$) with work-family conflict, family-work conflict, stress, family and life satisfaction, and frequency of family related work disruptions ($p < .05$).

Supervisor support also had a number of strong associations with the variables of interest in the study. For example, supervisor support was strongly and positively associated ($p < .001$) with coworker support, social support, flexible work arrangements, workplace culture, use of flexibility, family and life satisfaction, as well as work satisfaction. Not surprisingly, supervisor support was significantly ($p < .001$) and negatively associated with work-family conflict, family-work conflict, and stress.

The variable assessing level of perceived social support had significant and positive correlations with almost all of the proximal and distal outcome variables in the study. Social support was positively associated ($p < .001$) with flexible work arrangements, workplace culture, use of flexibility, frequency of family-related work disruptions, family and life satisfaction, and work satisfaction ($p < .01$). Social

support was significantly ($p < .001$) and negatively related to work-family conflict, family-work conflict, and stress.

The variable assessing organizational formal policies was significantly ($p < .001$) and positively associated with income, work hours, organization size, social support, flexible work arrangements, work-family conflict, workplace culture, family and life satisfaction, and work satisfaction. Formal policies were significantly and negatively ($p < .001$) correlated to stress.

Flexible work arrangements were strongly and positively correlated with workplace culture ($r = .235$) and use of flexibility ($r = .529, p < .001$). Flexible work arrangements also had significant and positive correlations ($p < .001$) with income, number of children under 18, number of children under six, coworker support, supervisor support, social support, formal policies, number of family-related work disruptions, family and life satisfaction and work satisfaction. Flexible work arrangements had statistically significant ($p < .001$) and negative correlations with work-family conflict, and stress.

Workplace culture had significant correlations with most of the study variables. It was most strongly and positively correlated ($p < .001$) with flexible work arrangements ($r = .529$) and supervisor support ($r = .496$). Workplace culture was also significantly and positively correlated to age, income, coworker support, social support, formal policies, flexible work arrangements, family-work conflict, frequency of family related work disruptions, and work satisfaction. Workplace culture was negatively and statistically significantly correlated to work hours, and organization

size. Surprisingly, workplace culture did not have statistically significant correlations at the bivariate level with work-family conflict and stress.

Ability to use flexibility had a number of strong and significant bivariate correlations with the conflict and outcome variables in the study. It was most strongly correlated with number of flexible work arrangements ($r = .529, p < .001$) but also had positive and statistically significant ($p < .001$) correlations with income, number of children under six, supervisor support, social support, workplace culture, work satisfaction, coworker support ($p < .01$) and children under 18 ($p < .01$). Use of flexibility had a number of significant ($p < .001$) and negative correlations: age, work hours, work-to-family, family-to-work, and stress. Use of flexibility was also negatively associated with frequency of family-related work disruptions ($p < .05$).

Work-family conflict was most strongly correlated with family-work conflict ($r = .580, p < .001$) and stress ($r = .440, p < .001$). Further, work-family conflict had mostly significant and negative correlations with the study variables. For example, it was negatively correlated to most of the support variables such as coworker support, supervisor support, social support, formal policies, flexible work arrangements, and workplace culture. Not surprisingly it was negatively correlated ($p < .001$) to two of the outcome variables in the study: family and life satisfaction and work satisfaction.

Family-work conflict had a slightly stronger positive correlation to stress ($r = .450, p < .001$) than did work-family conflict ($r = .440, p < .001$). Family-work conflict was significantly and positively associated ($p < .001$) with number of children under 18 and frequency of family-related work disruptions. Like work-family

conflict, family-work conflict had mostly negative correlations to the major outcome variables. For instance, it was negatively correlated to both family and life satisfaction and work satisfaction indicating the more family-work conflict an employed parent had, the less satisfaction with family, life and work they would report.

Frequency of family-related work disruptions was most strongly associated with stress ($r = .232, p < .001$) indicating that the more disruptions employees had the higher the level of stress they reported. Frequency of family-related work disruptions had a number of statistically significant ($p < .001$) and positive correlations with number of children under 18, number of children under six, social support, number of flexible work arrangements, workplace culture, work-family conflict, family-work conflict. Frequency of family-related work disruptions was also significantly and positively associated with coworker support ($p < .01$). Frequency of family-related work disruptions was significantly ($p < .001$) and negatively correlated to two of the three outcome variables: family and life satisfaction, and work satisfaction. Frequency of family-related work disruptions was also negatively correlated to age ($p < .001$), coworker support ($p < .01$) and ability to use flexibility ($p < .01$).

The variable assessing level of stress among employees in the sample had significant correlations with almost all study variables. Stress had significant and positive correlations ($p < .001$) with number of children under 18, work-family conflict, family-work conflict, and frequency of family-related work disruptions. Stress had significant and negative correlations with age, income, coworker support, supervisor support, social support, formal policies, use of flexibility which supports

earlier work that has shown that these variables act as significant predictors to work-life integration. Further, level of stress was significantly ($p < .001$) and negatively correlated to family and life satisfaction.

The variable assessing family and life satisfaction had a number of significant and positive correlations. For example, it was most strongly and positively correlated with coworker support ($r = .496, p < .001$) followed by use of flexibility ($r = .494, p < .001$). It was also significantly and positively correlated to work satisfaction ($p < .001$). Family and life satisfaction was negatively associated ($p < .001$) with number of children under six, work hours, organization size, work-family conflict, family-work conflict, and frequency of family-related work disruptions.

Work satisfaction had more positive than negative bivariate correlations to the variables in the study. As expected, work satisfaction had stronger correlations with variables associated with the work domain. For example, it had both a strong and significant positive correlation ($p < .001$) with coworker support, supervisor support and use of flexibility. It had strong, statistically significant negative correlations ($p < .001$) with organization size, work-family conflict, stress, and frequency of family related work disruptions.

Research Questions 3 - 6: Tests of the Hierarchical Regression Models

Table 7 presents the results of the regression model for work-family conflict. The final model for work-family conflict found five variables positively associated with work-family conflict: work hours, ethnicity (white), education, number of children under 18 and having exceptional care responsibilities. A further five

variables were negatively associated with work-family conflict: workplace culture, age, coworker support, supervisor support, and social support.

Table 7. Hierarchical Multiple Regression Model of Influence of Demographics, Supports and Barriers on Work-Family Conflict (*N* = 1635)

Variable	B	SE B	β
Step 1			
Age	-.041	.011	-.10***
Ethnicity: White NH	.597	.259	.06*
Education	.347	.099	.09***
Number of Kids <18	.265	.087	.18***
Work Hours	.096	.013	.18***
R ²	.06		
Step 2			
Age	-.049	.011	-.12***
Ethnicity: White NH	1.32	.238	.13***
Education	.488	.091	.12***
Number of Kids <18	.354	.079	.11***
Work Hours	.081	.012	.15***
Type of Care (ECR = 1)	1.70	.328	.11***
Coworker Support	-.262	.064	-.11***
Supervisor Support	-.069	.017	-.11***
Social Support	-.369	.092	-.10***
Workplace Culture	-.312	.034	-.25***
R ²	.24		
<i>F</i> (10, 1625)	51.48***		

Note. **p* < .05 ***p* < .01 ****p* < .001 [†] *p* < .10 ; ECR – Exceptional Care Responsibility

Approximately, 24% of the variance in work-family conflict was explained by the above set of predictor variables. On step 1, the demographic variables predicted a modest 6% of work-family conflict ($F(5, 1630) = 21.58, p < .001$). When type of care provided, work-life supports such as coworker support, supervisor support, social support, and workplace culture were added to the equation, the proportion of variance accounted for by the model increased by 18% ($F \text{ Change} = 73.06, R^2 \text{ Change} = .18, p < .001$). The most significant contribution made to the prediction of work-family

conflict was workplace culture ($\beta = -.25, p < .001$). Having exceptional care responsibilities also significantly predicted work-family conflict ($\beta = .11, p < .001$).

Table 8 presents the results of the regression model for family-work conflict. The final model for work-family conflict found six variables positively associated with work-family conflict: education, single, number of children under 18, having exceptional care responsibilities, ability to use flexibility, and frequency of family-related work disruptions. A further four variables were negatively associated with work-family conflict: age, social support, number of available flexible work arrangements, and workplace culture.

Approximately, 12% of the variance in family-work conflict was explained by the above set of predictor variables. On step 1, the demographic variables predicted a modest 3% of family-work conflict, $F(4, 1775) = 15.13, p < .001$. When type of care provided, social support, workplace culture and frequency of family-related work disruptions were added to the equation, a significant increase in variance was accounted for by the model ($F \text{ Change}(6, 1769) = 29.17, p < .001; R^2 \text{ Change} = .09$). The most significant contribution made to the prediction of work-family conflict was workplace culture ($\beta = -.15, p < .001$). This was followed by having exceptional care responsibilities ($\beta = .14, p < .001$).

Table 8. Hierarchical Multiple Regression Model of Influence of Demographics, Supports and Barriers on Family-work Conflict (*N* = 1779)

Variable	B	SE B	β
Step 1			
Age	-.032	.009	-.10***
Education	.295	.076	.09***
Single	.700	.201	.08***
Number of Kids <18	.228	.067	.09***
R ²	.03		
Step 2			
Age	-.031	.009	-.09***
Education	.356	.075	.11***
Single	.344	.195	.04 ^T
Number of Kids <18	.259	.065	.09***
Type of Care (ECR = 1)	1.71	.269	.14***
Social Support	-.350	.075	-.11***
FWA	-.136	.054	-.07*
Uses Flexibility	.220	.075	.08**
Workplace Culture	-.149	.024	-.15***
FFRWD	.331	.061	.13***
R ²	.12		
<i>F</i> (10, 1769)	24.13***		

Note. * *p* < .05 ** *p* < .01 *** *p* < .001 ^T *p* < .10; ECR – Exceptional Care Responsibility; FWA – Flexible Work Arrangements; FFRWD – Frequency of Family-Related Work Disruptions.

Table 9 presents the results of the regression model for stress. The variables for the stress and well being model were standardized and scaled so that a negative value indicated less stress and a positive value indicated more stress. The final model for stress found nine variables positively associated with stress: education, single, number of children under 18, having exceptional care responsibilities, ability to use flexibility and frequency of family-related work disruptions. A further five variables were negatively associated with stress: age, social support, number of available flexible work arrangements, and workplace culture.

Table 9. Hierarchical Multiple Regression Model of Influence of Demographics, Work-Life Supports and Barriers on Stress ($N = 1635$)

Variable	B	SE B	β
Step 1			
Gender (Female = 0)	-.244	.049	-.12***
Age	-.016	.002	-.17***
Ethnicity: White NH	.155	.058	.07**
Education	-.112	.022	-.12***
Single	.291	.059	.12***
R ²	.08		
Step 2			
Gender (Female = 0)	-.300	.041	-.15***
Age	-.014	.002	-.15***
Ethnicity: White NH	.163	.049	.07***
Education	-.127	.019	-.14***
Single	.171	.050	.07***
Type of Care (ECR = 1)	.206	.087	.06*
Supervisor Support	-.010	.004	-.07*
Social Support	-.110	.024	-.13***
Workplace Culture	-.022	.009	-.08*
Work-family conflict	.051	.008	.23***
Family-work conflict	.069	.009	.25***
FFRWD	.100	.020	.13***
R ²	.36		
$F(12, 1623)$	80.68***		

Note. * $p < .05$ ** $p < .01$ *** $p < .001$ ^T $p < .10$; ECR – Exceptional Care Responsibility; FFRWD – Frequency of Family-Related Work Disruptions.

Approximately, 36% of the variance in stress was explained by the above set of predictor variables. On step 1, the demographic variables predicted 8% of the variance in stress ($F(6, 1629) = 28.05, p < .001$). When type of care provided, supervisor support, social support, workplace culture, work-family conflict, family-work conflict and frequency of family-related work disruptions were added to the equation in step 2, stress was significantly predicted at a more accurate level (F Change $(6, 1623) = 122.29, p < .001; R^2$ Change = .29). The most significant contribution made to the prediction of stress was family-work conflict ($\beta = .25, p <$

.001), followed by work-family conflict ($\beta = .23, p < .001$). Having exceptional care responsibilities was modestly associated with stress and well being ($\beta = .06, p < .001$).

Table 10 presents the results of the regression model for family and life satisfaction. The final model for family and life satisfaction found four variables positively associated with family and life satisfaction: number of children under 6, income, coworker support, and supervisor support. A further five variables were negatively associated with family and life satisfaction: being single, number of children under 18, having exceptional care responsibilities, work-family conflict, family-work conflict, and family related work disruptions.

Table 10. Hierarchical Multiple Regression Model of Influence of Demographics, Work-life Supports and Barriers on Family and Life Satisfaction ($N = 1634$)

Variable	B	SE B	β
Step 1			
Family Income	1.37E-006	.001	.11***
Single	-.261	.040	-.17***
Number of Children <18	-.078	.013	-.16***
Number of Children <6	.083	.026	.08***
R ²	.07		
Step 2			
Family Income	1.53E-006	.001	.12***
Single	-.202	.036	-.13***
Number of Children <18	-.057	.012	-.12***
Number of Children <6	.087	.024	.09***
Type of Care (ECR = 1)	-.085	.048	-.04 ^T
Coworker Support	.033	.009	.09***
Supervisor Support	.011	.002	.13***
Work-family conflict	-.013	.004	-.09**
Family-work conflict	-.045	.005	-.26***
FFRWD	-.040	.011	-.08***
R ²	.25		
F (4, 1630)	31.55		

Note. * $p < .05$ ** $p < .01$ *** $p < .001$ ^T $p < .10$; ECR – Exceptional Care Responsibility; FFRWD – Frequency of Family-Related Work Disruptions.

Approximately, 25% of the variance in stress was explained by the above set of predictor variables. On step 1, the demographic variables predicted 7% the variance of family and life satisfaction ($F(4, 1630) = 31.55, p < .001$). When type of care provided, coworker support, supervisor support, work-family conflict, family-work conflict and frequency of family-related work disruptions were added to the equation in step 2, family and life satisfaction was significantly predicted ($F \text{ Change}(6, 1623) = 63.02, p < .001; R^2 \text{ Change} = .17$). The most significant contribution made to the prediction of family and life satisfaction was family-work conflict ($\beta = -.25, p < .001$), followed by supervisor support ($\beta = -.13, p < .001$). Having exceptional care responsibilities was modestly associated at the level of a trend to family and life satisfaction ($\beta = -.04, p < .10$).

Table 11 presents the results of the regression model for work satisfaction. The final model for work satisfaction found nine variables positively associated with work satisfaction: age, ethnicity: white, income, having exceptional care responsibilities, coworker support, supervisor support, formal benefits, workplace culture and the interaction of family-work conflict by care type. A further three variables were negatively associated with work satisfaction: gender, work-family conflict, and family-work conflict.

Table 11. Hierarchical Multiple Regression Model of Influence of Demographics, Work-life Supports and Barriers on Work Satisfaction ($N = 1460$)

Variable	B	SE B	β
Step 1			
Gender (Female = 0)	-.390	.092	-.11***
Age	.025	.004	.14***
Ethnicity: White NH	.558	.110	.11***
Income	2.69E-006	.001	.11**
R ²	.08		
Step 2			
Gender (Female = 0)	-.245	.075	-.07**
Age	.020	.004	.12***
Ethnicity: White NH	.328	.091	.08**
Income	2.10E-006	.001	.07**
Type of Care (ECR = 1)	-.083	.123	ns
Coworker Support	.274	.025	.27***
Supervisor Support	.033	.006	.13***
Formal Benefits	.084	.023	.08***
Workplace Culture	.111	.013	.21***
Work-family conflict	-.045	.011	.11***
Family-work conflict	-.011	.013	ns
R ²	.40		
$F(7, 1448) 89.959$			

Note. * $p < .05$ ** $p < .01$ *** $p < .001$ ^T $p < .10$; ECR – Exceptional Care Responsibility; FFRWD – Frequency of Family-Related Work Disruptions.

Approximately, 40% of the variance in work satisfaction was explained by the above set of predictor variables. On step 1, the demographic variables predicted 7% of work satisfaction ($F(4, 1455) = 31.00, p < .001$). When type of care provided, coworker support, supervisor support, formal benefits, work-family conflict, and family-work conflict were added to the equation in step 2, work satisfaction was significantly predicted ($F \text{ Change}(7, 1448) = 114.01, p < .001; R^2 \text{ Change} = .34$). The strongest predictor in the final model predicting work satisfaction was coworker support ($\beta = .26, p < .001$), followed by workplace culture ($\beta = .21, p < .001$) and

supervisor support ($\beta = -.16, p < .001$). Neither type of family care responsibility nor family-work conflict made significant contributions to the model in step 2.

