

**Causes, Consequences, and Moderating Factors of Strain of  
Caregiving Among Employed Caregivers**

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## **Preamble**

Two decades ago (1991), we conducted our first national study of work-life conflict in Canada to “explore how the changing relationship between family and work affects organizations, families and employers.” Almost 21,000 employed Canadians participated in this research. Just over ten years ago (2001) we undertook our second national study of work-life conflict in Canada to determine how the “demographic, social and economic changes that occurred throughout the 1990's increased the percent of the Canadian working population at risk of high work-life conflict.” Just less than 32,000 employed Canadians took part in this study. In 2011-12 we undertook a third national study of work-life balance in Canada. Just over 25,000 employed Canadians participated in this study. Findings from this study are provided in a series of three research reports:

*Report One: Revisiting Work-Life Issues In Canada: The 2012 National Study on Balancing Work and Caregiving in Canada* was released in October, 2012. This report can be found at <http://sprott.carleton.ca/duxbury/>

*Report Two: Causes, Consequences, and Moderating Factors of Strain of Caregiving Among Employed Caregivers* uses the 2011-12 survey data to explore the link between caregiving demands, caregiver strain (emotional, financial and physical strain associated with the care of an elderly dependent) and role overload, work-life conflict, employee well-being, and organizational well-being.

*Report Three: Caregiving in Canada: A View From the Trenches* uses qualitative interview data collected from in-depth interviews with 150 employed male and female caregivers to explore the costs and benefits of two forms of caregiving (eldercare, multi-generational caregiving) to Canadians and the firms that employ them. It also focuses on what can be done to reduce the strains associated with caregiving.

This series of reports should provide business and labour leaders, policy makers and academics with an objective “big picture” view on the current situation with respect to work-life conflict and employed caregiving in Canada. It is hoped that the production of three specialized reports rather than one massive tome will make it easier for the reader to assimilate key findings from this rich and comprehensive research initiative.

## Chapter One: Introduction

In the new millennium dependent care is not just a question of care for children. Demographic, social, economic, and policy changes have made family care of older relatives an issue of extreme importance to policy makers, families, researchers and employers (Sims-Gould & Martin-Matthews, 2008; Fast & Keating, 2000). The growth of interest in eldercare as a 'work and family' issue can largely be attributed to its position at the nexus of a number of important socio-demographic trends including:

- Population ageing: As the baby-boom generation moves towards middle age, and their parents toward old age, the per cent of the population aged 65 years or older and requiring care is projected to increase. The sheer number of people living longer will increase the probability of having an elderly relative in need of at least some assistance (Sims-Gould & Martin-Matthews, 2007).
- Health-related factors: Medical advances that enable people with disabilities and health problems to live longer, inevitable declines in health that come with age, increased survival after catastrophic illness and injury, and new patterns of chronic illness and disability have all changed the landscape of care needs (Joseph & Hallman, 1998; Fast & Keating, 2000).
- Health-care restructuring: Health care reforms that emphasize early discharge and community-based care have shifted responsibility for care from formal to informal caregivers, and redistributed a considerable amount of eldercare to the community. This policy reform has made it necessary for informal caregivers to provide higher levels of care for frail, ill and disabled people at home (Fast & Keating, 2000).
- Increased labour force participation of women: Female family members (predominantly wives, daughters and daughters-in-law) have traditionally borne the lion's share of responsibility for the unpaid labour of family care-giving (Joseph & Hallman, 1998; Decima, 2004; Pavalko & Gong, 2005). The fact that two-thirds of these women are also employed in the labour force has made eldercare a work and family issue (Fast & Keating, 2000).
- Changing structure of families: The capacity of families to meet the expectations required by health services restructuring is affected by the changing structure of families, which today are smaller, more diverse, more complex and less stable, have less free time and break up more often. Families are also more diverse in terms of structure, patterns of functioning, and heritage (Grunfeld et al., 2007; Fast & Keating, 2000).
- Declining fertility rates: Declining fertility rates mean that Canadian families are smaller today than they were thirty years ago. The 2006 census reported that the average number of children per family living at home in 2006 was 1.2. These data, taken to their logical conclusion, suggest that within the next few decades, children will be required to provide support for a larger number of elderly family members.

Demographic projections suggest that society has yet to feel the full effects of the challenges of providing eldercare. There is consensus in the literature that the demands and expectations for care will continue to grow with the number of Canadians over 65 expected to double by 2026. According to Statistics Canada, the 2011 census determined that "The number of seniors aged 65 and over increased 14.1% between 2006 and 2011. This rate of growth was more than double the 5.9% increase for the Canadian population as a whole."<sup>1</sup> These data confirm Brink's (2004) prediction that the number of people requiring care will grow significantly in the future. As the baby-boom generation moves towards middle age, and their parents toward old age, a higher proportion of workers will simultaneously and/or sequentially be involved in combining paid employment with providing care and support to an ailing spouse or partner, parent, in-law or other older relative (Lero & Lewis, 2008, pg. 391). According to the Canadian Caregiver Coalition (2001), it is not a matter of "if you become a caregiver, but when." Clearly, the time is now for a definitive study on caregiving.

As part of this study we undertook a comprehensive literature that examined caregiving in all its complexities and reviewed what is currently known about "employed caregiving" in Canada (see Chapter Two of this report). This review determined that much of this literature in this area dealt with and/or debated the following issues:

- The extent and nature of employed caregiving (i.e., tasks performed, the burdens of employed caregiving, the coping strategies used by employed caregivers).
- The context under which employed caregiving is performed (i.e., the role of restructuring in health care, workplaces and communities).
- Anticipated changes in the number of employed caregivers over time and the future of employed caregiving in Canada.
- The impact of caregiving on the employed caregiver (i.e., consequences and challenges).
- The impact of employed caregiving on employers, society and the economy.

Several conclusions can be drawn from the research that has been done to date on caregivers:

- Families maintain the primary responsibility for the care of chronically ill and disabled elderly family members (Montgomery, Gonyea & Hooyman, 1985).
- Most caregivers are looking after only one individual, but close to one in ten (8%) are looking after a second family member (Decima, 2004).
- The typical caregiver is age 46, female and works outside the home - the exemplar of the "sandwich generation" (Marks, 2006).

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<sup>1</sup> Statistics Canada, The Daily: <http://www.statcan.gc.ca/daily-quotidien/120529/dq120529a-eng.htm>

- Providing care appears to affect the mental health of caregivers. Caregivers have consistently higher rates of depression than non-caregivers (Pavalko & Gong, 2005).
- While the per cent of employees providing care is small at any given time, adults are more likely than not to provide care at some point in their lives with the greatest proportion of caregiving occurring in midlife, a time when most employees are also juggling work and other family responsibilities (Pavalko & Gong, 2005).
- Caregivers provide a range of tasks in looking after their family member, the most common being providing medication, paying bills, driving them to destinations (e.g., doctor visits) and assisting with lifting and moving. These tasks are performed by a large majority of caregivers, although less than half report doing so on a daily basis. The incidence and frequency of tasks performed are related to the nature of a recipient's disabilities (e.g., lifting assistance with older, physically disabled individuals) (Decima, 2004).
- A significant proportion of caregivers are paying out-of-pocket costs to provide care to their family members (Decima, 2004).
- The contributions made by informal caregivers are extremely important. Care provided by a family member or friend can have a value related to the quality of life of the care recipient that cannot be replaced by any amount of formal services (Health Canada, 1999).
- Family members who are providing care may need support in the caring role, both to help them meet the needs of the person requiring care, and to help them meet their personal or family needs during the time they are caregivers (Health Canada, 1999).
- There is a persistent gendered division of labour in the allocation of caregiving work, with women, regardless of employment status, income and family structure, being more likely than men to perform the intensive personal and physical care tasks (Campbell et al., 1998; Neal et. al., 1993; MacDonald, Phipps & Lethbridge, 2005; Rajnovich, Keefe & Fast, 2005; Williams, 2004).
- Compared to women, men do different *amounts* as well as different *types* of care work and in different combinations with paid work and formal care help (Guberman 1999; Rajnovich et al., 2005; Pavalko & Gong, 2005; Pyper, 2006).

## **1. Employed Caregivers**

Analysis of the existing literature revealed a number of gaps in our knowledge about employed caregivers (see Chapter Two). These shortcomings informed the development of our research program on employed caregivers.

A *caregiver* is operationally defined in this study as someone who provides a broad range of financially uncompensated ongoing care and assistance, either by necessity or choice, directly to family members who are in need due to physical, cognitive, or mental health conditions. Eldercare is a form of caregiving that relates to the special needs and requirements that are unique to senior citizens. These definitions are consistent with those used by the Canadian Caregiver Coalition (2001) and Fast and Keating (2000). Eldercare is different from childcare in that it tends to increase in amount and intensity over the course of caregiving (Morris, 2001). The timing of care is also different. Caring for children spans many years, carries a fairly predictable pattern and changes occur slowly with time. Caregiving, on the other hand, is less predictable and varies widely in duration (Pavalko, & Gong, 2005).

The focus in this study is on employed caregivers – individuals who are caregivers (as defined above) but also engage in paid employment. Our definition of employed caregivers includes two main groups: (1) Employees with responsibilities for the care of an adult dependent, and (2) Employees in the sandwich group (i.e., people who are dealing with their own dependent children while at the same time attending to the needs of aging parents).