Multiple Groups Structural Equation Models

Research Question 7: Models Developed Using Multiple Groups Structural Equation Modeling

Five structural equation models were used to explore whether the relationship between work-life supports and outcomes operated in a similar manner for employees with typical and exceptional care responsibilities. For each of the five work-life outcomes explored, the hypothesized models are presented first, followed by the baseline simultaneous models. Suggested guidelines for interpretation of the paths for each model are to compare unstandardized solutions across samples when groups differ in their variabilities (Kline, 2005). Standardized solutions for each path in are reported in the accompanying causal model figures.

Work-Family Conflict

The Hypothesized and Baseline Models

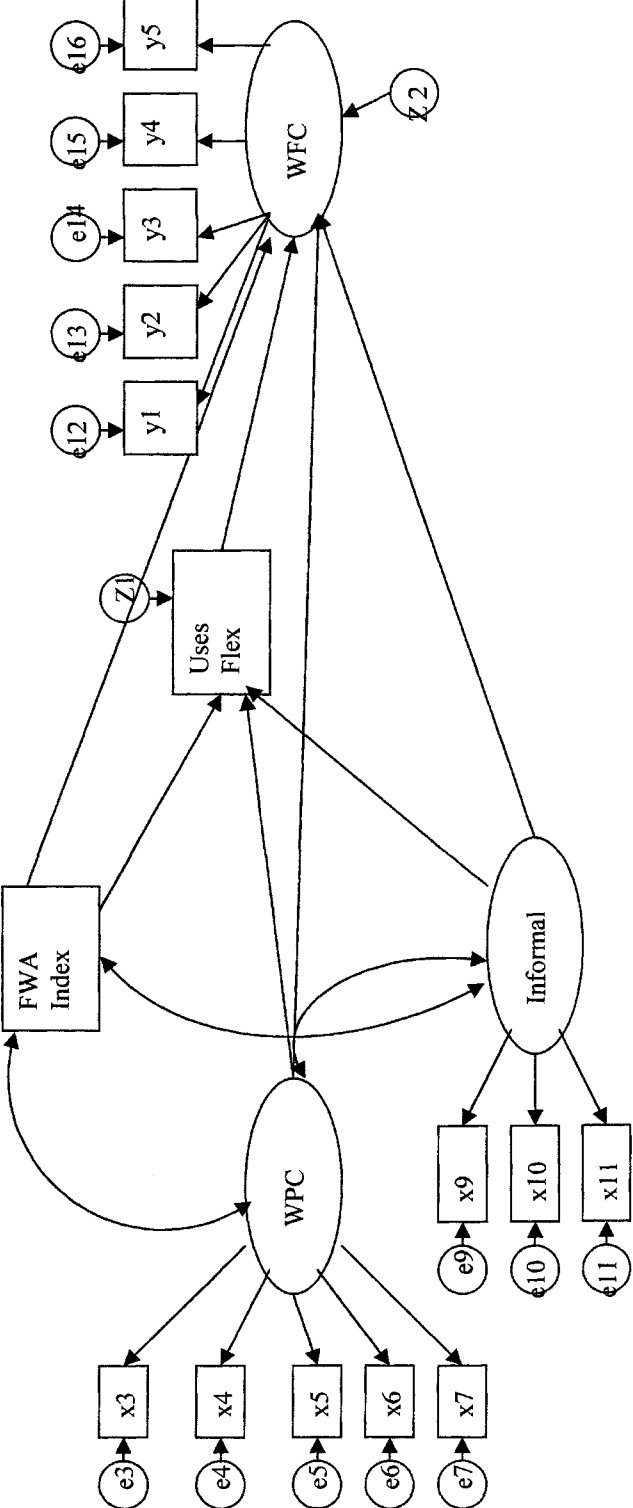
The original hypothesized model for work-family conflict (Figure A-1) was tested for each group. The hypothesized model contained 58 parameters ($df = 164; n_1 = 1708, n_2 = 187$). The hypothesized models for both groups yielded untenable solutions as seen in the χ^2 , CFI, and RMSEA values in Table 13. The hypothesized model was modified using data from the total sample of parents ($n = 1902$), then retested with each group of parents to establish a baseline model prior to specifying

the equality constraints. Model 6 was the first model to reach an acceptable solution and included the deletion of the formal support latent construct in favor of the manifest measure of flexible work arrangements and the addition of three direct paths, one from workplace culture to work-family conflict, one another from informal support to work-family conflict, and another from formal support to work-family conflict in both samples. The final measurement model that was tested on both groups simultaneously is presented in Figure 7. The χ^2 , CFI and RMSEA values for the hypothesized and final baseline models along with their associated change statistics are presented in Table 12.

Table 12. Respecified Model Fit for Work-Family Conflict for Employees with Typical Care Responsibilities and Exceptional Care Responsibilities

Group	Model	χ^2	df	<i>p</i>	CFI	RMSEA	$\Delta \chi^2$	Δ	df	<i>p</i>
Typical Care Responsibility										
	Hypothesized	1375.23	183	.001	.852	.062				
	Model 6 (Baseline)	447.98	83	.001	.951	.051	927.25	100		.001
Exceptional Care Responsibility										
	Hypothesized	333.26	183	.001	.844	.066				
	Model 6 (Baseline)	110.46	83	.001	.969	.042	222.80	100		.001

Figure 7. Baseline Measurement Model for Work-family Conflict



Simultaneous Model Testing

Once the baseline was established a simultaneous estimation of the parameters for both groups was run. The final baseline model tested had 106 parameters ($df = 164, n_1 = 1708, n_2 = 187$). The model yielded a substantatively reasonable fit of the data ($\chi^2_{df 187} = 545.32, p < .001, CFI = .954, RMSEA = .035$). Although the results suggest that for both groups the data were fairly well described by the model, this does not necessarily suggest that the actual factor loadings were similar across the two groups. This was tested by constraining all lambda parameters to be equal and comparing this model to the baseline model (see Table 14). The difference in the χ^2 value was not significant hence the measurement model for work-family conflict was invariant across the two groups, which implies that the manifest variables loaded similarly on their latent constructs.

When the model was further constrained to test for structural invariance the significant χ^2 value indicates that the regression weights predicting work-family conflict were non-invariant across groups (see Table 13) (Byrne, 2005). This implies that group differences exist in the predicted paths to work-family conflict.

Table 13. Model Comparisons for Work-Family Conflict for Employees with Typical Care and Exceptional Care Responsibilities

Model	χ^2	df	<i>p</i>	CFI	RMSEA	$\Delta \chi^2$	Δ df	<i>p</i>
Baseline	545.32	164	.001	.954	.035			
Measurement Invariance	549.06	176	.001	.955	.033	3.741	12	.988
Structural Invariance	599.71	195	.001	.951	.033	54.39	31	.006

The standardized and unstandardized parameter estimates resulting from simultaneously fitting the model in both groups are shown in Table 15 and help to identify the group differences. Examination of the structural paths for employees with typical care responsibilities indicate there are two significant direct paths that predict work-family conflict: workplace culture ($\beta = -.237, p < .001$) and informal support ($\beta = -.056, p < .001$). There were no statistically significant indirect effects.

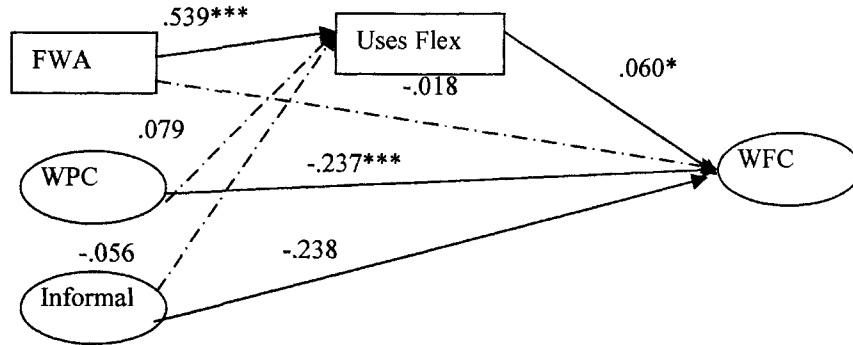
For employees with exceptional care responsibilities, one non-significant trend-level path predicting work-family was found: informal support ($\beta = -.441, p < .10$). Figure 8 and Figure 9 depict the structural paths for both groups. There were no statistically significant indirect paths for employees with exceptional care responsibilities.

Table 14. Maximum Likelihood Path Estimates for Predictors of Work-Family Conflict for Employees with Typical Care and Exceptional Care Responsibilities

Direct Path		Type of Care Responsibility					
		Typical Care			Exceptional Care		
		B	SE	β	B	SE	β
FWA	→ Uses Flexibility	.383***	.015	.539	.369***	.049	.507
Work Culture	→ WPC 1	1.00		.548	1.00		.567
	→ WPC 2	1.15***	.062	.665	1.12***	.173	.697
	→ WPC 3	1.12***	.060	.671	1.10***	.178	.641
	→ WPC 4	.987***	.059	.563	.900***	.167	.520
	→ WPC 5	.842***	.051	.552	.905***	.087	.642
	→ Uses flexibility	.172	.110	.079	.063	.257	.030
	→ WFC	-.337***	.090	-.237	-.159	.200	-.114
Informal Support	→ Social Support	1.00		.182	1.00		.178
	→ Supervisor	26.27***	4.04	.763	29.78*	13.45	.896
	→ Coworker	5.955***	.914	.699	6.42*	2.45	.703
	→ Uses flexibility	-.335	.320	-.056	.238	.724	.039
	→ WFC	-.919***	.284	-.056	-1.84 ^T	.988	-.443
Uses Flexibility	→ WFC	.039**	.019	.060	.004	.056	.006
WFC	→ WFC 1	1.00		.760	1.00		.567
	→ WFC 2	.955***	.033	.729	.951	.084	.697
	→ WFC 3	1.00***	.034	.751	.975	.086	.641
	→ WFC 4	.944***	.033	.726	.952	.088	.520
	→ WFC 5	.912***	.031	.735	.905	.087	.642

Note. * p < .05 ** p < .01 *** p < .001 ^T p < .10

Figure 8. Causal Paths of Work-family Conflict for Employees with Typical Care Responsibility (N = 1708)

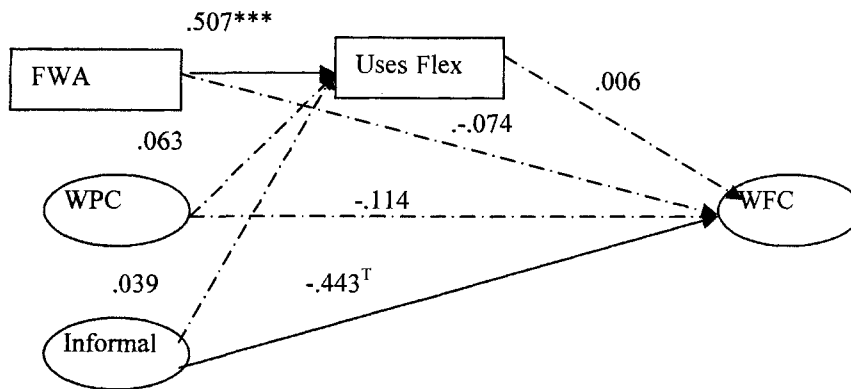


* $p < .05$ ** $p < .01$ *** $p < .001$

--- Not significant

→ Statistically significant

Figure 9. Causal Paths of Work-family Conflict for Employees with Exceptional Care Responsibility (N = 187)



* $p < .05$ ** $p < .01$ *** $p < .001$

--- Not significant

→ Statistically significant

*Family-Work Conflict**The Hypothesized and Baseline Models*

The original hypothesized model for family-work conflict (Figure A-2) was tested for each group of employees. The hypothesized model contained 58 parameters ($df = 164$; $n_1 = 1708$, $n_2 = 187$). The hypothesized model yielded untenable solutions for both groups (Table 15). The same procedures were followed as for the work-family conflict model using the Bentler-Weeks approach. Model 8 was the first model to reach an acceptable solution and included the addition of three direct paths, one from workplace culture to family-work conflict, one another from informal support to family-work conflict, and another from formal support to family-work conflict. Three error covariances were also added, $z1$ (error disturbance for uses flexibility) to $e2$ (error variance associated with type of flexible work arrangements), $e7$ (error variance of manifest variable regarding perceived ethical practice of supervisor) to latent construct informal support, error covariance from $e1$ to $e2$ both of which measure the construct formal support. Rationale for adding covariances to the error terms were that they could be theoretically justified as they were related to error found within the manifest variables. The final measurement model for both groups is presented in Figure 10. The χ^2 , CFI and RMSEA values for the hypothesized and final baseline models along with their associated change statistics are presented in Table 15.

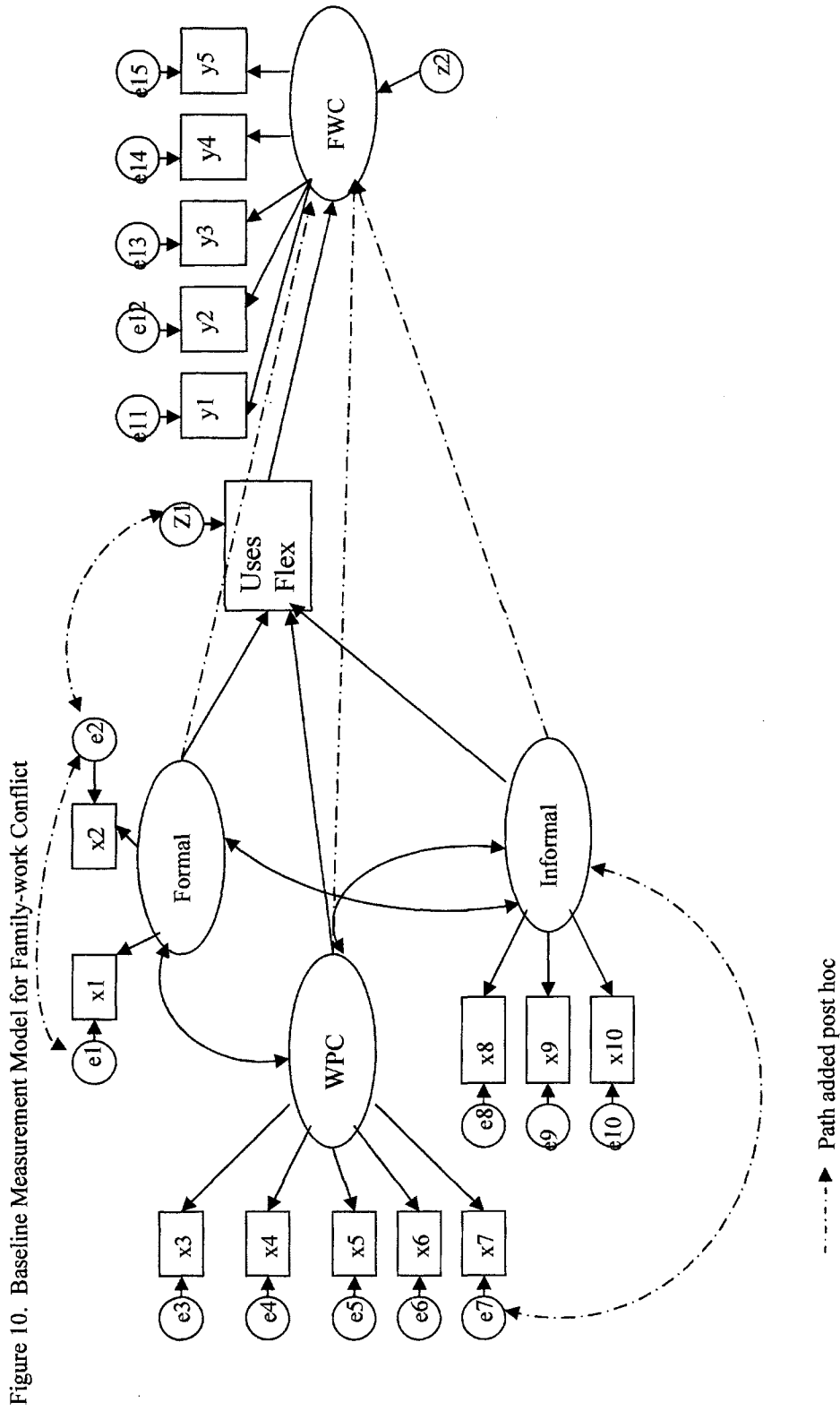


Figure 10. Baseline Measurement Model for Family-work Conflict

Table 15. Respecified Model fit for Family-Work Conflict for Employees with Typical Care Responsibilities and Exceptional Care Responsibilities

Group	Model	χ^2	df	<i>p</i>	CFI	RMSEA	Δ	χ^2	Δ	df	<i>p</i>
Typical Care Responsibility											
	Hypothesized	1233.95	164	.001	.834	.062					
	Model 8 (Baseline)	258.34	93	.001	.978	.032	975.01	71			.001
Exceptional Care Responsibility											
	Hypothesized	289.72	164	.001	.812	.064					
	Model 8 (Baseline)	119.61	93	.03	.970	.039	170.11	71			.001

Simultaneous Model Testing

The model tested simultaneously with both groups had 116 parameters (*df* = 186, $n_1 = 1708$, $n_2 = 187$). The model yielded an excellent fit of the data ($\chi^2 = 408.08$, $p < .001$, CFI = .969, RMSEA = .025). The measurement model was then tested for invariance. The difference in the χ^2 value was not significant indicating the measurement model for family-work conflict was invariant across the two groups, which implies that the manifest variables loaded similarly on their latent constructs about equally for each group.

When the model was further constrained to test for structural invariance the results suggest that the regression weights predicting each factor to family-work conflict were non-invariant across groups (Table 16). This implies that group differences exist in the predicted paths to family-work conflict.

Table 16. Model Comparisons for Family-Work Conflict for Employees with Typical Care and Exceptional Care Responsibilities

Model	χ^2	df	<i>p</i>	CFI	RMSEA	Δ	χ^2	Δ	df	<i>p</i>
Baseline	405.08	186	.001	.969	.025					
Measurement Invariance	412.88	200	.001	.970	.024	7.80	14			.899
Structural Invariance	495.96	220	.001	.961	.026	90.877	30			.001

The standardized and unstandardized parameter estimates resulting from simultaneously fitting the model in both subgroups are shown in Table 17 and help to identify where the group differences lie. Examination of the structural paths for employees with typical and exceptional care responsibilities indicate that for employees with typical care responsibilities there were three significant direct paths in the model: formal support predicting use of flexibility ($\beta = .011, p < .001$), informal support predicting use of flexibility ($\beta = -.040, p < .001$), use of flexibility predicting family-work conflict ($\beta = .179, p < .001$) and workplace culture predicting family to work conflict ($\beta = -.228, p < .001$). There were no statistically significant indirect paths from the predictors to family-work conflict.

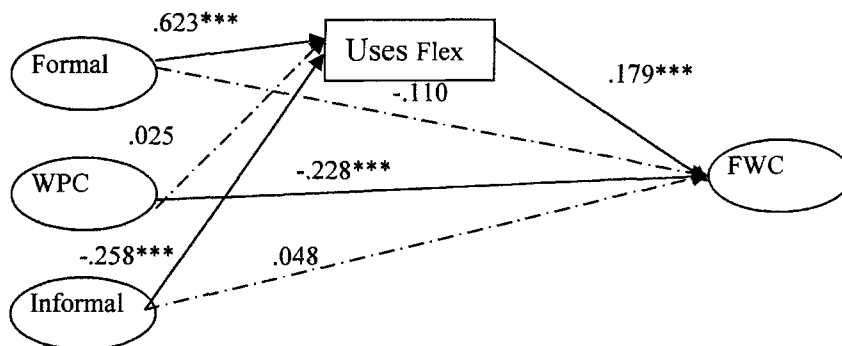
The paths for employees with exceptional care responsibilities, in contrast were slightly different from employees with typical care responsibilities. For employees in the exceptional care responsibility group two different paths in the model were significant: formal support predicting uses flexibility ($\beta = .519, p < .000$), and, informal support predicting level of family-work conflict ($\beta = -.359, p < .10$). There were no statistically significant indirect paths. Figure 11 and Figure 12 depict the structural paths for both groups.

Table 17. Maximum Likelihood Parameter Estimates for the Unconstrained Predictors of Family-Work Conflict for Employees with Typical Care and Exceptional Care Responsibilities

Direct Path		Type of Care Responsibility					
		Typical Care			Exceptional Care		
		B	SE	β	B	SE	β
Formal Support	→ Formal Policy	1.00		.137	1.00		.150
	→ FWA	6.73***	1.78	.844	6.73	5.76	.948
	→ Uses flexibility	3.53***	.782	.623	2.68 ^T	1.46	.519
Work Culture	→ WPC 1	1.00		.566	1.00		.574
	→ WPC 2	1.16***	.061	.697	1.15***	.177	.726
	→ WPC 3	1.09***	.059	.680	1.15***	.183	.678
	→ WPC 4	.997***	.058	.587	.901***	.167	.526
	→ WPC 5	.679***	.047	.460	.882***	.157	.562
	→ Uses flexibility	.025	.110	.012	-.010	.350	-.005
	→ FWC	-	.062	-.228	.045	.157	.042
		.247***					
Informal Support	→ Social Support	1.00		.167	1.00		.166
	→ Supervisor	28.72**	4.73	.765	32.71*	15.68	.911
		*					
	→ Coworker	6.47***	1.07	.698	6.90*	3.31	.705
	→ Uses flexibility	-.258	.282	-.040	.432	.666	.066
	→ FWC	.158	.179	.048	-1.27 ^T	.744	-.359
Uses Flexibility	→ FWC	.092***	.023	.179	.032	.051	.061
WFC	→ FWC 1	1.00		.708	1.00		.672
	→ FWC 2	.959***	.038	.727	.960***	.124	.725
	→ FWC 3	.999***	.042	.679	1.01***	.145	.632
	→ FWC 4	.986***	.039	.736	.891***	.123	.656
	→ FWC 5	.678***	.035	.538	.807***	.121	.593

Note. * p < .05 ** p < .01 *** p < .001 ^T p < .10

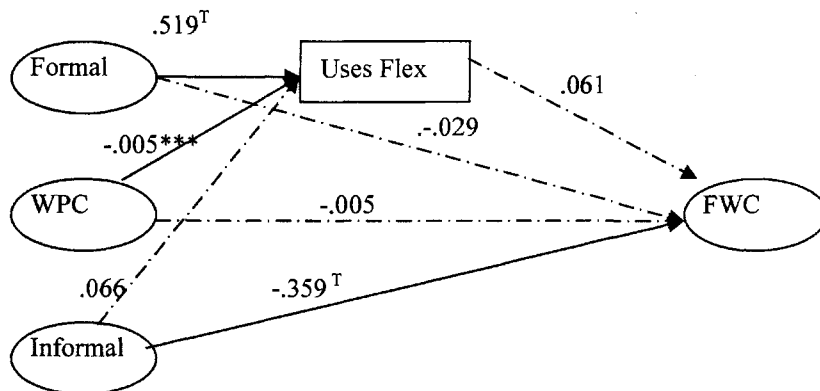
Figure 11. Causal Paths of Family-work Conflict for Employees with Typical Care Responsibility (N = 1708)



*p<.05 ** p<.01 ***p<.001 ^Tp<.10

-----> Not significant -> Statistically significant

Figure 12. Causal Paths of Family-work Conflict for Employees with Exceptional Care Responsibility (N = 187)



*p<.05 ** p<.01 ***p<.001 ^Tp<.10

-----> Not significant -> Statistically significant

*Work Satisfaction**The Hypothesized and Baseline Models*

The original hypothesized model for work satisfaction (Figure A-3) was tested for each group. The hypothesized model contained 174 parameters ($df = 245$; $n_1 = 1708$, $n_2 = 187$). The hypothesized models yielded untenable solutions when tested in each sample of employees (Table 18). The model was modified using the same procedures as specified earlier. Model 3 was the first model to reach an acceptable solution and included the addition of four direct paths, one from workplace culture to work-family conflict, one from workplace conflict to work satisfaction, one another from informal support to work-family conflict, and another from informal support to work satisfaction. Two error covariances were also added, $z1$ (error disturbance for uses flexibility) to $e2$ (error variance associated with type of flexible work arrangements), $e7$ (error variance of manifest variable regarding perceived ethical practice of supervisor) to the latent construct informal support. Rationale for adding covariances to the error terms were that they could be theoretically justified as they were related to error found within the manifest measures of the items. The final measurement model for both groups is presented in Figure 13. The χ^2 , CFI and RMSEA values for the hypothesized and final baseline models along with their associated change statistics are presented in Table 19.

Figure 13. Baseline Measurement Model for Work Satisfaction

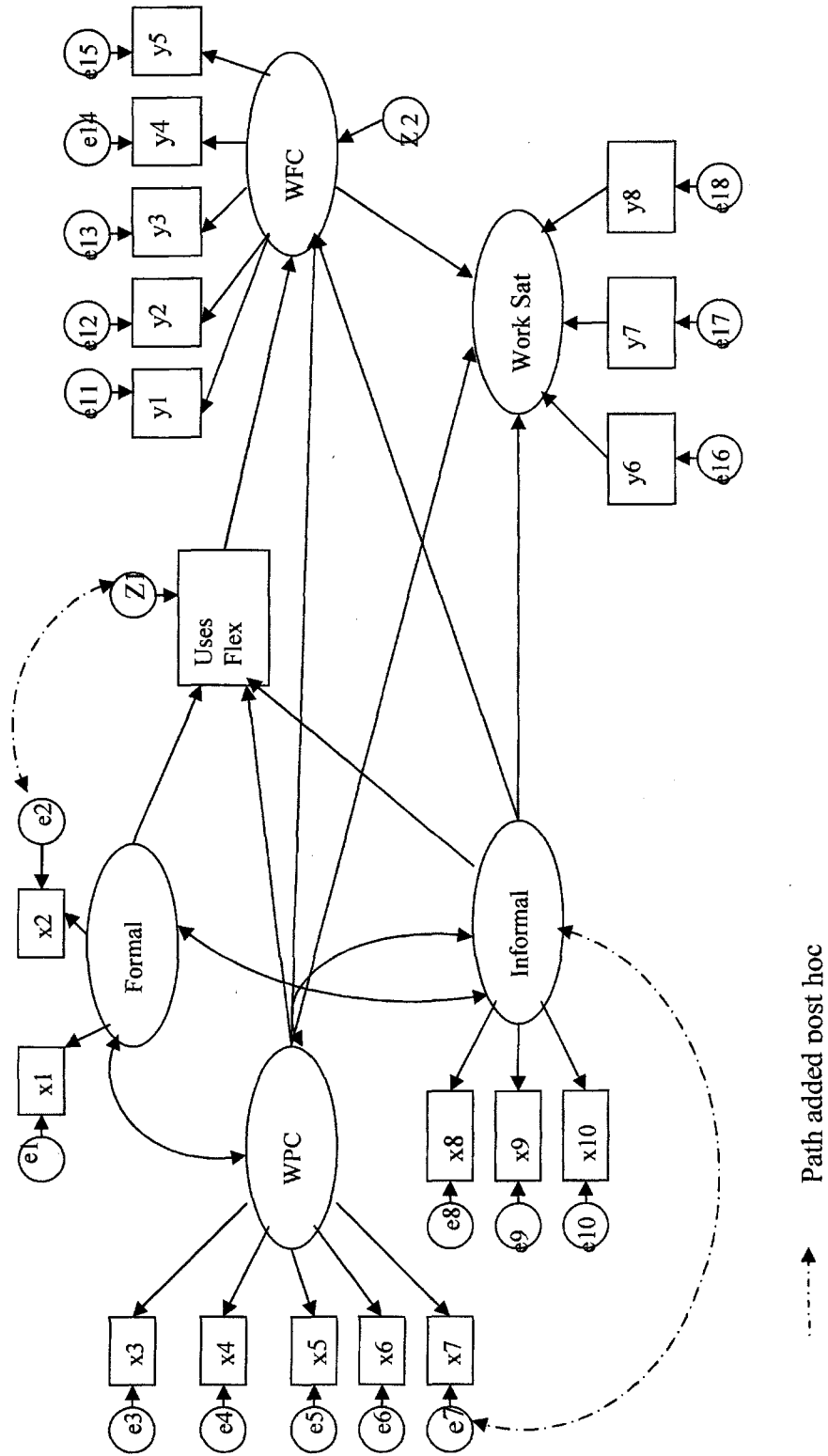


Table 18. Respecified Model Fit for Predictors of Work Satisfaction for Employees with Typical Care Responsibilities and Exceptional Care Responsibilities

Group	Model	χ^2	df	<i>p</i>	CFI	RMSEA	$\Delta \chi^2$	Δ	df	<i>p</i>
Typical Care Responsibility										
	Hypothesized	2318.93	245	.001	.792	.070				
	Model 3 (Baseline)	476.33	140	.001	.964	.038	1842.60	105		.001
Exceptional Care Responsibility										
	Hypothesized	469.30	245	.001	.810	.070				
	Model 3 (Baseline)	174.18	140	.001	.969	.036	295.12	105		.001

Simultaneous Model Testing

The final baseline model tested had 136 parameters ($df = 282, n_1 = 1708, n_2 = 187$). The model yielded an excellent fit ($\chi^2 = 652.02, p < .000, CFI = .964, RMSEA = .026$). The measurement model was then tested for invariance. The difference in the χ^2 value was not significant indicating that the manifest variables loaded similarly on their latent constructs about equally for each group (see Table 20).

When the model was further constrained to test for structural invariance the results suggest that the regression weights predicting from each factor to work satisfaction were non-invariant across groups (see Table 19). This implies that group differences exist in the predicted paths to work satisfaction.

Table 19. Model Comparisons for Work Satisfaction for Employees with Typical Care and Exceptional Care Responsibilities

Model	χ^2	df	<i>p</i>	CFI	RMSEA	$\Delta \chi^2$	Δ	df	<i>p</i>
Baseline	660.19	297	.001	.964	.026				
Measurement Invariance	660.19	297	.001	.965	.025	8.16	15		.917
Structural Invariance	722.81	322	.001	.961	.026	70.78	40		.002

The standardized and unstandardized parameter estimates resulting from simultaneously fitting the model in both subgroups are shown in Table 20 and help to

identify where the group differences lie. Examination of the structural paths for employees with typical care responsibilities suggest that there are a number of significant direct paths in the model that predict work satisfaction: formal support predicting use of flexibility ($\beta = .566, p < .001$), use of flexibility predicting work-family conflict ($\beta = .051, p < .05$), formal support predicting work-family conflict ($\beta = .008, p < .05$), workplace culture predicting work-family conflict ($\beta = -.244, p < .001$), workplace culture predicting work satisfaction ($\beta = .114, p < .05$), informal support predicting work-family conflict ($\beta = .051, p < .05$), informal support predicting work satisfaction ($\beta = .694, p < .001$), work-family conflict predicting work satisfaction ($\beta = -.082, p < .01$, see Figure 14). Three indirect paths were significant hence were tested for mediation using the Sobel test statistic: formal support \rightarrow uses flexibility \rightarrow work-family conflict was found to not be significantly different from zero (Sobel test statistic = 1.92, $p < ns$); workplace culture \rightarrow work-family conflict \rightarrow work satisfaction was significantly different from zero (Sobel test statistic = 2.53, $p < .01$, two-tailed); informal support \rightarrow work-family conflict \rightarrow work satisfaction (Sobel test statistic = 2.94, $p < .001$, two-tailed) was also significantly different from zero. The tests suggest that work-family conflict acts as a mediator for work satisfaction among employees with typical care responsibilities.

The paths for employees with exceptional care responsibilities, in contrast were slightly different from employees with typical care responsibilities. For employees in the exceptional care responsibility group the paths in the model that

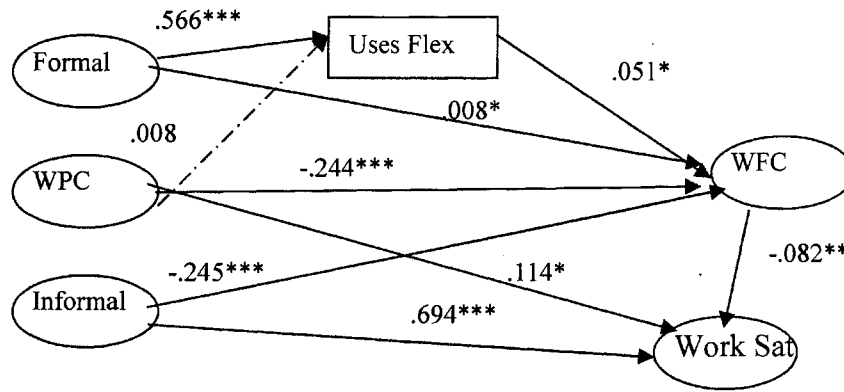
achieved significance were: formal support predicting uses flexibility ($\beta = .491, p < .05$), workplace culture predicting work satisfaction ($\beta = .434, p < .10$), informal support predicting work-family conflict ($\beta = -.030, p < .10$), informal support predicting work satisfaction ($\beta = .301, p < .05$), work-family conflict predicting work satisfaction ($\beta = -.194, p < .000$) (see Figure 15). Three indirect paths were tested for mediation: formal support \rightarrow uses flexibility \rightarrow work-family conflict (Sobel test = - 1.23, $p < . ns$); uses flexibility \rightarrow work-family conflict \rightarrow work satisfaction (Sobel test = 1.40, $p < . ns$); informal support \rightarrow work-family conflict \rightarrow work satisfaction but was not significantly different from zero (Sobel test statistic = 1.41, $p < ns$).