## **2. Objectives of This Study**

The study described in this report was designed to meet the following objectives:

1. To better understand which employees take on the role of caregiver and why.
2. Quantify the work and family demands facing employed caregivers in Canada.
3. To estimate the prevalence of caregiver strain in Canada's workforce, identify what factors put employees at risk with respect to such strain and what can be done to reduce caregiver strain.
4. To quantify the impact caregiving has on employees who provide care as well as the organization that employs them.
5. To determine the impact of gender and caregiving situation on the above issues.

To meet this last objective we compare the findings obtained from the male and female employees in the sandwich group (i.e. employees who have children at home and also provide eldercare) to their counterparts with those attained with the men and women in the eldercare only group.

### **3. Relevance of this study to key stakeholders**

Our decision to restrict our focus to employed individuals providing care to family members can be justified as follows. First, as noted above, this group is large, encompasses the majority of employed caregivers and is growing. Unfortunately it is also understudied and our knowledge of the challenges faced by employed caregivers (especially those with multigenerational caregiving demands) is limited (Fast & Keating, 2000). Part of the problem seems to be that research on caregiving appears to have “fallen between the gaps” in terms of research agendas. Most research on caregiving has been confined to the gerontological and family studies literatures and has focused on caregiver burden and caregiver strain (Montgomery, Gonyea & Hooyman, 1985; Schene, Tessler, & Gamache, 1994; Sims-Gould & Martin-Matthews, 2007). Few researchers in these fields have looked at how to best combine the competing needs of paid work and caregiving (Fast & Keating, 2000; Montgomery, Gonyea & Hooyman, 1985; Pyper, 2006). While some researchers in the workplace policy and work-family domains have studied the balance between work and caregiving, most of the work in these disciplines has focused on the balance between employment and caring for younger children (Pavalko & Gong, 2005). This research study seeks, therefore, to inform policy makers by providing a focus on this understudied group.

Second while the growth of caregiving demands has led to an increase in research on the topic, the findings vary and comparability is limited because of a lack of consistency and clarity in definitions of caregiving (Pavalko & Gong, 2005; Montgomery, Gonyea & Hooyman, 1985). The problem is exacerbated by a lack of consensus in the research literature with respect to how best to measure caregiving as well as the consequences of caregiving (i.e., burden, strain) and the lack of a clear theoretical framework to guide research (Schene, Tessler and Gamache, 1994). Pavalko and Gong (2005) articulate these concerns by noting that at this point in time neither researchers nor policy makers know much about the structural conditions either at work or in the community that reduce the burdens faced by employed caregivers. Our study will address these issues by restricting our study to one broadly defined group, employed caregivers, one theoretical perspective (role overload) and the use of well established and valid measures from the literature. The large sample size will also allow us to conduct in-depth gender-based analyses. Such analysis is necessary given that the research in this area has identified a gendered division of labor in the allocation of caregiving work (Campbell and Martin-Matthews 2000; Morris 2004; Rosenthal and Martin-Matthews, 1999; Grunfeld et al., 1997; Gignac et al. 1996).

Third, our choice of employed caregivers was guided by the fact that a number of researchers (e.g., Pavalko & Gong, 2005; Ansello & Rosenthal, 2007) have expressed concerns with the fact that much of the research in this area focuses on the cost to the employer of introducing policies and practices to support caregivers. They go on to note that little data are available that talk about the costs associated with not supporting caregivers in their need to combine paid employment and caregiving. Our study should open these hidden costs and invisible contributions to public view and, we hope, to the scrutiny of researchers and the consideration of policy-makers and service providers.

Fourth, our choice of sample reflects our belief that the challenges faced by, and the supports needed by, employed caregivers are likely to be different from those experienced by caregivers who are not in Canada’s labour force - an assumption that we intend to empirically examine in

this report. Findings from this study should, therefore, inform both policy makers and employers who wish to develop policies and programs to address the concerns of employed caregivers.

Fifth, our focus on employed caregivers of all ages will increase our understanding of the issues faced by younger caregivers. Currently, our knowledge is constrained by the fact that most research focuses on older workers (Statistics Canada's General Social Survey, for example, focuses on workers 55 years of age or older). This is unfortunate as Uriarte-Landa and Hebert (2009) reported that 16% of workers aged 25 to 54 provide care to seniors in need of assistance. Our research design recognizes that caregiving is not restricted to older workers and will supply needed information on how age, career stage and life cycle stage affect the balance between work and caregiving.

Sixth, the decision to focus on employed caregivers recognizes the fact that the consequences for the Canadian labour market of high levels of work-caregiving conflict is likely to be significant and consequential. As the baby boom generation reaches the traditional retirement age, and the potential for labour shortages increases, pressures to keep older workers in the labour force will likely mount (Pyper, 2006; Duchesne, 2004). To support the greater costs associated with the health, social and income security of a proportionally larger population of retired senior citizens, Canada needs individuals of working age to participate actively in the paid labour market (Grunfeld et al., 2007). To retain the services of older workers with specialized skills which are in short supply it is likely that employers will need to make the workplace more "caregiver friendly." The aging of the workforce will also mean that a greater number of employers will experience, firsthand, the concerns of employees with caregiving responsibilities and will need to adapt appropriate policies and practices to support these workers (Lero & Lewis, 2008, pg. 391). Research such as that outlined in our proposal should increase our understanding of how best to keep talented caregivers, especially Boomers, in our labour force.

Finally, the costs to Canada's health care and social services systems would be onerous if employed caregivers were no longer available to provide care. Research has shown that the caregiving contributions of family members reduce or eliminate the need for some formal services. Our focus on the identification of how organizations can best support employed caregivers will provide information to policy makers and practitioners that will help deal with this increasingly important issue.

#### **4. Structure of this report**

This report is divided into seven chapters in addition to this introduction. A comprehensive literature review on employed caregiving is provided in Chapter Two. Chapter Three provides a summary of the methodology used in this study. A brief profile of 7966 men and women who responded to the caregiver section of the survey is given in Chapter Four. Data on the following six topics are presented and discussed in Chapter Five: the family demands borne by employed caregivers, why employees chose to take on the role of caregiver, caregiver strain, caregiving intensity, subjective caregiver demands, and the consequences of caregiving. Chapter six presents our findings with respect to the key predictors of caregiver strain and perceived stress (section one), role overload (section two), work-life conflict (section three), organizational outcomes, (section four) and individual outcomes (section five). The ability of the moderators to

impact the relationship between domain specific overload and total role overload is presented and discussed in section six. The report ends in Chapter Seven by articulating the key findings and conclusions of the study.

## **Chapter Two: Literature Review**

Family caregiving is a resource-intensive responsibility as the caregiver's time, energy and financial resources are diverted from their normal activities to caring for their loved one. Evidence indicates that caregiving is especially taxing on caregivers who are also engaged in paid employment as such individuals need to balance multiple roles and responsibilities - a balancing act that may result in higher levels of physical, mental, emotional, and economic strain. The research initiative that is described in this report was undertaken to increase our understanding of: (1) the factors that cause such strains, (2) the consequences that may arise as a result of caregiver strain and (3) the conditions that potentially moderate the relationship between the stressful conditions caregivers may experience and deleterious consequences. Before undertaking this research study we undertook an extensive review of the literature to put the study into context. This chapter of the report outlines key findings from this review with respect to what we know about employees' experiences combining paid employment and providing care for one or more elderly dependents. The articles reviewed for this review were gathered from the academic and practitioner literature, and policy reports published in Canada and the USA.

This chapter is divided into the following nine parts: definition of key concepts, caregiving context, prevalence of caregiving, determinants of caregiving, motivations for caregiving, consequences of caregiving, frameworks for studying caregiver strain, dealing with caregiver strain and areas of future research.

### **1. Defining the key concepts**

Terminology used in the literature to denote the activities, actors and other concepts related to eldercare are quite variable. Caregiving and caregiver strain are two important concepts that are used repeatedly in this review. We have defined our application of these terms below.

#### **1.1. Informal Caregiving**

“Caregiving” is a very general term pertaining to a variety of activities of care. To better capture the meaning of the term, Fast and Keating (2000) attempted to categorize these activities into four groups: personal, physical, organizational, and emotional. Rosenthal and Martin-Matthews (1999) grouped all caregivers into care providers (performing hands-on care tasks) or care managers (coordinating and managing services performed by others). Commonly used terms to describe caregiving activities are “basic care” or “personal care”, or “activities of daily living” (ADLs) such as dressing, feeding and bathing. To differentiate ADLs from somewhat less intensive activities such as grocery shopping, transportation, and handling finances, a term “instrumental activities of daily living” (IADLs) is used (Mature Market Institute, 2011). Furthermore, to emphasize that the caregiving is by family members, friends and neighbours rather than paid services, the terms “informal” or “unpaid” care are also interchangeably (Lum, 2011).