Table 20. Maximum Likelihood Path Estimates for Predictors of Work Satisfaction for Employees with Typical Care and Exceptional Care Responsibilities

Direct Path		Type of Care Responsibility					
		Typical Care			Exceptional Care		
		B	SE	β	B	SE	β
Formal Support	→ Formal Policy	1.00		.147	1.00		.161
	→ FWA	6.81***	1.77	.917	6.53	5.42	.988
	→ Uses flexibility	2.99***	.563	.566	2.30*	1.14	.491
	→ WFC	.029 ^T	.015	.008	-.024	.044	-.007
Work Culture	→ WPC 1	1.00		.564	1.00		.578
	→ WPC 2	1.15***	.061	.692	1.15***	.173	.732
	→ WPC 3	1.11***	.059	.687	1.13***	.177	.672
	→ WPC 4	.998***	.058	.586	.873***	.163	.514
	→ WPC 5	.678***	.047	.458	.889***	.155	.571
	→ Uses flexibility	.017	.092	.008	.114	.285	.056
	→ WFC	-.337***	.068	-.244	-.185	.167	-.030
Informal Support	→ Social Support	1.00		.152	1.00		.169
	→ Supervisor	30.98***	5.38	.738	30.35*	14.38	.862
	→ Coworker	7.44***	1.31	.730	7.08*	3.36	.735
	→ WFC	-1.23***	.295	-.245	-1.196	1.05	-.448
Uses Flexibility	→ WFC	.033*	.016	.051	-1.96 ^T	1.05	-.030
	WFC						
Work Sat	→ WFC 1	1.00		.759	1.00		.816
	→ WFC 2	.956***	.033	.730	.944***	.084	.769
	→ WFC 3	1.00***	.034	.750	.972***	.085	.776
	→ WFC 4	.948***	.033	.729	.946***	.087	.745
	→ WFC 5	.912***	.031	.735	.905***	.086	.727
	→ Work Sat	-.053	.018	-.081	-.130	.060	-.194
	→ Work Sat 1	1.00		.806			.795
	→ Work Sat 2	.718***	.036	.550	.877***	.108	.672
	→ Work Sat 3	.918***	.044	.583	.829***	.121	.558
	← WFC	-.053**	.018	-.082	-.129*	.060	-.194
Work Sat	← Informal Support	2.09***	.393	.694	1.29 ^T	.692	.434
	← Work Culture						
		.102*	.043	.114	.277*	.109	.301

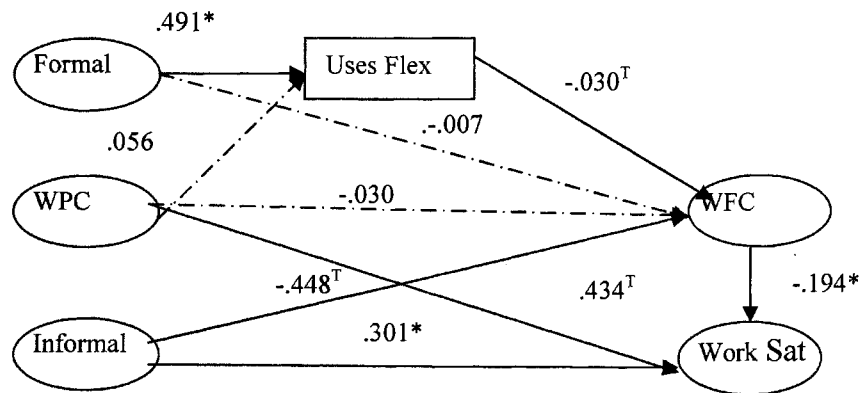
Note. * p < .05 ** p < .01 *** p < .001 ^T p < .10

Figure 14. Causal Paths of Work Satisfaction for Employees with Typical Care Responsibility (N = 1708)



* p < .05 ** p < .01 *** p < .01^T p < .10 - - - -> Not significant - - - -> Statistically significant

Figure 15. Causal Paths of Work Satisfaction for Employees with Exceptional Care Responsibility (N = 187)



* p < .05 ** p < .01 *** p < .01^T p < .10 - - - -> Not significant - - - -> Statistically significant

*Family and Life Satisfaction**The Hypothesized and Baseline Models*

The original hypothesized model for family and life satisfaction (Figure A-4) was tested for each group. The hypothesized model contained 64 parameters ($df = 145; n_1 = 1708, n_2 = 187$). The hypothesized models yielded untenable solutions (Table 21). The model was modified using the LM test statistics for identifying causal covariances and paths that might improve overall fit. Model 3 was the first model to achieve an acceptable solution and included the addition of three direct paths, one from workplace culture to family-work conflict, another from workplace culture to family and life satisfaction and one from informal support to family-work conflict. One error covariance was also added, $z1$ (error disturbance for uses flexibility) to $e2$ (error variance associated with type of flexible work arrangements). Rationale for adding covariances to the error terms were that they could be theoretically justified as they were related to error associated with the manifest variables. The final measurement model for both groups is presented in Figure 16. The χ^2 , CFI and RMSEA values for the hypothesized and final baseline models along with their associated change statistics are presented in Table 21.

Figure 16. Baseline Measurement Model for Family and Life Satisfaction

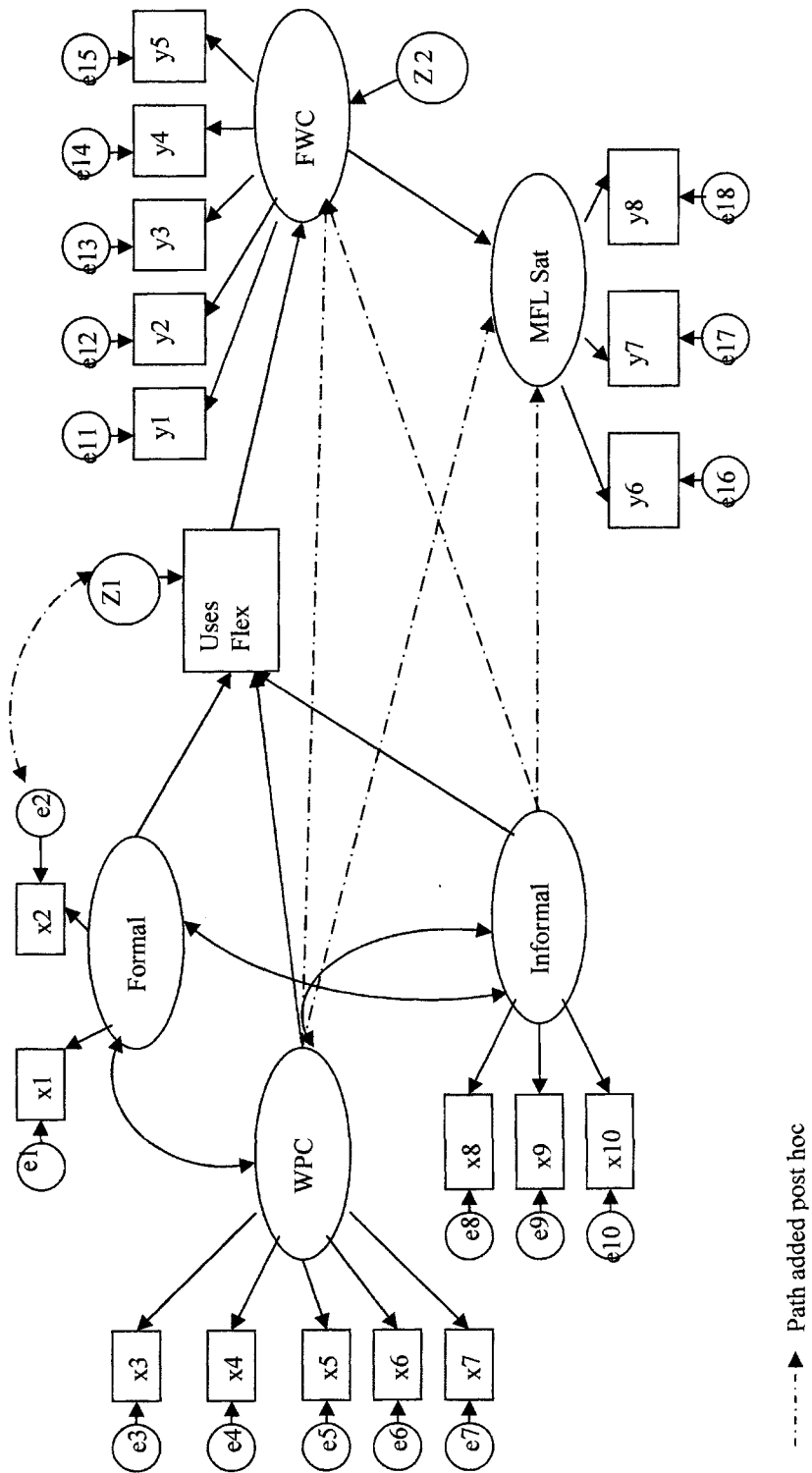


Table 21. Respecified Model fit for Predictors of Family and Life Satisfaction for Employees with Typical Care Responsibilities and Exceptional Care Responsibilities

Group	Model	χ^2	df	<i>p</i>	CFI	RMSEA	Δ	χ^2	Δ	df	<i>p</i>
Typical Care Responsibility											
	Hypothesized	755.67	145	.001	.895	.059					
	Model 3 (Baseline)	870.86	140	.001	.909	.055	115.19	5			.001
Exceptional Care Responsibility											
	Hypothesized	216.14	145	.001	.899	.060					.001
	Model 3 (Baseline)	197.34	140	.001	.918	.055	18.80	5			.01

Simultaneous Model Testing

The final baseline model tested had 138 parameters (*df* = 280, *n*₁ = 1708, *n*₂ = 187). The model yielded an adequate fit of the data ($\chi^2 = 1092.90, p < .001, CFI = .909, RMSEA = .039$). The measurement model was then tested for invariance. The difference in the χ^2 was not significant indicating that the manifest variables loaded similarly on their latent constructs about equally for each group.

When the model was further constrained to test for structural invariance the results indicated that the regression weights predicting each factor to family-work conflict were non-invariant across groups (see Table 22). This indicated that group differences exist in the predicted paths to Life Satisfaction.

Table 22. Model Comparisons for Family and Life Satisfaction for Employees with Typical Care and Exceptional Care Responsibilities

Model	χ^2	df	<i>p</i>	CFI	RMSEA	Δ	χ^2	Δ	df	<i>p</i>
Baseline	1092.90	280	.001	.909	.039					
Measurement Invariance	1100.96	296	.000	.909	.038	8.06	16			.947
Structural Invariance	1199.00	320	.000	.905	.038	106.10	46			.000

The standardized and unstandardized parameter estimates resulting from simultaneously fitting the model in both groups are shown in Table 23. Examination of the structural paths for employees with typical care responsibilities indicate that there are five significant direct paths in the model: formal support predicting family-work conflict ($\beta = .100, p < .05$), workplace culture predicting family-work conflict ($\beta = -.261, p < .001$), use of flexibility predicting family-work conflict ($\beta = .171, p < .001$) and family to work conflict predicting family and life satisfaction ($\beta = -.425, p < .001$) (see Figure 17). There were no statistically significant indirect paths.

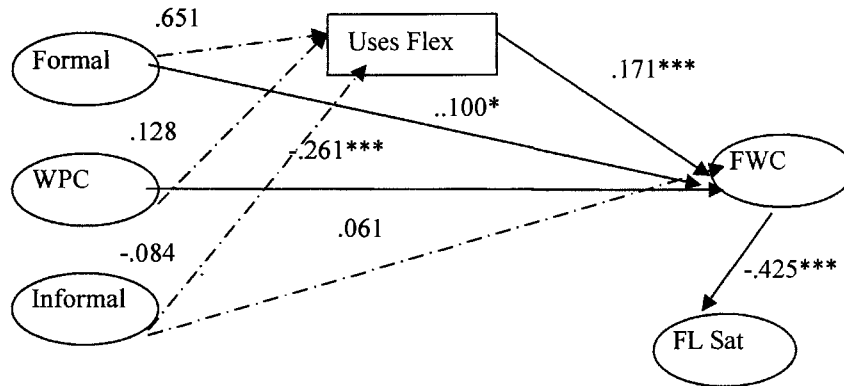
As with the other three models the paths for employees with exceptional care responsibilities were different from employees with typical care responsibilities. For employees in the exceptional care responsibility group two different paths in the model were significant: informal support predicting family-work conflict ($\beta = -.379, p < .001$) and family-work conflict predicting family and life satisfaction ($\beta = -.580, p < .05$) (see Figure 18). There were no statistically significant indirect paths.

Table 23. Maximum Likelihood Parameter Estimates for Predictors of Family and Life Satisfaction for Employees with Typical Care and Exceptional Care Responsibilities

Direct Path		Type of Care Responsibility					
		Typical Care			Exceptional Care		
		B	SE	β	B	SE	β
Formal Support	→ Formal Policy	1.00		.143	1.00		.159
	→ FWA Uses flexibility	7.10 ^T	4.22	.928	6.66	10.99	.997
	→ FWC	3.54	2.27	.651	2.34	4.43	.483
		-.284*	.137	-.100	-.055	.257	-.580
Work Culture	→ WPC 1	1.00		.548	1.00		.566
	→ WPC 2	1.14***	.062	.667	1.12***	.174	.694
	→ WPC 3	1.12***	.061	.671	1.11***	.179	.645
	→ WPC 4	.981***	.059	.559	.899***	.167	.518
	→ WPC 5	.843***	.051	.553	1.02***	.165	.644
	→ Uses flexibility	.128***	.124	.058	.073***	.391	.035
	→ FWC	-.299***	.079	-.261	.026	.179	.023
Informal Support	→ Social Support	1.00		.181	1.00		.169
	→ Supervisor	26.37***	4.09	.763	32.18*	15.22	.917
	→ Coworker	5.97***	.928	.698	6.68*	3.16	.694
	→ FWC	.189	.221	.061	-1.32	.802	-.021
Uses Flex FWC	→ FWC	.089***	.023	.171	.026	.050	.048
	→ FWC 1	1.00		.721	1.00		.697
	→ FWC 2	.930***	.036	.717	.885***	.114	.693
	→ FWC 3	.984***	.040	.682	1.01***	.136	.656
	→ FWC 4	.963***	.037	.732	.836***	.115	.637
	→ FWC 5	.653***	.034	.528	.765***	.113	.583
Life Sat	→ Life Sat 1	1.00		.404	1.00		.324
	→ Life Sat 2	.868***	.110	.822	1.00*	.401	.693
	→ Life Sat 3	.888***	.051	.472	.885***	.212	.378
	← FWC	-.408***	.055	-.425	-.419*	.168	-.580

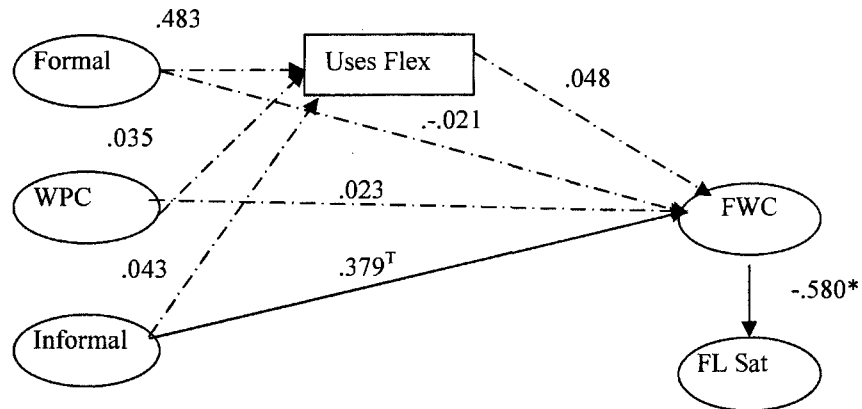
Note. * p < .05 ** p < .01 *** p < .01^T p < .10

Figure 17. Causal Paths of Family and Life Satisfaction for Employees with Typical Care Responsibility (N = 1708)



* $p < .05$ ** $p < .01$ *** $p < .01$ ^T $p < .10$ \cdots Not significant \longrightarrow Statistically significant

Figure 18. Causal Paths of Family and Life Satisfaction for Employees with Exceptional Care Responsibility (N = 187)



* $p < .05$ ** $p < .01$ *** $p < .01$ ^T $p < .10$ \cdots Not significant \longrightarrow Statistically significant

*Stress**The Hypothesized and Baseline Models*

The original hypothesized model for (Figure A-5) was tested for each group. The hypothesized model contained 106 parameters ($df = 76; n_1 = 1708, n_2 = 187$). The hypothesized models yielded untenable solutions (Table 24). The model was modified using the LM test statistics for identifying causal covariances and paths that might improve overall fit. Model 5 was the first model to achieve an acceptable solution and included the addition of four direct paths, one from workplace culture to family-work conflict, another from workplace culture to stress, one from informal support to family-work conflict and another from informal support to stress. Three error covariances were also added, z1 (error disturbance for uses flexibility) to e2 (error variance associated with type of flexible work arrangements), e7 to informal support and e17 to e19. Rationale for adding covariances to the error terms were that they could be theoretically justified as they were related to error found within the manifest measures of the items. The final measurement model for both groups is presented in Figure 19. The χ^2 , CFI and RMSEA values for the hypothesized and final baseline models along with their associated change statistics are presented in Table 24.

Table 24 Respecified Model fit for Predictors of Stress for Employees with Typical Care Responsibilities and Exceptional Care Responsibilities

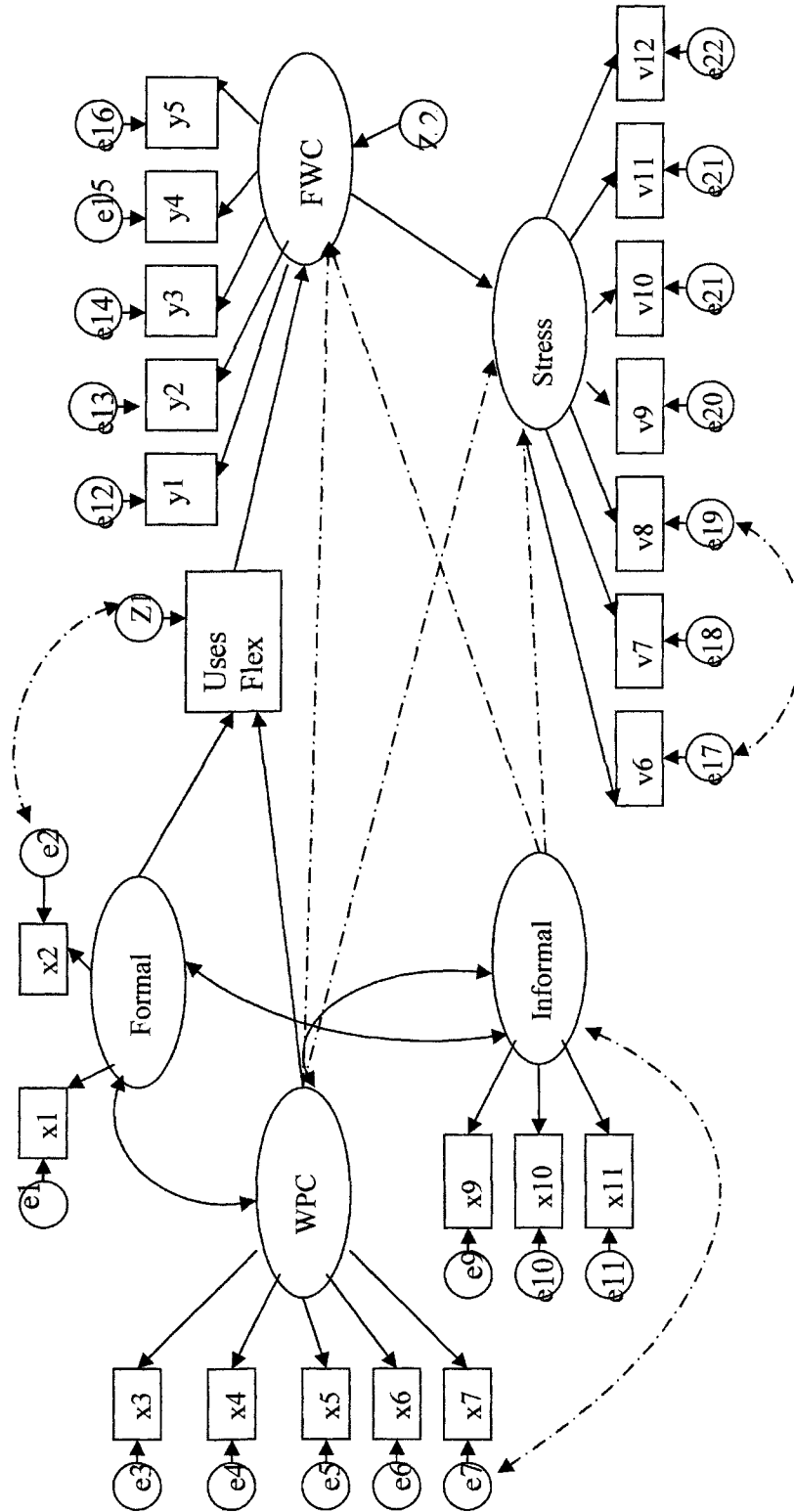
Group	Model	χ^2	df	<i>p</i>	CFI	RMSEA	$\Delta \chi^2$	Δ df	<i>p</i>
Typical Care Responsibility									
	Hypothesized	1078.54	221	.001	.911	.048			
	Model 5 (Baseline)	676.64	216	.001	.952	.035	401.90	6	.001
Exceptional Care Responsibility									
	Hypothesized	403.19	221	.001	.825	.06			.001
	Model 5 (Baseline)	310.39	216	.001	.908	.048	92.8	6	.001

Simultaneous Model Testing

The final baseline model tested had 162 parameters ($df = 436, n_1 = 1708, n_2 = 187$). The model yielded an adequate fit of the data ($\chi^2 = 1072.13, p < .001, CFI = .911, RMSEA = .048$). The measurement model was then tested for invariance. The difference in the χ^2 was not significant indicating that the manifest variables loaded similarly on their latent constructs about equally for each group.

When the model was further constrained to test for structural invariance the results indicated that the regression weights predicting each factor to family-work conflict were non-invariant across groups (see Table 25). This indicated that group differences exist in the predicted paths to stress.

Figure 19. Baseline Measurement Model for Stress



Dotted lines represent paths and covariances that were added.

Table 25. Model Comparisons for Stress for Employees with Typical Care and Exceptional Care Responsibilities

Model	χ^2	df	<i>p</i>	CFI	RMSEA	Δ	χ^2	Δ	df	<i>p</i>
Baseline	1072.13	436	.001	.941	.028					
Measurement										
Invariance	1083.76	456	.001	.941	.027	11.63	20			.928
Structural	1153.25	479	.001	.935	.028	106.25	48			.001
Invariance										

The standardized and unstandardized parameter estimates resulting from simultaneously fitting the model in both groups are shown in Table 26. Examination of the structural paths for employees with typical care responsibilities indicate that there are three significant direct paths in the model: family-work conflict predicting stress ($\beta = .511, p < .001$), workplace culture predicting stress ($\beta = -.139, p < .05$), informal support predicting stress ($\beta = -.165, p < .001$) (Figure 20). Two indirect paths were tested for mediation: workplace culture \rightarrow family-work conflict \rightarrow stress (Sobel test: -6.06, $p < ns$); informal support \rightarrow family-work conflict \rightarrow stress (Sobel test: 4.07, $p < .001$) indicating a significant difference from zero.

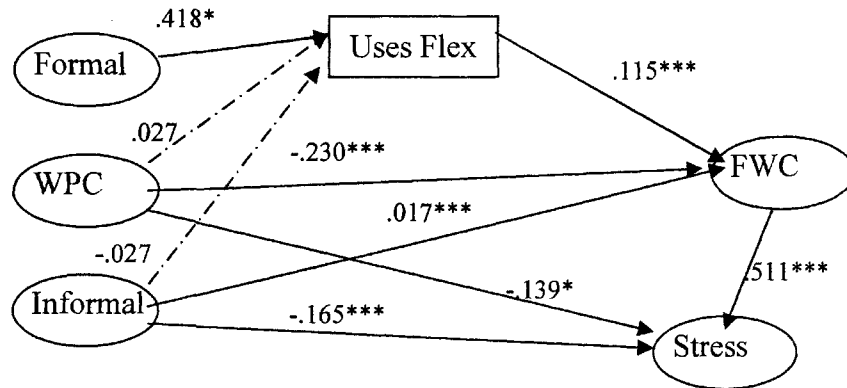
As with the previous models the paths for employees with exceptional care responsibilities were different from employees with typical care responsibilities. For employees in the exceptional care responsibility none of the support variables significantly predicted stress. Instead workplace culture significant predicted family-work conflict ($\beta = -.231, p < .05$) and family-work conflict in turn predicted stress ($\beta = -.419, p < .001$) (see Figure 21). There were no statistically significant indirect paths.

Table 26. Maximum Likelihood Parameter Estimates for Predictors of Stress for Employees with Typical Care and Exceptional Care Responsibilities

Direct Path			Type of Care Responsibility					
			Typical Care			Exceptional Care		
			B	SE	β	B	SE	β
Formal Support	→	Formal Policy	1.00		.209	1.00		.195
	→	FWA Uses flexibility	3.46***	.611	.662	4.58*	2.32	.840
	→		1.56*	.494	.418	1.60	1.68	.404
Work Culture	→	WPC 1	1.00***		.570	1.00		
	→	WPC 2	1.15***	.060	.695	1.16***	.180	.567
	→	WPC 3	1.09***	.058	.679	1.17***	.186	.721
	→	WPC 4	.990***	.057	.586	.920***	.170	.678
	→	WPC 5	.668***	.046	.456	.899***	.160	.531
	→	Uses flexibility	.057*	.107	.027	.015	.357	.007
	→	FWC Stress	-.253***	.037	-.230	-.259*	.114	-.231
Informal Support	→	Social Support	1.00		.163	1.00		.164
	→	Supervisor	29.36***	4.41	.763	33.07*	14.79	.913
	→	Coworker	6.67***	1.00	.702	6.91*	3.11	.699
	→	Uses flexibility	-.181	.283	-.027	.438	.686	.066
	→	FWC	.060***	.014	.017	.014	.045	.004
	→	Stress	-.504***	.158	-.165	-.560	.474	-.166
	→	FWC	.060***	.014	.115	.014	.045	.025
Uses Flex FWC	→	FWC 1	1.00		.723	1.00		.692
	→	FWC 2	.928***	.036	.718	.890***	.115	.692
	→	FWC 3	.976***	.039	.678	1.00***	.138	.645
	→	FWC 4	.965***	.036	.736	.867***	.117	.656
	→	FWC 5	.650***	.033	.527	.784***	.115	.593
	→	Stress	.448***	.034	.511	.394***	.104	.419
	→	FWC	.060***	.014	.115	.014	.045	.025
Stress	→	Stress 1	1.00		.475	1.00		.534
	→	Stress 2	1.08***	.070	.581	1.06***	.198	.564
	→	Stress 3	1.44***	.080	.682	1.18***	.185	.643
	→	Stress 4	1.14***	.074	.586	.967***	.181	.559
	→	Stress 5	.656***	.054	.394	.603***	.138	.416
	→	Stress 6	1.01***	.066	.580	.943***	.172	.585
	→	Stress 7	1.35***	.080	.724	1.15***	.198	.660

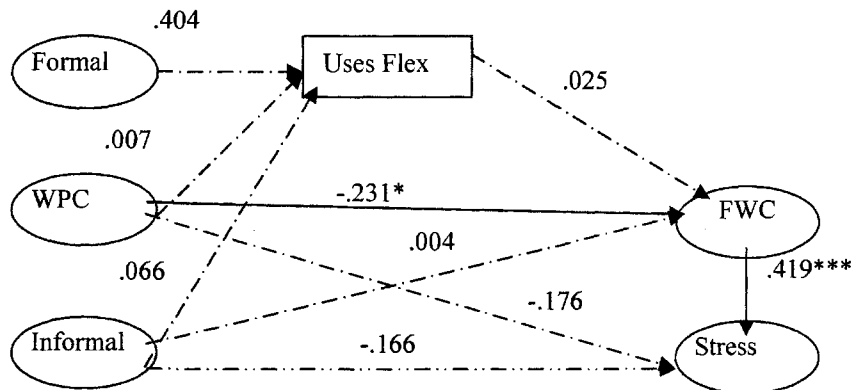
Note. * p < .05 ** p < .01 *** p < .001 † p < .10

Figure 20. Causal Paths of Stress for Employees with Typical Care Responsibility



*p < .05 **p < .01 ***p < .001 - - - - -> Not significant - - - - -> Statistically significant

Figure 21. Causal Paths of Stress for Employees with Exceptional Care Responsibility



*p < .05 **p < .01 ***p < .001 - - - - -> Not significant - - - - -> Statistically significant

Table 27. Summary of Findings

Major Findings			
Analysis of Variances Tests	T-tests	Hierarchical Regressions	Multiple Group SEM Models
There were no statistically significant differences among the different types of disability-related dependent care for most work-life supports, barriers and outcomes.	Socio demographic differences Employed parents with exceptional care responsibilities report lower incomes than employees with typical care responsibilities.	Exceptional care responsibilities was a significant predictor of both types of conflict (WFC, FWC) Contributed as much to the model as did other socio-demographics such as age, ethnicity, education, number of hours worked.	Informal support was a much stronger predictor of both types of conflict for employees with exceptional care responsibilities than it was for employees with typical care responsibilities.
Employees with children with disabilities report lower life satisfaction and higher levels of stress than employees caring for older adults.	Differences in supports Employees with exceptional care responsibilities report lower levels of social supports, have less benefit options, less positive workplace cultures use more flexibility than do employees with typical care responsibilities.	Exceptional care responsibilities was a significant predictor to negative work-life outcomes Having exceptional care responsibilities significantly predicted increased levels of reported stress, and decreased satisfaction with family and life.	Workplace culture was more negatively related to outcome variables for employees with exceptional care responsibilities than those with typical care responsibilities.
Employees with children with disabilities were more likely to report they had lost benefits due to family related work disruptions than did employees caring for an adult relative or older adult with disability.	Differences in levels of conflict Employed parents with exceptional care responsibilities reported both higher levels of work-family conflict and family-work conflict than parents with typical care.		Paths predicting work-life outcomes are very different for employees with exceptional family care.
Employees with multiple exceptional care responsibilities experience more barriers than employees with single responsibilities seen through lower levels of supervisor and social support.	Differences in Work-life outcomes Employees with exceptional care responsibilities report lower levels of family and life satisfaction, work satisfaction and higher levels of stress than parents with typical care responsibilities.		

Chapter 5: Discussion

Managing dependent care responsibilities is central to work-life integration for an employed caregiver. Without family, community, and workplace resources, both tangible and relational, to assist the employee in meeting the care needs of a dependent child or adult, work-life integration is inhibited, affecting the lives of all family members and functioning of the organization.

The current study expands the understanding of the role dependent care has on the work-life interface through first examining different types of disability-related dependent care as dimensions of the concept called exceptional care; and second, by exploring the differences between exceptional care responsibilities and typical care responsibilities. Results suggest that compared to workers with typical care responsibilities, workplace supports are weaker, barriers are stronger and outcomes more negative for workers with exceptional care responsibilities. The findings are consistent with previous research studies focusing on employees with children with disabilities that indicate as employees they experience greater barriers in locating care resources and finding support at work and in the community to facilitate work-life integration (Brennan & Brannan, 2005; Lewis et al., 2000b; Ward et al., 2005); are more likely to make adjustments within the family to manage their exceptional care responsibilities through modified work patterns (Lewis et al., 2000b); and, that when caring for both children older adults with chronic conditions that the effect of multiple caregiving roles increased stress and

decreased family and life satisfaction (Neal et al., 1993; Neal & Hammer, 2007; Stevens & Townsend, 1997).