From the caregiver perspective, however, such strict delineation of their activities is often irrelevant because they might not see what they do as “work” at all and cannot tell at which point

the simple assistance they provide to elderly turns into “caregiving” (Henderson & Forbat, 2002 in Chappell, 2011). More controversies associated with the caregiving concept and definitions are discussed in greater detail in Fast and Keating (2000) and Duxbury et al. (2009). Of note is the difficulty one has interpreting the concept of family in “family caregiving” since the concept of family in our society has changed from what it used to be in the past.

In this study, we have adopted the definition of informal caregivers provided by the Canadian Caregiver Coalition (2001) (in Lum, 2011, p.1): “Informal caregivers are individuals who provide ongoing care and assistance, without pay, for family members and friends in need of support due to physical, cognitive, or mental conditions.” To further clarify the definition, caregivers may include individuals who are the primary caregiver, the sole caregiver or secondary caregivers who either live with or separately from the person receiving care (Duxbury et al., 2009).

## **1.2 Caregiver strain**

The terms used to denote the difficulties that caregivers experience in providing assistance to older adults are quite variable in the literature. The most frequently used terms are “burden” and “strain”, or less frequently, “stress”. In many sources, some or all of these terms appear to be interchangeable (e.g., Montgomery, 1992; Stoller, 1992; Vitaliano et al., 1991). Furthermore, Vitaliano et al (1991) in a review of ten measures of burden developed in the context of dementia identified terms such as “distress”, “behaviour and mood disturbance”, and “hassle” that are used in the literature in addition to “caregiver strain”. Further complexity arises because the relationships among these terms are not well understood. For example, while some authors treat burden/strain as a form of stress others have treated it as a stressor (Robinson, 1983; Davey & Szinovacz, 2008). Our review of the literature suggests that caregiver burden or strain is a multidimensional construct that may assume different meanings when used in different circumstances. As Vitaliano et al have pointed out, different conceptualizations of burden cause confusion and inconsistency in results making it difficult to draw fair comparisons.

In an attempt to clarify the definition and application of “burden”, Montgomery et al. (2000) summarized the ways it has been conceptualized in the literature. They categorized the most commonly applied meanings into three groups:

1. The extent of work load and hours spent (e.g., Metlife, 2006, notes that the National Alliance for Caregiving & AARP used Level of Burden Index to measure caregiving intensity),
2. The distress or difficulty associated with care, and
3. The perceived impact of this workload on the caregiver's life.

“Perceived” as it is used in the third category is a very important distinction as it underscores the subjective perspective of the caregiver on the objectively stated conditions of caregiving rather than the occurrence of these conditions. The authors indicated that this definition has been most commonly used in the literature. They note two types of perceived impact:

- Subjective burden (i.e., emotional impacts or stress). Researchers typically include subjective demands (i.e., impact of caregiving on the relationship between the caregiver and receiver) within this definition, and
- Objective burden (i.e., impact on resources such as time, health, space, finances and restrictions on social and work activities).

In this review, caregiver strain is defined in terms of "burdens" or changes in the caregivers' day to day lives which can be attributed to the need to provide care" (Duxbury et al., 2009, p. 10). To further refine this term, burden is defined as "the physical, psychological or emotional, social, and financial problems that can be experienced by family members caring for impaired older adults" (George & Gwyther, 1986 in Vitaliano et al., 1991, p. 67). In sum, caregiver strain will be explored as the caregivers' emotional burden and their subjectively perceived impacts of physical, social and economic conditions associated with caregiving to older adults.

## **2. Informal Caregiving: The Canadian Context**

Our review of the literature indicates that although the need for informal caregiving is likely to increase dramatically over the next several decades, the number of people able to provide such care is likely to shrink. Data supporting these claims are summarized below.

### **2.1 Aging Population**

The global population is becoming increasingly older (World Bank, 2012<sup>2</sup>). In Canada, from 1950 to 2010, the proportion of the population aged 65 and older grew from 8% to 14%. In 2036, it is estimated that this age bracket will represent 23% to 25% of the population, or 9.9 to 10.9 million people compared to 4.8 million in 2010. Life expectancy is also changing. World Bank data from 2012 indicates that the life expectancy in Canada in 2012 is 80.8 years of age compared to 71.1 in 1960. Also of note is the fact that men who reach the age of 65 years are expected to live for an additional 18.1 years while women who reach this age are likely to live an additional 21.3 years. This is significantly higher than the 13 (men) and 13.6 (women) additional years of those who lived until 65 years of age attained in 1921 (Statistics Canada, 2011a, 2011b). The number of individuals 80 years of age and older has become a sizeable portion of the population. In 2010, out of 4.8 million seniors there were 1.3 million individuals aged 80+, and 6,500 individuals aged 100 years and older. These changes in age demographics suggest that identifying people who are 65+ years of age as "seniors" may be outdated.

Aging population trends are evident in other countries as well. In the US, 13% of the population is aged 65 or older. Most of the Western European countries, Japan, Africa, Latin America, South Asia and East Asia have an even greater percentage of their population aged 65 years or older than does Canada. This is likely to change, however, as Canada has a large number of baby boomers and is expected to see more pronounced changes in age demographics compared to other nations over time (Conner, 2000; Statistics Canada, 2011a, 2011b).

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<sup>2</sup> Published Oct 12, 2012 at <http://www.worldbank.org/>

Thanks to improved living conditions and advances in health care and medical technology, people are not only living longer, but they are also living healthier. This is evidenced by an increasingly higher proportion of people aged 65 and older who are still in the labour force (145,200 men and 69,300 in 1997, and 332,200 men and 18,600 women in 2010) (Statistics Canada, 2011a). However, as people age, their health often deteriorates. In 2009, 25% of seniors reported at least four chronic conditions compared with 6% of adults aged 45 to 64, and many more seniors had one or more conditions (Statistics Canada, 2011a). Chronic conditions bear serious implications for continuous care (Chappell, 2011).

## **2.2 Rising elder care demand**

The above trends (longer life expectancy, falling mortality) mean that the proportion of the Canadian population who need both medical and non-medical care will continue to grow (Cranswick, 2002; Johnson & Lo Sasso, 2000; Saldo & Freedman, 1994). The first part of the Canadian baby boom generation has just achieved retirement age and it is projected that the number of individuals in the retirement age bracket will show noticeable growth as more and more baby boomers make this transition. By 2036, the numbers of "seniors" will more than double, while the numbers of individuals aged 80 and over will increase by 2.6 times. One out of every three seniors will be 80 or older in 2036 (Statistics Canada, 2010). Inevitably, poor health is expected to coincide with aging, especially in the 80 and over age group. In particular, there is reason to believe that we will see a greater number of chronic ailments as opposed to acute health problems (Guberman, 1999). In 1996, 21.5% of elderly in the U.S. over 65 years who lived in the community were unable to complete basic personal activities without assistance and in 2009, 25% of Canadian seniors suffered from more than one chronic condition (Statistics Canada, 2011a). Notably, an estimated 8% of all senior Canadians suffered from some form of dementia in the 1990's, with such cases on the rise (Neufeld & Harrison, 2000).

## **2.3 Shrinking availability of formal care**

At the same time that Canada will need more resources devoted to eldercare, the restructuring of the Canadian health care system has left limited resources for public health services. There are shortened lengths of stay in hospital, increased wait times, and increased costs associated with nursing homes and other professional services (Johnson & Lo Sasso, 2000; Neufeld & Harrison, 2000). While shortened lengths of stay in hospital may be attributable to advances in medical science and assistive technology, an elderly individual's early discharge back into the community will likely require caregiver support. Also relevant is the fact that improvements in medical science and assistive technology have enabled people to co-exist with debilitating illnesses for a longer time than in the past (Albert & Schulz, 2010). These trends place more burden on family caregivers as these elderly will not only need assistance with their daily activities, but will also require certain medical care or therapy that untrained informal helpers might not be comfortable providing (Armstrong & Kits, 2004; Frederick & Fast, 1999). Although living in the community is considered a physically and psychologically healthier option than being institutionalized, it can be expected that the demands for care will increase the anxiety, stress levels and burnout of informal caregivers (Frederick & Fast, 1999). Placing long-term care in the hands of the community is a relatively recent approach taken by the public

health system with very little known about the consequences it may have on caregivers and care receivers.

## **2.4 Shift to informal care for elderly**

With limited health care and social service resources, patients are transitioning back into the community from hospitals at an expedited rate. Additionally, and/or as a consequence of limited resources, an increasing number of elderly individuals who need help with activities of daily living are living in the community rather than in assisted living residences (Johnson & Schaner, 2005). As greater numbers of elderly are residing in the community, there is a strong tendency toward a shared responsibility of care from informal sources such as family, friends, and neighbours with limited support from formal sources. For example, in 2002, 39% of senior women and 46% of men received care from only informal sources (Armstrong et al., 1994 in Guberman, 1999; Cranswick, 2002; Henderson, 2002). Informal sources of care are predominantly close family members, of which, most are women. In a review by Gugerman, 1999, it was concluded that family and friends provide 75-90% of total care to their loved one. Even when the individual is in long term care, caregivers are still involved in care activities. It is anticipated that unpaid care by family and friends will continue to be a substantial part of eldercare in the future (Chappell, 2011).

## **2.5 Decreasing supply of informal caregivers**

The rise in elder care demands is at odds with the decreasing supply of informal caregivers. The changing nature of the family unit has led to a greater proportion of elderly within the family. Smaller family sizes, later marriages, remarriages, higher divorce rates, and more women pursuing career ambitions rather than having children have contributed to this shift. Women also tend to outlive their husbands, leaving them alone in old age and in need of care from other family members. An additional concern is the health of the caregiver's themselves. Today's caregivers are middle-aged and when their parents' demand for care increases, the caregivers themselves may start having health problems and not be able to provide intensive care (Frederick & Fast, 1999; Montgomery et al., 2000; Preston, 1984 in Singleton, 1998). In the U.S., the average age of caregivers has increased from 46.4 years in 2004 to 49.2 years in 2009 (Mathew Greenwald & Associates, 2009).

## **2.6 Value of Informal Caregiving**

It is difficult to assign a precise dollar value to the cost of informal caregiving because methods to determine these costs are quite variable in the literature. It is, however, very clear that informal caregivers contribute an immense value to society. One source estimates that informal caregivers for the elderly provide unpaid labour worth \$5 billion annually (Fast et al., 2002) with informal caregiving totalling \$25 billion. These informal sources of care offer significant savings to the Canadian health care system and subsequently, taxpayers (Chappell, 2011; Hollander et al., 2009 in Lum, 2011) with a contribution equivalent to the work of 276,509 full-time employees (Keating et al., 1999 in Henderson, 2002). These numbers indicate that family caregivers are a crucial part of sustainable public health care. They help ease health system level priorities such as staffing shortages and wait times, while ensuring care is available to the elderly

and offering cost savings to the elderly in the process (Caregiver facts, 2008; Johnson & Schaner, 2005). However, the downstream consequences of informal care are evident. Significant strain is placed on informal caregivers both financially and emotionally with no compensation provided for their work.

## **2.7 Challenges with respect to disability**

The demand for certain types of care depends on the impairment level of those in need of care. While the Canadian population is experiencing an improvement in the overall rate of disability, there are also concerns that the poor lifestyle choices of young adults may lead to increased rates of obesity and associated diseases and disabilities. In fact, when these individuals reach the older age bracket, their health may be worse than the health status that today's elderly enjoy (Uhlenberg & Cheuk, 2008). This gloom prognosis suggests that the need for informal caregivers will continue to persist in the foreseeable future. Moreover, despite technological advances to support communication and mobility needs, it is anticipated that the elderly population will still need substantial help with basic daily activities (Johnson & Lo Sasso, 2000, 2006; Spillman & Pezzin, 2000).

## **3. Prevalence of caregiving**

It is difficult to accurately estimate the number of informal caregivers in Canada. The criteria used to estimate the number of caregivers in the population is variable because of inconsistencies in two basic parameters: age of the caregiver and type of care provided. When discussing age of the caregiver, most sources include individuals aged 45 and older. Many of these sources also specify the top of the age range for caregiving as 64 years. This choice is based on a logical assumption that parents of individuals younger than 45 likely will not need assistance with their daily activities while those individuals older than 64 are not likely to have living parents. There are, however, references that include individuals outside of the traditional 45 to 65 year old cohort in their estimates of caregivers. Given the aging population, this inclusion is justifiable. Survey data shows that an increasing number of seniors who are taking care of their parents are still a part of the labour force (Cranswick, 2002; Statistics Canada, 2011a). Young adults may also assume some of the caregiving responsibilities for grandparents and other elderly relatives (Albert & Schulz, 2010). Since our study focuses on employed caregivers, capping the age of a caregiver at 64 seems reasonable.

When discussing the type of care provided, some sources report data pertaining to caregiving for all elderly (including a spouse's parents) while other sources exclude caregivers if they are providing care to a spouse's parent. There are other sources that report estimates for family caregiving which may include child care and care for disabled adults aged 18+. For all these reasons it is difficult to assign a precise estimate to the prevalence of informal caregiving in Canada. For the purposes of this review, we elected to report data that most closely describes the prevalence of caregiving to elderly dependents.

According to General Social Survey (GSS), Cycle 16, in 2002, more than 1.7 million Canadian adults aged 45 to 64 (or 16% of this age group) were caregivers to almost 2.3 million seniors suffering from long-term disabilities. Therefore, each caregiver is providing help to an average

of 1.3 seniors (Cranswick, 2002; Stobert & Cranswick, 2004). Estimates using the 2002 GSS suggest that 57% of these caregivers were employed in 2001. The number of employed caregivers is expected to increase over time as the numbers of seniors grow, family size decreases, and more women, who are the majority of caregivers, stay employed (Wagner, 2003). Data from the 2007 General Social Survey indicate that 7 out of 10 of the caregivers in 2007 were employed (Cranswick & Dosman, 2008).

Data from the GSS also give us information on the recipients of informal caregiving. These data show that in most cases employed caregivers provide care for elderly dependents who are either their parents or their parents-in-law. People are four times more likely to care for their parents than parents-in-law. In the 2002 General Social Survey, 67% of caregivers looked after their parents and 24%, their parents-in-law (Cranswick & Dosman, 2008; Stobert & Cranswick, 2004). In 2007, according to the Canada Year Book (2011), 1.65 million Canadians aged 45 and older cared for their own or a spouse's parents. These data, however, do not differentiate between employed and unemployed caregivers. In addition, data from a U.S. survey show that adult children constitute 42% of all caregivers for the elderly (Johnson & Lo Sasso, 2000). Apart from family members, care can be provided by friends, neighbours and co-workers. In the 2002 General Social Survey, 24% of caregivers provided care to non-kin seniors comprised (Stobert & Cranswick, 2004). More recently, a national study in the U.S. done by Neal and Hammer (2007) estimated that between 9% and 13% of U.S. households were made up of dual earner sandwiched couples

### **3.1 Prevalence of informal caregiving: “sandwich generation” caregivers**

The “sandwich generation” is a group of caregivers in their middle age who still have children in their home but are also taking care of their aging parents. Very little is known about this cohort of caregivers, including their prevalence. While examining Canadian social trends, Cranswick and Dosman (2008) found that almost 43% of caregivers to elderly were between 45 and 54 years old and very likely to have children living with them. In the U.S., the 2002 Health and Retirement Study identified 12% of individuals aged 55 to 64 years were caring for multiple generations. According to Family Caregivers Online (n.d.) 44% of Americans aged 45 to 55 have aging parents or in-laws and children under 21.

Estimates of the number of people in this group vary depending on the age group of caregivers and children considered. Some sources include those households where children are 18 and younger (e.g., Loomis & Booth, 1995; Rajnovich et al., 2005; Spillman & Pezzin, 2000), other sources include young adults up to age 25 who still live with their parents (e.g., Cranswick, 2002; Hicks et al., 2007; Raphael & Schlesinger, 1993). Further difficulty arises because employment status is not always indicated for the populations being studied. Nevertheless, in 2002, Statistics Canada identified 589,000 individuals aged 45 to 64 who combined child care, eldercare and paid work (Caregiver facts, 2008). In this study, more “sandwiched” respondents were employed (80%) than those who cared only for an elderly individual (65%). Additionally, approximately 26% of this multigenerational group cared for more than one senior. Women (32%) were more likely than men (25%) to find themselves “sandwiched” between responsibilities (Williams, 2004).

The sandwich generation is predicted to have the highest demands on their resources. Given the demographic trends, this group of individuals appears to be increasing. The trends contributing to this increase include aging baby boomers, delaying marriage and parenthood, decreasing fertility rates and increasing life expectancy. This results in families consisting of more elderly and fewer children (Hicks et al., 2007; Williams, 2005).

More research is needed to clearly identify this population and the factors that are contributing to their increasing prevalence. Consistent methodologies are encouraged to improve the accuracy and comparability of these estimates. Such data would better inform the public policy and workplace program development. Some researchers, in fact, express doubts as to whether or not the sandwich group is actually prevalent in our society. Chappell (2011) argued that in fact, it would be more appropriate to talk about “serial caregiving” rather than the “sandwich generation” because no more than 25% of caregivers (Penning, 1998 and Williams, 2005) find themselves in this situation. More importantly, they argue that “serial caregiving”, which relates to the continuum of care offered by women in first raising their children, then caring for their aging parents and then for their aging husband, may be more concerning.

### **3.2: Prevalence of informal caregiving: time in role**

Our review of the literature determined that there is a great deal of variability between studies with respect to the length of time the individual has provided care and the number of hours of care provided each week. Some studies include caregivers who have provided at least six months of care prior to the study, while others require a longer time. Similarly, the number of hours per week spent on caregiving varies from eight to ten or more hours per week. A consistent set of inclusion criteria for caregivers between studies is required to provide accurate estimates of the caregiving situation and to allow for comparative studies.

No matter the criteria used, the available data indicate that the time caregivers spend in a caregiving role is impressive. In 2007, family caregivers aged 45 to 64 spent on average 5.4 years providing care; 10% of these individuals had been providing care for at least 13 years. The majority of this group was women, and more than half were employed (Cranswick & Dosman, 2008). In one study of U.S. eldercare providers, an average of three hours each day was devoted to providing care despite the fact that many were employed (Margolies, 2004). Researchers have observed that caregivers often underestimate the time they will have to spend on providing care when they start helping out with small tasks. Over time, the increasing demands start conflicting with their work responsibilities (Mature Market Institute, 1999).