Dependent Care Operates Along a Continuum

An unexpected outcome of the study was the observation that individuals in the “sandwich generation” did not as a group meet the criteria of exceptional care responsibilities. Dependent care responsibilities may operate on a continuum of care ranging from typical care on the one end to exceptional care on the other. This may position those individuals with “sandwich” care responsibilities in the middle. Employees labeled as exceptional care within the “sandwich generation” group in this study were individuals providing intense care to an older adult. Although level of intensity was not measured directly, employees who were “sandwiched” were selected as having exceptional care responsibilities if they provided regular care and had decreased their work hours to provide care. Once this distinction was made for the “sandwich” group their workplace supports and work-life outcomes were similar to the disability-groups. This finding extends previous work on the “sandwich generation” that has found that as level of care increases so does stress and conflict among caregivers (Williams, 2005).

Differences within the Exceptional Care Concept

Work-life integration supports and barriers were found to be similar for disability-related care groups, however, work-life outcomes, such as family and life satisfaction and stress were lower for employees caring for a child with a disability.

Caring for a child with a disability has been found to have adverse effects on family and life satisfaction, and on marital satisfaction in particular (George, Vickers, Wilkes, & Barton, 2008; Kersch, Hedvat, Hauser-Cram, & Warfield, 2006; Rosenzweig & Huffstutter, 2004). Higher levels of dissatisfaction in marriage may be attributed to both the significant amount of time and energy needed to care for a child with a disability and the stigma attached to having a child with a disabling condition (Angermeyer, Schultze & Dietrich, 2003; Brennan & Brannan, 2005). Marriage satisfaction and stress have been examined separately in relation to being a parent with a child with a disability (Floyd & Zmich, 1991; Risdal & Singer, 2004), providing care for an older adult (Essex & Hong, 2007) or being part of the “sandwich” generation (Neal & Hammer, 2007). A comparison of different types of exceptional care responsibilities within one sample extends understanding that while the experiences overall are similar there is some variability between the groups on outcomes.

Employees caring for a child with a disability in this study were also more likely to report having lost benefits due to family-related work disruptions. The National Survey of Children with Special Health Care Needs (2007) estimates that 9.7% of employees caring for children with disabilities spent 11 or more hours a week coordinating care for their children. This finding in particular, highlights that many employees with children with disabilities are forced to make adaptations in work patterns to coordinate care for their children due to the *inflexibility* of

supports in the community (Lewis et al., 2000a; Rosenzweig, Roundtree, & Huffstutter, 2008; Rosenzweig et al., 2002). Adaptations in the work domain can put families at-risk for a host of negative outcomes such as poverty and ill health.

Number of Dependent Care Responsibilities Diminish Workplace Supports

Individuals with multiple exceptional care responsibilities experienced lower supervisor support and social support. Understandably, multiple exceptional care roles increases both the need for workplace flexibility and supports within the wider social system. Research on flexibility has shown that supervisors act as the “gatekeepers” of flexibility (Hopkins, 2005; Goshe, Huffstutter, & Rosenzweig, 2006; Lewis et al., 2000b). Employees requiring a high degree of flexibility may be seen by supervisors as “pushing the envelope” too far in terms of their requests for flexibility at work to meet their complex dependent care responsibilities (Brennan et al., 2007; Rosenzweig et al., 2004). Another explanation for the differences in social support may be that having multiple exceptional care roles increases the effect of courtesy stigma felt by employees. Although not directly tested, the effect sizes between the means of each group were very large. Studies that have examined the effect of caring for a family member with a disability have found that family members often internalize feelings of shame, blame and guilt and experience social exclusion through decreased support networks (Corrigan & Miller, 2004; Neal & Hammer, 2007).

Different Supports and Barriers Impact Exceptional Care

Results of this study revealed some important findings relating to differences. In comparison to those employees with typical care responsibilities, those with exceptional care responsibilities have lower incomes, fewer informal supports, and experience more negative workplace cultures. These findings add to the growing evidence that suggests that exceptional family care has both financial and emotional costs that are above those associated with typical dependent care.

First, financial resources are a major challenge to families providing exceptional care. Lukemeyer et al. (2000) found in their study based on a nationally representative sample of families who received Aid to Families with Dependent Children (AFDC), that families with children with disabilities were poorer than those families who had typically developing children. The income drop may have been due to out-of-pocket expenses such as specialized services and supports not covered by Medicare (Brennan & Lynch, 2008). Although in-depth studies regarding the financial costs associated with caring for an older adult have not been conducted, one authoritative survey, by the National Alliance for Caregiving and the American Association for Retired Persons (AARP) in 2004, found that most adult children financially contributed to their employees' support on a regular basis. Furthermore, those respondents who provided more intense care (up to 40 hours a week) reported higher average monthly expenditures. Reasons given for the expenditures as with the care of children with disabilities, are

attributed to out-of-pocket expenses such as food and clothing and medical supports and services not covered by Medicaid (Gross, 2006).

Second, employees with exceptional care responsibilities experience higher levels of work-family and family-work conflict than those with typical care responsibilities; a finding that is consistent with the results reported by Neal et al. (1993) that different types of caregiving experiences significantly predicted work-family conflict. Research on caring for a child with a disability suggests that higher levels of work-family conflict are found among families with this responsibility. Time adjustments families make for exceptional care responsibilities intensify the challenges of meeting any increased demands at work, a situation that relates to the “scarcity hypothesis” (Brennan et al., 2005; George et al., 2008; Greenhaus & Beutell, 1994).

Third, the results of the multiple group structural equation models produce findings consistent with results from studies on the employment challenges of employees with disability-related dependent care and those who have been identified as members of the “sandwich generation” (Brennan & Brannan, 2005; Huang et al., 2004; Neal & Hammer, 2007; Lewis et al., 2000a; Sahibzada, 2005). Specifically, the culture in the organizations which employees with exceptional care responsibilities function can significantly contribute to exacerbated work-family conflict which in turn influences satisfaction with work, family and life (Rosenzweig et al., 2007; Huang et al., 2004; Sahibzada et al., 2005). Prior

research supports the proposition that if desired allocations or allocation procedures are viewed as unfair, a host of negative outcomes may occur such as negative attitudes, withdrawal, and counterproductive behaviors (Granley & Cordeiro, 2002). Perhaps then, the more negative assessment of workplace culture by employees with exceptional care responsibilities could be due to the fact that because they have to use flexible work arrangements more often than those employees with typical care responsibilities, they are more likely to have experienced some “backlash” from other employees and supervisors as their use of flexible options is viewed as unfair. This finding has been reported in qualitative studies involving employees of children with physical disabilities and emotional and behavioral disorders (Lewis et al., 2000a; Rosenzweig et al., 2007, 2008).

Fourth, the structural models demonstrate a difference in the predictive strength of informal support, which was a strong predictor of family-work conflict among employees with exceptional family care but not for employees with typical care responsibilities. Social support plays a crucial role in mitigating negative effects such as stress by increasing feeling of self-worth and involvement in one’s community (Kagan, Lewis, & Brennan, 2008). However, families caring for members with disabilities have diminished supportive networks and resources. For example, in their study which investigated the effect of having a family member with a mental health disability, Angermeyer et al. (2003) found that families often withdraw from social interactions as a means of containing discriminating

comments and feelings of “guilt” and “shame.” Neal and Hammer’s (2007) longitudinal study of dual-income earners who provide care to both children and older adults report that increases in emotional resources significantly predicted life satisfaction yet they found that women will most often decrease these emotional resources as a coping strategy when dealing with heightened care responsibilities. Surprisingly, informal support was not a significant predictor to stress among employees with exceptional care responsibilities. This finding is in contradiction to previous research which has found a relationship between caregiver strain and the perceived adequacy of formal and informal child care supports (Brennan & Brannan, 2005; Kagan et al., 2008).

Implications

This research has implications for theory, organizational policy, and practice. Most significantly, the research points to the notion that dependent care needs to be conceptualized and measured as a multi-faceted construct that impacts the work-life integration abilities of individuals in different ways. The research further highlights that employer based flexibility does not meet the work-family fit needs of employees with exceptional care responsibilities and that they may have different ways to achieve fit from other domains to address this lack of fit. This suggests that the pathways that individuals with exceptional care responsibilities navigate in order to achieve work-family fit and through fit, work-life integration may have different predictors. This is a significant contribution to the work-life

literature as to date scholarship in linking disability-related dependent care have not been extended to make this distinction using a large national sample of employees that compares typical care with exceptional care responsibilities.

Theoretical Considerations

Results from this research enrich the theoretical understanding of multiple roles, by demonstrating support for the “competing time demands” and the “scarcity hypothesis” (Greenhaus & Beutell, 1985) seen through the increased levels of conflict and adverse work-life outcomes experienced by employees with single and multiple exceptional care demands. The results appear to confirm the proposition found within role theory that human energy may indeed be finite and that for individuals occupying multiple roles (who are more often women), the greater pressure on her resources, the less energy she will have to devote to other roles, and because of this, will experience greater levels of conflict and stress (Barnett & Garies, 2006). The findings from the study suggest support for another tenet of role theory called “enrichment” (Greenhaus & Powell, 2006). Employees with exceptional care responsibilities, may experience their job as enriching to their lives by providing a distraction from their roles as caregivers. Research with parents of children with mental health challenges has found support for the notion that work may act as a buffer from the stresses associated with caregiving (Rosenzweig et al., 2008).

The study adds to the conceptualization of flexibility and permeability of border/boundaries (Clark, 2000; Ashforth, Kreiner, & Fugate, 2000) by suggesting that employees with exceptional care responsibilities may meet extra demands through flexibility within domains outside of the workplace. How flexibility functions within the family and community for individuals with exceptional care responsibilities is unknown. Qualitative research on caring for a child with a mental health disability suggest that the mechanisms involve communication across boundaries within the family and work domains (Rosenzweig et al., 2008). Whether the strategies for exceptional caregivers are similar across the different care types (child, adult, elder) or whether the strategies vary over time or by type of crisis needs further research.

The results also align with theories related to the workplace, in particular organizational justice theory and ecological systems theory by suggesting that flexibility options within the workplace and community that are specific to the needs of this group of employees with dependent care responsibilities are required (Kagan et al., 2008). This supports Hill's (2008) suggestion that social and contextual attributes of workplaces are constructed of both structural (policy availability, and nature of tasks one performs) and interactional factors (supportive culture and supervisor- subordinate trust). The findings from this study propose that for employees with exceptional care responsibilities use of flexibility is indeed limited by these two factors and to a much greater extent than it is for those

employees with typical care responsibilities. Further research effort is needed to examine if flexibility efforts aimed at meeting the needs of employees with exceptional care responsibilities are successful at decreasing conflict and negative work-life outcomes such as stress.

The tenets of organizational justice theory are also supported by the findings by indicating that the “equity principle” and “procedural justice” may interact with exceptional care to exacerbate negative outcomes; particularly, that employees with exceptional care responsibilities will be perceived by others as enacting family benefits unfairly by others. Organizations will need to begin to view the needs of employees with exceptional care responsibilities as different from those with typical care responsibilities and work to creating a culture that values their family responsibilities in addition to the skills they bring to the workplace.

Although not directly tested, the tenet of institutional theory that suggests that family-friendly workplace policies that have only been adopted for symbolic purposes rather than substantive reasons are perceived negatively by all actors within the institution when enacted is tentatively supported by the findings. Employees with exceptional care responsibilities face limited flexibility solutions when dependent care issues arise, as such they are often forced to make adjustments to their work schedules regardless of the consequences. The results of the structural models indicate larger and more negative paths from workplace

culture to both work and family outcomes and may suggest that even within organizations that have family-friendly policies, the perceived over use of those policies by employees with exceptional care responsibilities can result in the perception of a more negative workplace culture. Institutional theory infers that in order to minimize these perceptions, efforts need to be directed at the cultural-cognitive component of organizations. Such efforts should address the experience that employees with exceptional care may have different flexibility needs and require different types of supports than employees with typical care responsibilities. Further, efforts aimed at the cultural-cognitive component of institutions should focus on changing attitudes and behaviors regarding employees with exceptional care responsibilities by reflecting their inclusion into workplace policy and practices as a feature of the diversity found in modern day organizations.

Organizational Policy and Practice

Employers may enhance the work-life integration experiences of employees with exceptional care responsibilities by understanding that exceptional care is a type of dependent care that follows a different trajectory than typical care, that can be conceptualized within the organizational response to diversity concerns.

Specific supports for employees with exceptional care responsibilities may be linked to the business case for flexibility and thus articulated as a means of attracting and retaining talented employees. Research has shown that organizations that offer support for employees' lives outside of work outperform companies with

only weak or moderate work-life programs (Lingle, 2005). Further, supportive environments inevitably foster feelings and behaviors of reciprocity, in which has been shown to increase organizational commitment (Eaton, 2003), increase productivity, and enhance job satisfaction (Baltes et al., 1999; Brough, O'Driscoll, & Kalliath, 2005).

Positioning exceptional care as another feature of organizational diversity policies within the workplace may ensure that flexibility policies are viewed as a legitimate organizational concern that reflects: the legal issues related to caregiver discrimination (Rosenzweig et al., 2008). Additionally, organizational efforts aimed at educating supervisors and others who control flexibility within the workplace on the experience of exceptional care and the specialized needs of employees with these type of care responsibilities are needed so that supervisors are aware of and responsive to, employees' often sporadic and unpredictable flexibility needs (Rosenzweig et al., 2008). Further, supportive supervisors in the workplace can influence support among coworkers which in turn can help to develop more effective informal workplace supports for employees with exceptional care responsibilities.

Community

Communities can enhance work-life integration of families with exceptional care responsibilities by increased flexibility and availability within formal and informal specialized support services such as referral centers, child care, after

school supports, respite care, transportation to medical appointments, and sick care so that families' exceptional care responsibilities have increased flexibility and access to resources in emergencies (Brennan et al., 2007; Kagan et al., 2008). The lack of cohesive structure of referral and information regarding benefits and services for families with exceptional care responsibilities can result in unnecessary emotional, logistical, and financial hardship (Allen, 2003; Friesen, Brennan, & Penn, 2008; Kagan et al., 2008) which signals a lack of fit for families with complex care responsibilities. Informal community supports such as community networks or peer-support services should be established to provide ways of caring for children, adults and elders with exceptional care needs while their employed family members are at work (Kagan et al., 2008). Peer-to-peer support through a voluntary exchange program where employed family members can exchange periods of care with another family or look after multiple individuals for short periods of time is an example of a way that available supports could be increased among employees with exceptional care responsibilities (Kagan et al., 2008).

Community services can also support employees with exceptional care responsibilities by allowing for greater flexibility within their hours of service so it is not just flexible work arrangements that employees with these types of responsibilities must use to meet their complex care responsibilities (Kagan et al., 2008). Research on the work outcomes for families with a child with a disability has consistently found that it is mothers' who most often will decrease or give up

employment when they cannot find child care or after school care (Kagan et al., 2008; Rountree & Lynch, 2006; Rosenzweig et al., 2002). Moreover, this effect does not diminish as children with disabilities age (Essex & Hong, 2005). In their research on the employment challenges associated with caring for children with disabilities, Kagan et al. (1998) found that flexibility in child care, family support services, health care professionals, schools, and transportation services was a critical element to exceptional carers' ability to achieve work-family fit and through this, work-life integration. Gareis and Barnett (2008) suggest that community-level policies and practices act as resources that alleviate stress for employees. They argue that community-resource fit is one mechanism that impacts an individual's ability to achieve work-life integration (Gareis & Barnett, 2008). Studies that examine how community-resource fit operates to alleviate negative outcomes among employees with exceptional care responsibilities are needed.

Federal and State Policies

Another implication arising from this research is the need for federal and state policy efforts to address the lack of financial supports for families with exceptional care responsibilities. This is an overlooked component of care work that is tied to the gendered assumptions of women's domestic labor and roles as mothers, wives, and daughters (Rosenzweig et al., 2008). Family leave policy supports in the U.S. lag far behind those of other countries in both scope, remuneration, and duration (Brennan, Rosenzweig, Malsch, Stewart, Kjellstrand, &

Coleman, 2009). Amendments need to be made to the FMLA which governs job protection, to cover more workers and care situations as well as provide wage replacements for caregivers (Brennan & Marsch, 2008). The current structure of the policy is unpaid and extremely limited in scope, making access and use of this support untenable for many employees with exceptional care responsibilities (Brennan et al., 2009). State efforts are needed to establish more requirements for employers that support more employees through greater access to flexibility to downgrade to part-time work, flexible work arrangements and prorated benefits (Brennan & Malsch, 2008) by legislating laws that require employers to offer this as part of benefit packages. To date very few states have established these kinds of supports. California, Washington and New Jersey are currently the only three states with paid family leave insurance programs (The Paid Family Leave Collaborative, 2009). In California, the program pays workers who contribute to the state's disability insurance fund, up to 55% of their weekly earnings (with a maximum of \$800) per week. Current efforts are also being made in six other states to include paid family and medical leave (The Paid Family Leave Collaborative, 2009). The results from this study suggests that income supports are desperately needed in order for families to avoid negative personal, familial, and financial outcomes due to their complex care responsibilities.

Limitations and Future Research

There are limitations to this study that warrant discussion. First, as a secondary analysis there are limitations to drawing firm conclusions regarding employees with exceptional care responsibilities. Specifically, the selection criteria for the exceptional care group was limited to individuals caring for a child, adult or elder, using a single response item to identify these care responsibilities. The severity of the dependent's disability and the level of care required of the employee could not be determined. Research consistently finds that the severity of a family members' disability impacts employment status of caregivers (Brennan & Brannan, 2005; National Association of Caregivers and AARP, 2004). This is a significant limitation as it inhibits conclusions that can be made about the work-life experiences of the exceptional care group in the sample, and in the population. Major research efforts that examine exceptional care which include specific measures of types of exceptional care (child, adult, elder) and type of disability or chronic condition (physical, mental) are needed to further explore differences within the construct.

Second, the cross-sectional nature of the survey design is problematic in that it only provides information at one time point. Inferences regarding causality cannot be established due to the lack of certainty in the time-order, yet, this is what the structural models attempt to do. Further, inferences cannot be made regarding how the various constructs might behave over time. Findings from the structural

models must be interpreted cautiously. Replication of the models using similar groupings with longitudinal data is needed.

Third, the sample size for the exceptional care group used in the multiple group structural equation models was small given the complexity of the model estimated. Specifically, as Kline (2005) notes “as the ratio of cases to the number of parameters is smaller, the statistical stability of the estimates becomes more doubtful. Cases to parameter ratios less than 10:1 may be a cause for concern” (p. 319). Most of the paths tested within the sample of employees with exceptional care responsibilities did not achieve statistical significance. This may have been due to the lack of power due to the limited sample size. Appropriate power analyses should be conducted in future studies.

Fourth, the study integrated race and ethnicity into its analysis in a cursory manner. This was due largely to the secondary nature of study and in the limitations of the dataset. Ethnicity was found to be a significant predictor of outcomes, particularly being of “European” descent. This contradicts other research that has reported that (a) cultural group members interpret and perceive disability and the stress and strain attributed to caring for family members who have disabilities differently (Cook, Lefley, Pickett, & Cohler, 1994; Stueve, Vine, Struening, 1997) and (b) members of different cultural groups report greater degrees of social exclusion as a result of courtesy stigma (Rosenzweig & Brannan, 2008). The absence of an effect among the different groups within this study

suggests that stigma and cultural factors specific to one's culture may be influencing participants' responses to the disability and work-life conflict items in the survey. Future research, needs to examine the cultural context of work, work-life conflict, ethnicity and exceptional care using culturally appropriate qualitative methods of inquiry.

Fifth, the addition of error covariances to the structural models challenges the findings in that the error covariances were needed to obtain adequate model fit. The addition of error covariances within models is always problematic as it can never be determined if it is a result of measurement error or a capitalization on chance.

Last, the study measures work-life integration experiences based on individuals' perceptions of the work-life interface; therefore, the results should be viewed as exploratory and tentative. Future research efforts need to be made that examine exceptional care within a more holistic context, which brings in the experiences of coworkers, supervisors, partners, siblings, and community networks. This is particularly salient given the research on employment challenges of parents with young children with disabilities as it indicates that flexibility is often sought within the family.

A Call to Action

This research study expands the current understanding that the role dependent care has on work-life integration particularly, disability-related

dependent care. The findings suggest that dependent care is multifaceted and contains a dimension called exceptional care. The results tentatively propose that variations exist within the exceptional care experience and that there are differences in the use of workplace supports, barriers and work-life outcomes between employees with exceptional care responsibilities when compared to employees with typical care responsibilities.

Research, policy and organizational practice change is necessary if the experiences of employees with exceptional care responsibilities are to be adequately supported by workplaces and communities. To ignore caregivers providing exceptional care is to continue to marginalize individuals, mainly women, by keeping hidden the informal and unpaid care work they provide. The issue of dependent care has historically and continues to be viewed as a “woman’s issue” however, given the growing need for dual incomes, the rise of women into powerful roles within organizations, the advances in medical technology that have expanded the likelihood of survival for people with chronic conditions and the deinstitutionalization of people with mental health conditions, dependent care needs to be viewed as a social issue, one that will result in dire economic and social losses if it continues to remain hidden within the private sphere of the home. That these losses are not individual, but impact society can be seen in the decreased earning potential of families who have exceptional care responsibilities, increased

costs to the social welfare system seen through increased claims for assistance, lack of health insurance and social isolation and exclusion experienced by caregivers.

In order to begin to view dependent care as a social issue future directions are needed to develop ways to differentiate between typical and exceptional care that take into account the complexity of the care. This is especially significant to the positioning of those employees who are part of the eldercare and the “sandwich generation” along the typical – exceptional care continuum. Research and theory is needed to determine at what point care becomes exceptional for these dependent care groups. Further theoretical development is needed that explains how exceptional care is different from typical care, what circumstances change typical care to exceptional care, and what kind of adjustments or supports occur within the family, workplace, community that help families achieve better work-life integration.

Major research efforts that examine the impact of courtesy stigma within the workplace just as prior efforts have looked at other types of discrimination are also needed (Badgett, 2008; Barbara, McBrier, & Kmec, 1999; Lopez, Hodson, Roscigno, 2009; Ortiz & Roscigno, 2009). This study provides tentative evidence of the potential ways in which courtesy stigma is enacted within the workplace. Research studies that have focused on the challenges of caring for a child with a behavioral or mental health disorder found that courtesy stigmatization was found within the workplace in four different ways: direct, indirect, enacted and felt (Gray,

2002; Rosenzweig, 2007). Research aimed at unpacking courtesy stigma as it relates to caring for different types of dependents, whether they be a child, an adult or an elder is needed in order to address the interventions needed in the workplace to address the stigma and discrimination currently experienced.

Further, organizations need to position exceptional care within diversity initiatives and establish training and support on the needs of employees with exceptional care. Organizations could begin this process by initiating self-assessments to determine the numbers of employees within their workforce who have exceptional care responsibilities, survey employees to assess what types of organizational supports might be helpful to supporting their exceptional care responsibilities and offering referrals to community agencies, or an informal family support network for employees (Rosenzweig, Brennan, Malsch, Roundtree, Stewart, & Mills, 2009). These efforts could lead to a cultural shift within organizations, that support the notion of diversity and inclusion. In creating a culture that acknowledges dependent care as a facet of an employees life, organizations can attract a talented and diverse workforce that includes those with exceptional care responsibilities.

Importance to Social Work

The social work profession both with its history of providing services to families and its position in the employee assistance system, found within the benefits systems of organizations, is well-situated to assist working caregivers with

exceptional care responsibilities and to help their employers address work-life integration.

Social work has been concerned about employment-related issues of the workplace for much of its professional history. As Akabas and Kurzman (2004) write “work, or its absence, is inevitably a central issue in the lives of the clients social workers serve” (p. 1). The activities of social work have included both social action, born out of the Settlement House Movement and casework, rooted in the origins of the Charity Organizing Societies (Rosenberg & Rosenberg, 2006). Historically, the primary focus of social work has been directed mainly at the working class through efforts to build collective identity and strength through labor movements. This same attention has not been directed toward the working conditions characteristically encountered by the middle-class (Rosenberg & Rosenberg, 2006).

Employment concerns, especially those related to work-life integration, are being addressed by researchers and professionals in the fields of psychology, sociology, law, and business. There is a notable lack of contribution to this area by social work which is surprising, given the profession’s knowledge of the intersections between work and poverty, work and health, work and illness, work and mental health, and how each impacts individuals and groups who are marginalized through race, gender, class, age and ability. Given this knowledge an abandonment of social work’s commitment to organizing on behalf of progressive

social change might be, as Akabas and Kurzman (2004) suggest, “an unacceptable desertion of core functions unique to the profession” (p. 6). This is especially true for those individuals and families who are already marginalized and discriminated against because of their exceptional care responsibilities. It is critical that social work begin to address the problems faced by millions of American families in general, through renewed research and interventions to advocate for greater social change within the workplace.

Conclusion

The inclusion of diverse work-life experiences into the research base is needed in order to gain a greater understanding of the varied needs that working families have regarding dependent care. To date research has focused almost exclusively on the work-life needs and challenges of employees with typical care responsibilities. Disability-related dependent care has until recently, not emerged as a workplace issue. This research advances understanding of exceptional care by suggesting that dependent care may operate along a continuum with typical care at one end and exceptional care the other. Further, the need for workplace supports is very different for employees with exceptional care responsibilities compared to those with typical care responsibilities. By examining the different types of disability-related dependent care experiences together, these findings add to our growing understanding of exceptional care by showing that there are variations within the concept that result in different outcomes. Variations in the type of

exceptional care need further exploration to situate this term so that researchers will have a clearer understanding how certain types of disability impact work and life related outcomes differently than others.

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Appendix A: Proposed Structural Models and Survey Items

Figure A-1: Hypothesized Structural Model of the Predictors of Work-Family Conflict

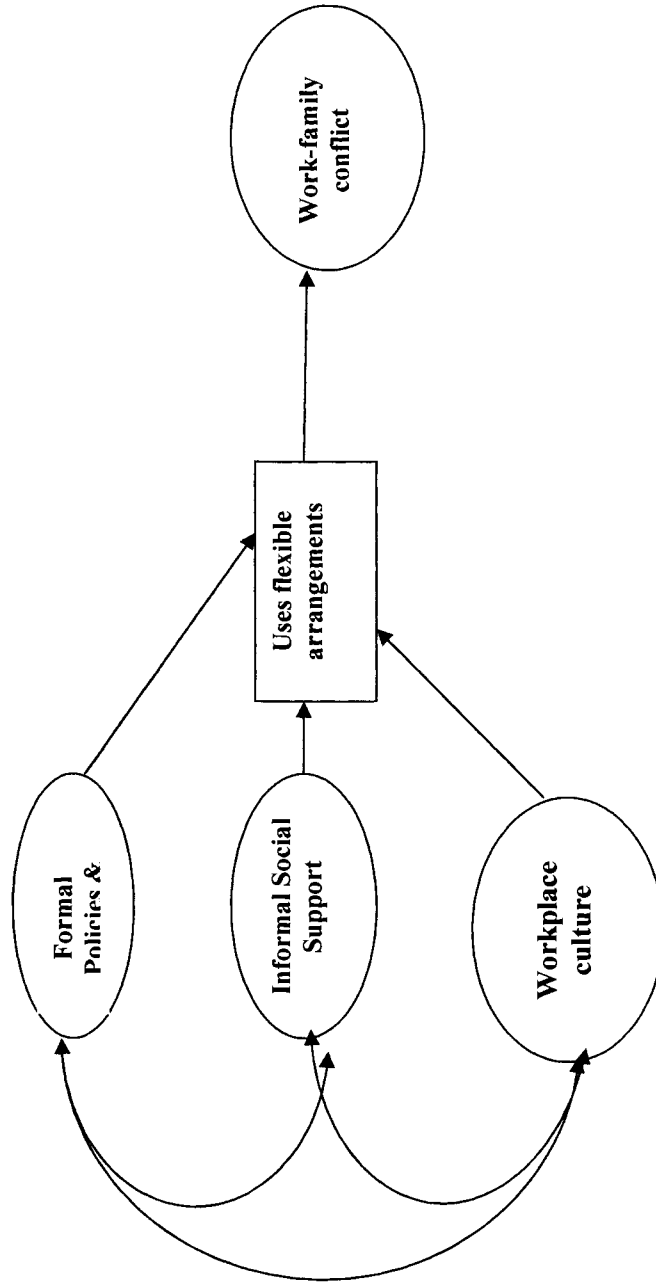


Figure A-2: Hypothesized Structural Model of the Predictors of Family-Work Conflict