Time devoted to caregiving also varies considerably depending on caregiver capacity. In the 1996 General Social Survey (Frederick & Fast, 1999), having responsibility for more than one person at a time, working full-time, and having been providing care for more than two years all reduced the hours spent per week on caring. On the other hand, the care receiver’s age and condition significantly increased the care time. It is noteworthy that caregivers spent three to five times more time on eldercare when the dependent was a spouse rather than a parent.

Another condition that increases amount of care (time spent and tasks performed) is living with the elderly in the same household (Dee et al., 1992). This likely happens when the care

recipient's health has significantly deteriorated and constant care is required. Many caregivers have changed their living arrangements to live together with the care recipient when long-distance care becomes insufficient (Statistics Canada, 2011a).

### **3.3: Prevalence of informal caregiving: caregiving tasks**

Caregiving involves a broad range of activities that take many forms and levels of intensity at different points in time (Duxbury et al., 2009). Several researchers have developed frameworks for categorizing informal caregiving tasks. They differ slightly in their level of detail, but are overall quite consistent. In this review, based on Fast and Keating (2000), Henderson (2002) and Wagner and Lottes (2006) these tasks are classified as follows:

- Activities of daily living (ADLs): Day-to-day basic support also referred to as “personal care” this category includes activities such as bathing, dressing, feeding, toileting and transferring from chair or bed.
- Instrumental activities of daily living (IADLs): Includes activities such as housekeeping, meal preparation, home maintenance, banking, shopping and transportation.
- Nursing: Includes activities such as help with medications and basic routine medical procedures.
- Care management: Includes activities such as identification of care providers and coordination of their activities.
- Emotional care: Includes things like emotional support and reassurance.
- Psychological care: Includes things like encouraging communication and involvement in activities.
- Spiritual care: Includes activities such as listening, talking about life, praying together and going to church.

With the oldest group of Canada's population growing in size, an increasing number of individuals will gradually lose their ability to perform the activities of daily living without help and more seniors will require basic care. The Longitudinal Health and Retirement Study of caregivers aged 55 and older found that in 1994, 3% of men and 9% of women provided help with basic care. In 2008, these numbers had increased to 17% and 28% respectively (Mature Market Institute, 2011). Interestingly, caregivers continue to help with personal care even when the care recipient moves into a long-term care facility. Reasons for this may include a desire to improve the quality of care and/or reduce the cost of “assisted living” (Cranswick & Dosman, 2008). While most studies exploring caregiving tasks address ADLs and IADLs, there is little known about the amount of help provided for other tasks, who provides them, and whether there are any associated gender and employment differences.

The literature also suggests that the prevalence of caregiving tasks also depends on factors associated with the care recipient. One determinant is the care recipient's age and level of disability. At the stage when more help is needed with personal care, informal caregiving is often replaced with more formal or institutional care if financial resources are available (Uhlenberg & Cheuk, 2008). Parents who are perceived as being more dependent receive more financial assistance (especially mothers) and more help with transportation, meal preparation and personal hygiene (Nichols & Junk, 1997). The type of care may also depend on whether the elderly is a man or a woman because their care needs may differ (Cranswick & Dosman, 2008).

### **3.4: Gender differences in the prevalence and intensity of caregiving**

Most of the literature in the area seems to agree that women comprise the majority of informal caregivers. Of the studies reviewed in this report, most samples were predominantly women. Armstrong (1994) concluded that more than 70% of caregivers are women. She also reported that women do most of the caring work. Similarly, Johnson and Wiener (2006) estimated that two thirds of unpaid caregivers for elderly are women. In the past, when gender roles in society were strictly delineated, it seemed logical that women would do whatever was necessary to care for the family while men worked outside the home. Such is not the case today as Canada's workforce is quite balanced with respect to gender. This would suggest that there is a need to reassess gender roles with respect to caregiving. The available evidence suggests that this may, in fact, be occurring.

There are already a few studies where men constitute a significant proportion (30% - 40%) of caregivers to the elderly (Metlife, 2003; National Institute of Aging, 2011). Additionally, the 1996 General Social Survey (GSS), Cranswick (1997) noticed that among non-kin caregivers, men were more represented than among kin caregivers. According to Statistics Canada, in 1996, women caregivers to elderly outnumbered men by three to two. However, in 2000, The National Family Caregivers Association in the U.S. identified a more balanced distribution: 56% of informal caregivers were women and 44% were men (Henderson, 2002). To further support the equalizing of gender differences in the prevalence of caregiving, the 2002 General Social Survey showed that 54.4% of caregivers aged 45 to 64 were women and 45.6% were men (Rajnovich et al., 2005). The fact that studies usually focus only on the primary caregiver may also underestimate the prevalence of male caregivers. Having reviewed several studies, Harris (1998) concluded that sons made up 10-12% of primary caregivers and 52% of secondary caregivers. Similar conclusions were also reached by Spillmann and Pezzin (2000) who identified both primary and secondary caregivers. This would suggest that findings with respect to gender differences in caregiving might be different if the secondary caregiver's role was examined. It can also be expected that in the future, sons will be more involved in caregiving due to the demographic situation (i.e. no other family members available to care for aging parents) (Conner, 2000). While men seem to be more likely to provide caregiving than in the past, our review determined that there are still noticeable gender differences in the intensity of care (time devoted and type of care provided).

Findings related to the time spent on caregiving are quite variable in the literature. The methodology used to estimate time is often not specified making it difficult to make any fair comparisons. Nevertheless, it can be concluded that women spend significantly more time on

caregiving than men. In the 2002 Health and Retirement Study, men aged 55 years and older provided an average of 98 hours of care to their parents or in-laws per year, while women spent 141 hours (Johnson & Schaner, 2005). When looking at a younger group of caregivers, 45 to 64 years old, the 2002 General Social Survey found that caregivers in this age group spent considerably more time looking after the elderly. Women spent 29.6 hours per month (355.2 hours per year) while men spent 16.1 hours per month (193.2 hours per year). According to this study, women dedicated almost twice as much time to these tasks than men (Stobert & Cranswick, 2004). A different sample, likely reflecting much more intensive caregiving situations, found that women caregivers spent 21.9 hours per week on care tasks while men spent 17.4 hours (Mathew Greenwald & Associates, 2009).

Gender differences are also common with respect to reasons given for spending time in caregiving. There is some evidence that for women, there is a sense of responsibility of being primary caregivers or living with the elderly in the same house. On the other hand, men choose to spend more time providing care when they feel close to the recipient in the first place (Frederick & Fast, 1999). Employment status also affects the intensity of caregiving differently for men and women. When sons are employed, their hours of care decrease significantly, while daughters continue providing the same level of care despite employment (Stoller, 1983 in Brody, 1990).

Female caregivers also differ from their male counterparts in terms of the type of care tasks that they perform. In one study, not controlling for employment status or number of dependents, women were found to perform four different tasks while men performed only two (Gerstel & Gallagher, 1993). Women usually perform much more intensive personal and hands-on care (Amirkhanyan & Wolf, 2006; Cranswick, 2002; Henderson, 2002; Kramer & Kipnis, 1995; Montgomery et al., 2000). In a 2007 study, 40% of women and fewer than 20% of men provided personal care. In the same study, 60% of women and 30% of men performed regular tasks inside the house such as meal preparation, cleaning or laundry. On the other hand, more men provided help with tasks outside of the house such as repair and house maintenance. Not many family caregivers provided medically related care, but when they did, women did it more frequently than men (Cranswick & Dosman, 2008). Authors have observed that tasks which appear to be in a women's domain, seem to be more urgent and tied to a schedule. Women's tasks cannot wait. In contrast, "men's work" is more flexible and can be done when there is more time. Men tend to be involved in caregiving in an indirect and less intensive way. They take a more business-like approach to caregiving (Henderson, 2002). In Metlife studies (2003, 2011) more men than women reported that they provided care at a distance and helped with finances and financial management. Not surprisingly, female caregivers suffer more from the conflict between caregiving and work responsibilities.

There are divisive findings regarding gender difference in care management. Cranswick and Dosman (2008) found that women were more likely than men to help with this task while Montgomery et al. (2000) concluded that men help more with coordination and management of care and purchasing services. There are, however, some tasks that both men and women perform at equal levels. Cranswick (2002) as well as Cranswick and Dosman (2008) did not find any gender differences with respect to transportation and shopping, tasks that most caregivers are involved. Both men and women also help their dependents financially (Metlife, 2003).

### **3.5: Impact of employment on prevalence of caregiving**

A high proportion of caregivers have paid jobs outside of their home. The 2002 General Social Survey found that 77% of men aged 45 to 64 and 63% of women in the same age group were combining caregiving and work, most of them being employed full-time (Cranswick, 2002). These numbers pertain to all caregivers, but it is likely that they also reflect caregiving to the elderly and to some extent caregiving in multigenerational households.

Caregiving requires a considerable amount of time and effort. As such, it can be expected that employment will interfere with the services that informal caregivers provide to the elderly. On the other hand, caregiving requires financial means and employment provides income that allows caregivers to purchase more services than those of lower socioeconomic status (Brody, 1990). There is conflicting evidence regarding how employment impacts the time people spend on caregiving to the elderly. This is especially apparent when discussing the impacts of employment according to gender. In the sample of the 2002 General Social Survey, having a job did not significantly affect the amount of time both men and women spent on caregiving tasks (Stobert & Cranswick, 2004). However, an earlier study found that being employed decreased sons' caregiving activities by 20 hours per month while the time daughters spent taking care of their parents was not affected by their employment status (Stoller, 1983 in Seccombe, 1992). It is hypothesized that these trends have changed over time.

There is significant evidence in the literature suggesting that employment affects the type of tasks caregivers perform. An overall observation across studies is that caregivers who are not employed are more likely to help with the activities of daily living (Brody & Schoonover, 1986; Mathew Greenwald & Associates, 2009). When discussing gender, however, the impact of employment status on how much and what type of care is provided differs between men and women. Several researchers have reported that neither work responsibilities nor work status (full-time versus part-time) significantly changes the intensity of caregiving provided by women (Armstrong, 1994; Brody, 1990; Kramer & Kipnis, 1995; Rosenthal et al., 2004). This finding has been interpreted as suggesting that women feel strongly committed to their caregiving duties irrespective of the demands it places on their time and energy. Others note, however, that employment may affect the types of care women provide as it is likely that working women have less time for personal care, housekeeping, and emotional support (Brody & Schoonover, 1986; Mature Market Institute, 2011).

Men's caregiving activities, on the other hand, are strongly impacted by their employment status. In the 2008 Health and Retirement Survey, it was found that men who worked part-time were significantly more likely to provide basic care than their full-time counterparts. Additionally, full-time workers reported providing more financial assistance (Mature Market Institute, 2011).

## **4. Determinants of caregiving**

There are a variety of reasons why family and friends become engaged in caregiving. Primarily, it is a consequence of the health condition of the elderly and their need for help (Cranswick & Dosman, 2008; Cranswick & Thomas, 2005; Johnson & Lo Sasso, 2000; Mathew Greenwald & Associates, 2009; Uhlenberg & Cheuk, 2008). Research suggests that parents are the biggest

group of eldercare recipients. Johnson and Lo Sasso found that all respondents who indicated that their parents needed assistance also provided it. Having young children, a frail spouse or in-laws did not deter them from providing assistance. However, if the parent requiring care had a spouse capable of providing it, less assistance was needed from the children (Cranswick & Dosman, 2008). The most frequent condition that necessitates a senior's dependency on other people's help is old age followed by some type of dementia. Long-term conditions are present in seven out of ten caregiving situations (Mathew Greenwald & Associates, 2009). Current demographic trends are likely to increase the prevalence of these conditions in the future. The severity of the impairment will also influence the need for caregiving. If the severity of the impairment requires help with activities of daily living, this may reduce the amount of family caregiving and instead involve more formal caregiving if the family can afford it (Uhlenberg & Cheuk, 2008).

The availability of formal sources of care also has a bearing on the amount of caregiving provided by family members. Formal sources of care are increasingly limited as hospitals are under pressure to discharge patients as quickly as possible and since the focus of community care access centres are on post-acute care. Continuing care for elderly with chronic conditions is therefore placed in the hands of informal caregivers (Lum, 2011). The level of care that families can provide depends on their living arrangements, education and income, and the presence of a caregiving network. Geographic proximity determines whether dependents receive hands-on care (Brody, 1990; Conner, 2000; Nichols & Junk, 1997; Rosenthal et al., 2004) and living together in the same household increases the intensity of care (Johnson & Lo Sasso, 2000).

The socioeconomic status of informal caregivers is quite variable but in the majority of cases the household incomes of caregivers are below the national average. Health Canada survey data revealed that only 35% of households with caregivers have annual income over \$45,000 (Health Canada, 2002). Limited financial resources constrain the options available for providing care. Caregivers with financial limitations have to rely more heavily on their own efforts as they cannot afford to purchase expensive services (Conner, 2000). It appears that low income women are most likely to find themselves in a caregiving role. These women perform most of the care tasks themselves, thus creating a conflict with work responsibilities but cannot afford to reduce their work hours because their salaries significantly contribute to their household income (Montgomery, 1992). Morris (2004) reported that in these cases the women's lower income was likely associated with lower education.

The affluence level of the dependent also factors into the caregiving situation. According to the 2002 General Social Survey and several other studies, elderly with higher education and consequently more financial resources from previous employment did not require as much informal care as those with lower education and less wealth. They were able to afford to purchase formal sources of care. This association was stronger for men than for women (Cranswick & Thomas, 2005; Spillman & Pezzin, 2000).

A primary caregiver's role is eased by the presence of a caregiving network. Most often the caregiving network is comprised of siblings. Johnson and Lo Sasso (2006) demonstrated that having sisters reduced the likelihood that a woman would have to provide care for her parents, but having brothers did not. The likelihood of men to be intensively involved in caregiving for

his parents, on the other hand, decreased when he had female relatives. Most often the hands-on caregiving responsibilities were delegated to his wife and he engaged more in care management (Montgomery et al., 2000). Seccombe's (1992) conclusion that gender is one of the most important predictors of caregiving is further evidence for this pattern.

Ethnicity and living in a rural area are other suggested determinants of caregiving. Information about the caregiving situation among minorities is scarce so research is necessary to explore the impact of culture on caregiving circumstances and preferences. Nevertheless, there is evidence to conclude that some ethnic groups provide more caregiving to their kin than the national average. Uhlenberg and Cheuk (2008) found that Hispanics and Asians in the U.S. rely on informal caregiving more than Caucasians, and Kosloski et al. (1999) suggested that older African Americans might not trust formal services. Hispanic caregivers were found to cut back more on care expenses than Caucasians during the economic downturn, and consequently had to provide more care at home (Evercare Survey, 2009). Lack of knowledge about available services and language barriers are additional difficulties faced by minority groups especially if they are recent immigrants (Rajnovich et al., 2005; Remmenick, 1999). Finally, a caregivers' employment and consequently their household income in some regions is lower when they live in rural areas. As a result, they will have to provide more caregiving themselves (Keefe, 1997).

## **5. Motivation to provide care**

It is not well understood why middle-aged people, predominantly women, decide to assume the demanding role of caregiving to their elderly dependents. When one considers the options available for caregiving (i.e. public health care system, community services, private agencies, caregiving networks) it might appear that they have made a free choice in assuming this role. Such an assumption receives some support from the literature. In a study by Health Canada (2002), 60% of caregivers said they provided care to a family member because they chose to do so. Other research shows that there is always a subset of study participants that mention affection, love, friendship, attachment and feeling close to the care recipient as the strongest motivators behind their choice to provide care (Briggs, 1998; Guberman et al., 1999; Montgomery, 1992). This finding suggests that some caregivers are not pressured by any other circumstances. In a recent study by Duxbury et al. (2009), 57% of the employed caregivers said that what they were doing for their relatives was "labour of love". Providing care for reasons other than free choice has adverse effects on caregivers in terms of disrupted employment and stress levels (Health Canada, 2002).

Motivation to provide care, however, is not as straightforward as that suggested by the aforementioned studies. The available evidence suggests that even when adult children do not feel great affection toward their parents they still want to provide care. They feel a familial responsibility and duty toward their parents and/or simply see that their parents need assistance (Briggs, 1998; Montgomery, 1992). Willingness to provide care sometimes stems from gratitude and reciprocity. Children want to return the care they once received from their parents, or, on the contrary, they want to provide the good care that they did not receive in their childhood (Abel, 1991). This motive might have roots in a person's value system, personal characteristics or the need to confirm one's self-image. Personality characteristics have also been found to influence the caregiving decision, especially for women. Research has identified compassion, inability to

not take notice of a person in need, feeling a calling to care, a need to feel useful, and a need to help others as strong motivators to assuming a caregiving role (Briggs, 1998; Guberman et al., 1999).

Since women dominate the field of caregiving, it is interesting to look closer at the reasons that motivate them to assume this role. Although affection and personal characteristics are strong motivators, women are also more likely than men to feel pressured by societal expectations and upbringing to take on the role. That is, many women feel that taking care of family members is their obligation even if they are employed (Rosenthal et al., 2004; Margolies, 2004). It has been observed that even if there are several family members available, daughters will be the first to emerge as the primary caregiver followed by other women and then by men (Guberman, 1999; Henderson, 2002; Margolies, 2004; Seccombe, 1992). Women may admit that responsibilities should be shared equally between working siblings and that it is better to pay for care rather than quit their jobs, but in practice they often do not follow these beliefs (Brody, 1990).

The above mentioned reasons for choosing to become caregivers have emotional, psychological, and/or moral roots. Apart from these reasons, purely logistical considerations play an important part the decision to assume a caregiving role. Forty percent of interview respondents in the study by Duxbury et al. (2009) said that there was nobody else who could do it. These caregivers were unlikely to have the freedom of choice. This could, however, be a subjective perception rather than a fact. Daughters tend to feel that nobody else will be able to take better care of their parents than they can (Guberman et al, 1999). Similarly, formal sources of care are often not available. For example, there is a lack of sufficient beds in institutions, limited duration stays and inadequate support from community services (Armstrong & Kits, 2004; Guberman et al., 1999) especially in rural areas (Keefe, 1997). Family members are also often dissatisfied with the services provided by public agencies or paid care (Briggs, 1998) and believe that the home environment is the best place for their loved one, especially when they live close by (Briggs, 1998; Keefe, 2002; Rosenthal et al., 2004). Importantly, studies have also found that living in the community and receiving care from family members is often preferred by the elderly (Soldo & Freedman, 1994).