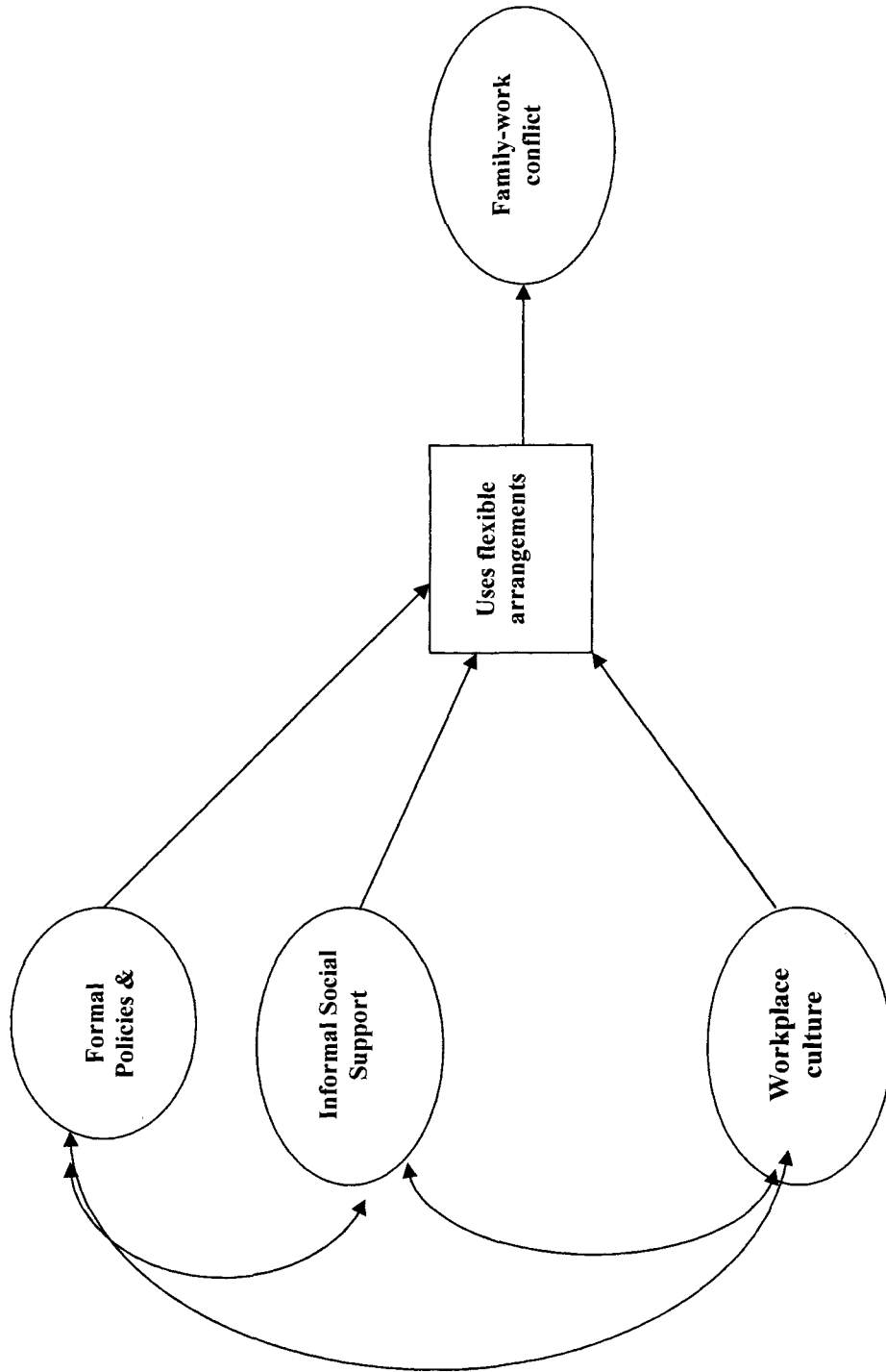


Figure A-3: Hypothesized Structural Model of the Predictors of Work-Satisfaction

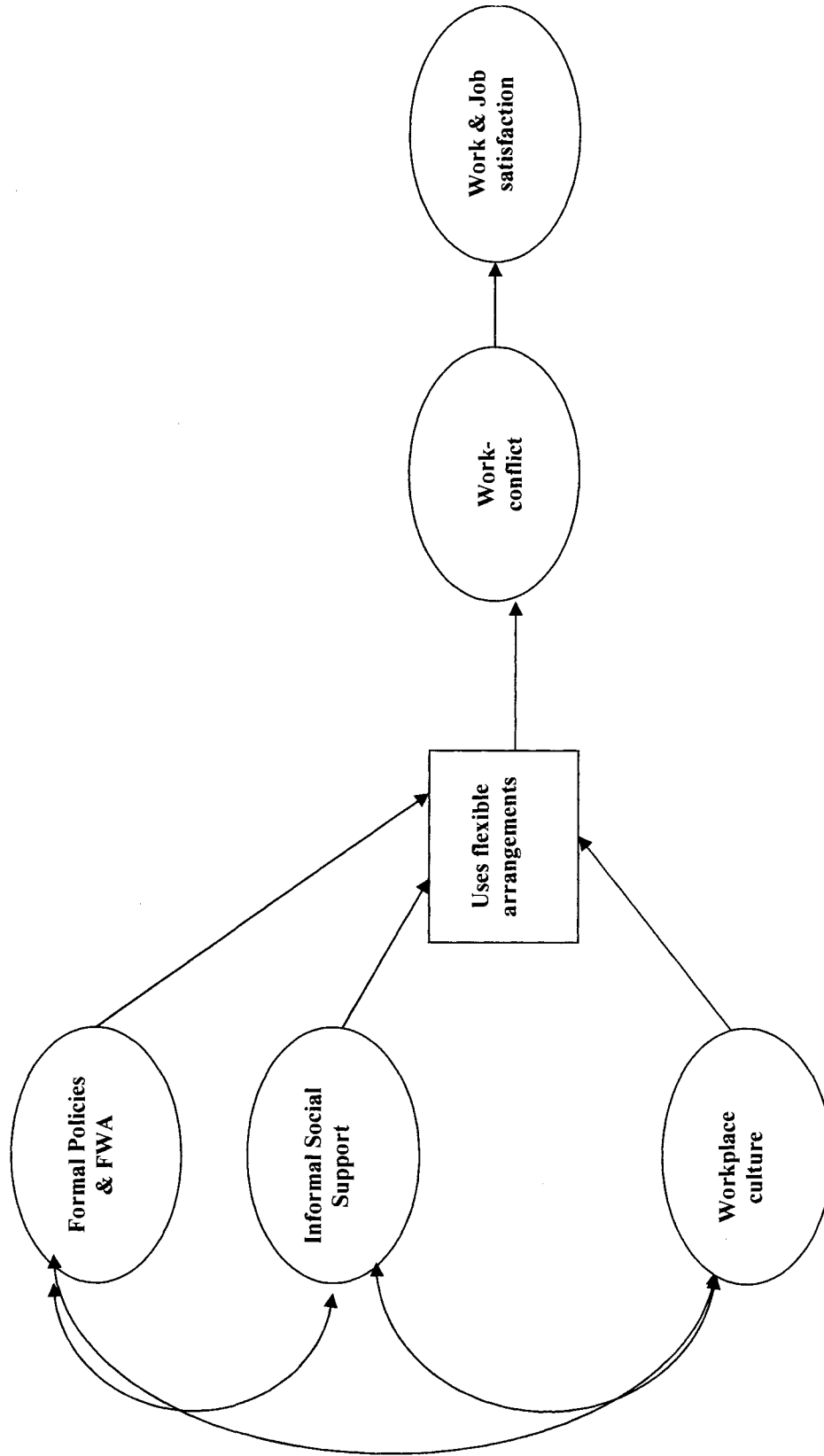


Figure A-4: Hypothesized Structural Model of the Predictors of Family and Life Satisfaction

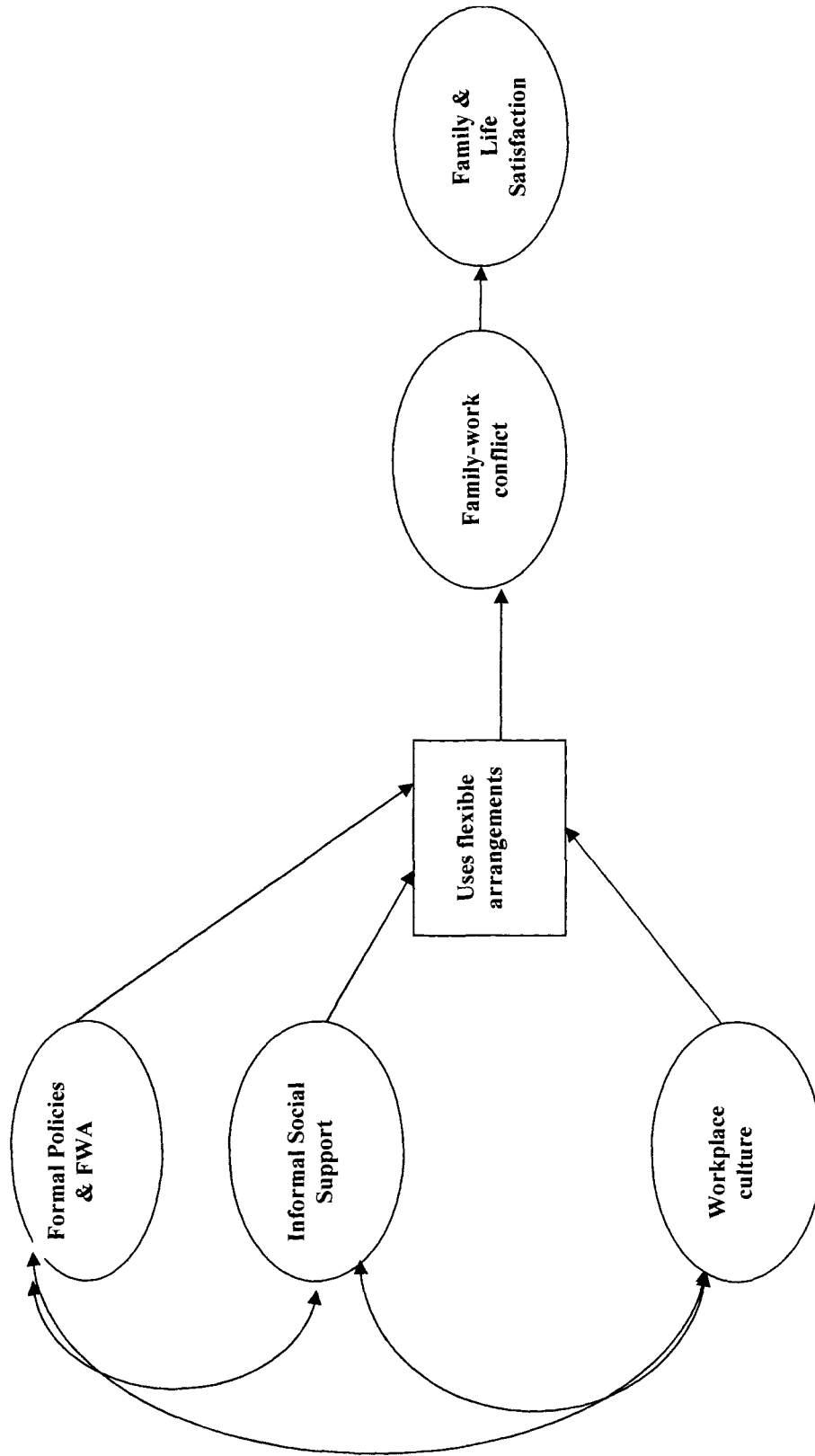


Figure A-5: Hypothesized Structural Model of the Predictors of Stress

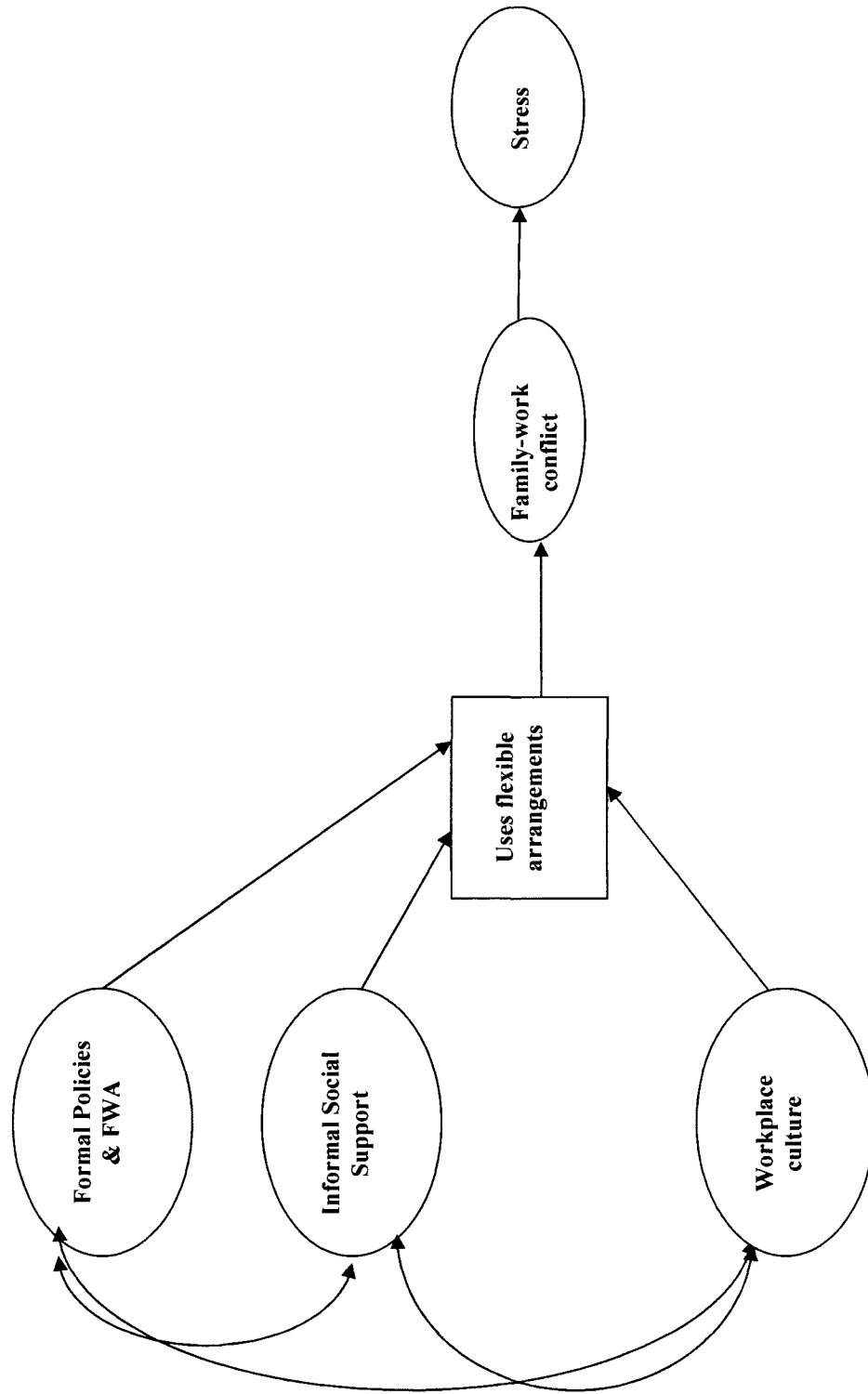


Table A-1
Recoded Items and Measures

Items	Values	Measure
Act as a parent of a child any age	1=yes 0=no	Parent
<p>1. Do you currently provide special assistance or care for a disabled, emotionally disturbed, or seriously ill child in your home?</p> <p>2. Do you currently provide special assistance or care for a seriously ill or disabled non-elderly adult relative in your home?</p> <p>For elders with disability</p> <p>3. Do you currently provide special assistance or care for a relative or in-law 65 years old or older –helping them with things that are difficult or impossible for them to do by themselves?</p> <p>4. Did you take time off work or work fewer hours during the past year than you would otherwise have done to be able to provide this attention and care? (yes only)</p> <p>5. Are you helping on a regular or only intermittently when special needs arise (regular only)</p>	1=yes 0=no	Exceptional Care Responsibility
Exceptional Care Responsibility: Multiples Composite created by adding ECR types.	1 = 1 dependent 2 = 2 dependents 3 = 3 dependents	Exceptional Care Responsibility: Number of Types of Exceptional Care Responsibilities

Items	Values	Measure
Approximately how many employees work for your company or organization for all locations in the US?	1=50-74 employees 2=75-99 employees 3=100-249 employees 4=250-499 employees 5=500-999 employees 6=1, 000-5,999 employees 7=6, 000-9,999 employees 8=10, 000 or more	Organization size
Gender of respondent as determined by interviewer	0=Female 1=Male	Gender
Age of respondent	0-99	Age of respondent
Race/Ethnicity White	1=White 0=Other	Race/ethnicity
African American	1=African American 0=Other	
Hispanic/Latino	1=Hispanic/Latino 0=Other	
Total Family Income	0 – 999,999.99	Family Income
Respondent Education	1=Less than HS 2=High school or GED 3=Some college/no degree 4=Associate degree 5=4-year college degree 6=Graduate or professional degree	Education
Marital Status	0=Married or cohabitating 1=Single	Marital Status
Number of children <18 in household	0-10	Number of children under 18
Number of children <6 in household	0-10	Number of children under 6
Who is responsible for child care?	1= I am 0= My spouse/partner/partner	Respondent responsible for childcare

Items	Values	Measure
Spouse/partner: All hours/wk at all jobs	0-178	Spouse works >35 hours week
<p>1. How often have you not had enough time for your family or other important people in your life because of your job?</p> <p>2. How often have you not had the energy to do things with your family or other important people in your life because of your job?</p> <p>3. How often has work kept you from doing as good a job at home as you could?</p> <p>4. How often have you not been in as good a mood as you would like to be at home because of your job?</p> <p>5. How often has your job kept you from concentrating on important things in your family or personal life?</p>	<p>5=Very often 4=Often 3=Sometimes 2=Rarely 1=Never</p>	<p>Work-family conflict Scale (5-items)</p>
<p>1. How often have you not been in as good a mood as you would like to be at work because of your family life?</p> <p>2. How often has your family or personal life kept you from doing as good a job at work as you could?</p> <p>3. How often has your family or personal life drained you of the needed energy you needed to do your job?</p> <p>4. How often has your family or personal life kept you from concentrating on your job?</p> <p>5. How often have you not had enough time for your job because of your family</p>	<p>5=Very often 4=Often 3=Sometimes 2=Rarely 1=Never</p>	<p>Family-work conflict Scale (5-items)</p>

Items	Values	Measure
1. I feel I am really part of the group of people I work with 2. I have the support from coworkers that I need to do a good job 3. I have support from coworkers that helps me to manage my work and personal or family life.	3=Strongly agree 2=Somewhat agree 1=Somewhat disagree 0=Strongly disagree	Informal Support Scale : Coworkers (3-items)

Items	Values	Measure
<p>1. My supervisor or manager keeps me informed of the things that I need to know to do my job well</p> <p>2. My supervisor or manager has expectations of my performance on the job that are realistic</p> <p>3. My supervisor or manager recognizes when I do a good job</p> <p>4. My supervisor or manager is supportive when I have work problems</p> <p>5. My supervisor or manager is fair and doesn't show favoritism in responding to employees personal or family needs</p> <p>6. My supervisor or manager accommodates me when I have family or personal business to take care of – for example medical appointments, meeting with child's teacher etc.</p> <p>7. My supervisor or manager is understanding when I talk about personal or family issues that affect my work.</p> <p>8. I feel comfortable bringing up personal or family issues with my supervisor or manager.</p> <p>9. My supervisor or manager really cares about the effects that work demands have on my personal and family life.</p> <p>10. My supervisor or manager is very competent in his or her job.</p> <p>11. I consider my supervisor or manager to be a friend both at work and off the job.</p>	<p>3=Strongly agree 2=Somewhat agree 1=Somewhat disagree 0=Strongly disagree</p>	<p>Informal support scale: Supervisor (11-items)</p>

Items	Values	Measure
<p>I have the support I need from family and friends when I have a problem with child care?</p> <p>I have the support I need from my family and friends when I have a personal problem?</p>	<p>4=Strongly agree 3=Somewhat agree 2=Somewhat disagree 1=Somewhat disagree 0=Strongly disagree</p>	<p>Informal support scale: Social Support (2-items)</p>
<p>1. Can you choose your own starting and quitting times within some range of hours?</p> <p>2. Can you change your starting and quitting times on a daily basis or must you stick to the times you choose?</p> <p>3. Do you actually use all the flexibility that is available to you to set starting and quitting times that are most helpful to you?</p> <p>4. Could you work full time/part time in your current position if you wanted to?</p> <p>5. Could you arrange to work for only part of the year in your current position?</p> <p>6. Are employees in your organization allowed to work from home?</p> <p>7. Are employees in your organization allowed to work a compressed workweek?</p>	<p>1=Yes 0=No</p>	<p>FWA Index (7-items)</p>
<p>1. How much do you use the flexible schedule options available to you at work?</p>	<p>3=A lot 2=Some 1=A little 0=Not at all 0= Don't have any</p>	<p>Use of flexibility</p>