An equally important consideration is the affordability of services. Costs of nursing homes and paid home care are on the rise. It is consistently reported across studies that families with lower incomes cannot afford to purchase services for their frail kin and therefore rely on informal sources of care. The caregivers that are especially subject to this situation are poor women, rural residents, and recent immigrants. If not for their own effort, their loved ones would be left without proper care (Caregiver facts, 2008; Johnson & Schaner, 2005; Keefe, 1997; Mathew Greenwald & Associates, 2009). These individuals would benefit the most from public health system resources, community support and workplace policies aimed at eldercare providers.

Imposition and financial dependence are two reasons for providing care that may cause particular distress for the caregiver. There is evidence that women are more vulnerable to these pressures than men. In a study of 40 Quebec families, Guberman et al. (1999) learned that some dependents had refused to go to an institution or a parent had designated one child to be the caregiver. Thus, the responsibilities of caregiving were imposed on the children, leaving them no choice but to provide care. Likewise, without a source of income, some daughters had to provide

care to their mothers or in-laws because they were dependent on the disabled mother's pension or husband's financial support. Undoubtedly, a complete lack of choice in providing care makes it an exhausting and depressing task. Those who are employed are less subject to such pressures, but daughters who have left employment to take care of a parent may end up becoming caught in the former condition of providing care out of necessity.

It is evident from the discussion above, that motivation to provide care is based on multiple considerations rather than just pure choice. In a study involving 15 women, when asked why they chose to be a caregiver, they often could not give a specific reason. Over time, they just naturally emerged as caregivers to their parents (Briggs, 1999). This reflects historical societal norms that prescribe a women's behaviour in situations when a family member needs care. "Who else if not her" will provide it?

Unfortunately, not all of the sources that were reviewed in this section provided information regarding the employment status of the caregivers. Nor could we find any discussions of possible associations between motivators to care and employment status. Nevertheless, there is reason to believe that most of the motivations addressed will apply to both employed and non-employed caregivers. Gender differences in the motivation to provide care is another area that is lacking in the literature. While we know quite a bit about the reasons why women assume a caregiving role, the motives behind men's choice in assuming this role is limited. We were also unable to find any research that discussed whether caregiving motives have any impact on the quality of care provided or on the caregiver's well-being.

## **6. Consequences of caregiving**

Consequences of caregiving to older adults go beyond the effects on caregivers and those being cared for. Multiple stakeholders are involved both directly and indirectly. Harlton, Keating and Fast (1998, p. 281) defined stakeholders as "a broad set of constituents including older adults themselves, their family members, friends and neighbors, those who provide services to older adults and those who develop policies for seniors benefits and services." Employers may also feel the impacts of caregiving because many caregivers are employed. Society in general is impacted through public policy and the allocation of resources. This section will review the major findings with respect to the consequences experienced by the key groups of stakeholders: caregivers, employers and society. This section ends with a review of what we know about the consequences of caregiving for those in the sandwich group.

### **6.1 Impact on caregivers**

Individuals can be affected by their caregiving responsibilities in a variety of ways. Elaborating on Cranswick's (2002) categories, all potential outcomes can be divided into physical and mental health problems, work-related outcomes, economic impacts, social consequences, and living arrangements. This section will review these outcomes and then provide a brief discussion of the positive outcomes associated with providing care to the elderly.

### **6.1.1 Physical health problems**

There is ample evidence in the literature suggesting that taking care of an elderly dependent may cause a variety of health problems. Firstly, providing personal care to severely disabled elderly (e.g., bedridden or in wheelchair), which usually involves lifting and turning, may cause muscle strain and back problems. Secondly, sleep deprivation can also occur, which leads to various physical and mental health problems including fatigue, headaches, ulcer, inability to concentrate, and hypertension (Armstrong, 1994; Fradkin & Heat, 1992; Guberman, 1999; Metlife, 2003). In the 2002 General Social Survey, 10% of men aged 45 to 64 and 20% of women reported having sleep disturbances due to providing eldercare. When discussing physical health, the gender difference was even bigger with 7% of men in this group and 21% of women reporting health problems. These findings suggest that women are at a higher risk of “caregiver burnout”, which is more likely to happen when they are involved in basic personal care (Cranswick, 2002). In contrast, the 2008 Health and Retirement Study in the U.S. concluded that women who provided basic care, irrespective of their age, were in better health than men (Mature Market Institute, 2011). This conflicting evidence suggests that there are complex situational and personal factors involved that affect a caregivers’ health.

It appears that caregiving to elderly takes a greater toll on the health of younger caregivers’ (aged 18 to 39), especially if they are men. This population experiences higher rates of cholesterol, hypertension, chronic obstructive pulmonary disease, kidney disease, and heart disease compared to their non-caregiving counterparts. Their health can be further affected by the behaviours that they engage in to cope with caregiver strain such as smoking and alcohol use. Smoking is higher among young, white-collar male caregivers, while alcohol use is more common among blue-collar caregivers. Finally, employed caregivers tend to ignore preventive health checkups and in general are neglectful of caring for their own health (Albert & Schultz, 2010).

### **6.1.2 Mental health problems**

Caregiving not only affects people’s physical health but also affects their mental, psychological and emotional well-being. Caregivers have to cope with the unpredictable nature of caregiving. They constantly worry about finances and the condition of the elderly dependent. They may often feel entrapped and helpless. Ultimately, the stress the caregiver experiences often spills over into their work life (Albert & Schultz, 2010; Guberman, 1999).

Research findings in this area are somewhat controversial. Many studies report caregivers as having high stress levels (Abel, 1991; Albert & Schultz, 2010; Dee & Peter, 1992; Neal et al., 1990; Rajnovich et al., 2005). Based on several Canadian sources Chappell (2011) concluded that up to 70% of caregivers claim that providing care to the elderly is stressful. However, only 5% admit that overall, they are not doing well, and a significant proportion of caregivers even point out the positive side of caregiving. In the 2002 General Social Survey, only 13% of caregivers described their lives as very stressful with no difference between caregivers and non-caregivers in this respect (Stobert & Cranswick, 2004). Moreover, Vitaliano et al. (1991) reported that over time, caregivers’ mental health did not deteriorate, but rather improved because they were able to adapt to the situation. These findings suggest that even if caregiving is stressful, it does not necessarily always lead to adverse mental health outcomes. Alternatively, it

may suggest that caregivers are able to find effective coping mechanisms over time. In cases where mental health is affected, caregivers suffer from depression (20% to 80% of caregivers), anxiety, fatigue, anger, resentment, hostility, eating problems among other disorders and in some cases engage in abusive behaviours toward the care receiver (Abel, 1991; Bumagin & Hirn, 2001; Guberman, 1999; Rajnovich et al., 2005).

Across studies, women have reported higher stress levels than men, and younger women (aged 18 to 39) tend to be more stressed than their non-caregiving counterparts (Albert & Schultz, 2010). In the 2002 General Social Survey, 24.9% of men said they sometimes felt stressed, and 6.5% said they almost always felt stressed while 35.7% of women reported sometimes feeling stressed and 14.2% almost always feeling stressed (Rajnovich et al., 2005). One possible explanation for this is psychological differences between men and women. Women tend to experience stronger feelings of guilt and perceived burden than men no matter how many additional hours they invest in caregiving (Briggs, 1998; Frederick & Fast, 1999). Women also report more depressive symptoms than men and find it more difficult to combine work and family responsibilities. For men, work serves as respite and actually reduces the distress associated with caregiving (Amirkhanyan & Wolf, 2006; Chumbler et al., 2004; Neal et al., 1990). Stress levels may however be underreported by men as many do not express their strains and burdens even if they experience them. This is supported by a study of 30 male primary caregivers where 50% of respondents reported feeling caregiver strain (Harris, 1998; Kramer & Kipnis, 1995).

Since caregiving stress is a concerning consequence of providing care, a substantial amount of literature has been devoted to discovering the reasons that may exacerbate this condition. First, there might be psychological and emotional aspects such as guilt of not providing enough care, feelings of not being appreciated, role reversal, resurfacing of old wounds, closeness between the caregiver and care recipient, increased awareness of their own aging, worries about the future, loneliness, grief of watching a parent deteriorate, isolation, sacrifices of social and family life, etc. (Abel, 1991; Dee & Peter, 1992; Fradkin & Heat, 1992; Nolan et al., 1996). Secondly, the care recipient's condition may cause worries. Physical disability, old age and dependency of the care recipient were found to be strongly associated with stress (Dee & Peter, 1992). Mental deficiencies of the disabled (accompanied by depression, difficulty bonding emotionally and inappropriate behaviours in public places) may be an even stronger predictor of caregiver stress (Abel, 1991; Young, 2006). Finally, stress levels may be increased by practical reasons such as ambiguity, hours of caregiving, length of caregiving, number of persons cared for, low education and income, work role conflict, and a lack of support from family and the workplace (Abel, 1991; Dee & Peter, 1992; Fradkin & Heat, 1992; Neal et al., 1993). Living in the same household and living at a distance can both have negative consequences. Living in the same household has been found to increase stress (Dee & Peter, 1992) while living at a distance reduces the amount and quality of caregiving and may cause "non-caregiver stress," especially when those in need are parents (Amirkhanyan & Wolf, 2006). The economic downturn also causes worries about a caregivers' ability to continue providing care (Evercare Survey, 2009).

With the majority of caregivers being women, the predictors of mental health in the literature are mostly derived from a women's perspective. Many of these predictors may not pertain to men (Horowitz, 1992). In fact, some studies do show that there are gender differences in this respect.

For example, the most important predictors of caregiving stress for daughters have been found to be interference with work and the quality of relationship with the parent while stressors for sons are behavioural problems of the parent and few informal helpers (Mui, 1995).

### **6.1.3: Work-related outcomes**

It can be expected that simultaneously performing caregiving and work duties will lead to increased levels of role overload and work-life conflict. Research shows that men and women deal with this situation very differently. Findings are quite consistent that for women, caregiving and employment interaction is unidirectional. In other words, when an elderly family member, especially a parent, is in need of assistance, women provide it regardless of their employment status. They perform all of the tasks that are required including helping with the more intensive activities of daily living (Kramer & Kipnis, 1995; Johnson & Lo Sasso, 2006). Most caregivers experience some degree of work-family conflict and stress, but women are more affected by this than men. In Pavalko and Artis's study (1997), within three years of providing care, 43% of working women decreased their workload by 13.5 hours and in many cases, just left their job. Their experience in the workplace may have influenced that decision as well. Women who are less satisfied with their work and who are closer to retirement were more likely to quit. This trend is also evident among non-caregivers. Men, on the other hand, are less involved in intensive caregiving and are less likely to give up their jobs to provide care (Guberman, 1999; Metlife, 2003). Recent data has determined that the present economic situation has meant that more caregivers, regardless of gender, are either reluctant to take time away from work or take on additional work to cover caregiving costs (Evercare Survey, 2009).

Caregiving responsibilities may also hurt an employee's career advancement and promotional opportunities. In the 2002 General Social Survey, 3% of employed caregivers aged 45 to 64 reported that they had to turn down a promotion (Cranswick, 2002). Employees involved in caregiving have had to decline training, challenging new assignments and job transfers that involve relocation. These decisions severely hinder career advancement as it limits an employee's ability to acquire new skills (Bumagin & Hirn, 2001; Mature Market Institute, 1999). Men may be somewhat more vulnerable to this risk compared to women. One study found that with increasing caregiving intensity (from 2 to 7.5 hours), the percentage of men reporting that their career plans were delayed increased from 5% to 34%. No such impact was reported for the women in the sample (Frederick & Fast, 1999).

Women appear to have different concerns when it comes to work related consequences of caregiving. Some case studies have revealed that most women who quit their jobs to provide care were regretful because they missed the social interactions with coworkers, their sense of achievement and felt badly about foregoing personal development. Work also allowed women to spend money on formal sources of care instead of providing all of the intensive care themselves. Poorer mental health was also seen in non-working caregivers, suggesting that work provides respite from caregiving activities (Brody, 1990).

#### **6.1.4: Economic impacts**

Closely related to employment outcomes are the economic consequences of caregiving. Missed days of work, unpaid leaves, transitioning to part-time, or quitting a job lead to lost income and consequently hurt the long-term economic well-being of caregivers (Albert & Schultz, 2010; Bumagin & Hirn, 2001). Johnson and Lo Sasso (2000) estimated that in 1994, 459 lost hours of work indirectly cost female caregivers US \$7,800 in income annually. The 2002 General Social Survey identified 11% of women and 9% of men aged 45 to 54 lost income due to their care duties (Cranswick, 2002). Moreover, the opportunity costs of these reductions in employment are considerable and include diminished chances of future employment, reductions in savings and investments, reduced contributions to pension funds, smaller pension benefits, and lower standards of living during retirement (Brody, 1990; Guberman, 1999; Mature Market Institute, 1999; Wagner, 2003). Mature Market Institute (2011) calculated that over an American's lifetime, all of the income losses due to caregiving add up to US \$283,716 for men and \$324,044 for women. The current economic recession puts caregivers at an even greater financial risk as they have to maintain their own financial stability while using up their savings or incurring additional debt to cover caregiving expenses (Evercare Survey, 2009).

Caregiving often incurs extra expenses due to purchasing additional adaptive equipment, medication, special diets, care services, home modifications, grocery delivery and paying for travel and phone bills among other items (Fradkin & Heat, 1992; Guberman, 1999; Stobert & Cranswick, 2004). According to the 2002 General Social Survey, extra expenses were the most common direct cost of caregiving that one in two respondents incurred with women being more likely to be affected than men (Cranswick, 2002; Rajnovich et al., 2005). Decima Research estimated that caregivers spent more than \$100 per month on caregiving amounting to \$80 million for all Canadians (Caregiver facts, 2008; Lum, 2011). According to a more liberal estimate by Evercare Survey (2009), caregiving to elderly costs more than 10% of a caregivers' annual income, and at least half of the caregivers experience difficulty paying for their own necessities as a result of these extra expenses. According to Mature Market Institute (2011), annual out-of-pocket expenses for caregiving may reach US \$5,531 per caregiver. Despite the rising costs associated with caregiving, 65% of Evercare Survey (2009) respondents said that financial burden had not decreased the quality of care they provided to their family members.

When considering the economic impact of caregiving, it would also be fair to consider the additional health care expenses that caregivers may incur (Mature Market Institute, 1999). As discussed at the beginning of this section, many caregivers suffer from physical and mental health problems caused by these family responsibilities which may subsequently lead to additional visits to the doctor.

Finally, it should be noted that no information is available regarding the work related consequences of caregiving that lead to lost income for the "sandwich generation" (Williams, 2004). There are no comparative estimates available to assess the degree to which their economic burden differs from that experienced by eldercare providers only.

### **6.1.5: Social consequences**

Although less severe than financial and health consequences, caregiving also affects a middle-aged persons social and family life. Several studies report that caregivers find it more difficult to balance their work and personal demands than those without such duties (MacBride-King, 1999; Stobert & Cranswick, 2004). Time that caregivers take off during the work day to deal with caregiving emergencies is compensated by taking work home in the evenings and on weekends (Mature Market Institute, 1999). Care duties also interfere with caregivers' leisure and social activities, hobbies, visits with friends and vacations (Abel, 1991; Cranswick, 1999; Johnson & Lo Sasso, 2000; Margolies, 2004). The 2002 General Social Survey data showed that due to caregiving responsibilities, 40% of women and 30% of men aged 45 to 64 had to change their social activities and 29% of women and 22% of men had to alter their holiday plans. This was especially common if they were engaged in intensive tasks such as personal care (Cranswick, 2002). Research also shows that caregiving often triggers family conflicts and damages relationships due to limited time alone with the spouses, restricted family vacation time and isolation (Armstrong, 1994; Margolies, 2004).

### **6.1.6: Changes in living arrangements**

When the care recipient's condition deteriorates and more personal care is required, it becomes difficult to provide care from a distance. Caregivers typically have to get closer to the dependent or often move to live together. In 1996, nearly half a million Canadians moved to reduce the distance between the caregiver and care recipient (Cranswick, 1999). The proportion of family members living with or close to their dependent increases as the care recipient's age increases (Cranswick, 2002). The 2002 General Social Survey identified that 3.8% of women and 2.3% of men moved closer to the care recipients. For 9.3% of women caregivers and 7.6% of male caregivers, the dependents moved closer to the caregiver (Rajnovich et al., 2005). It is likely that employed caregivers fall in the second category. Changes in living arrangements are an important consequence of caregiving to consider because it is this event that causes the biggest life style changes. In 2002, 4% of middle-aged women and 2% of men reported moving in with a senior (especially when they are 85 and older) to provide care (Cranswick, 2002).

### **6.1.7: Positive aspects of caregiving**

Despite all of the burdens that caregivers are subjected to, there are also positive sides of caregiving especially when the care recipient is a parent. The feeling of being overly burdened has also been cited as being periodic rather than constant (Chappell, 2011). In the 2002 General Social Survey, 82% of caregivers expressed satisfaction with life in general (Stobert & Cranswick, 2004). Nolan et al. (1996) concluded that between 55% and 90% of respondents in various surveys tend to identify satisfying aspects of their role. Interestingly, more direct and intense caregiving has been found to give adult children, especially daughters, an even higher degree of satisfaction likely due to a strong sense of accomplishment (Montgomery, 1992). Sons have also expressed pride in being a caregiver. They are able to be role models to their own children, have a sense of purpose and personal growth and feel gratitude for being able to give back (Harris, 1998). With so few studies, it would be premature to conclude that there are

significant gender differences in relation to the positive aspects of caregiving. More studies are needed in this respect.

Across studies, caregivers have reported positive feelings associated with caregiving. They felt that their relationship with the care receiver had become closer and stronger, they had a chance to show their love and gratitude, display competence, make a difference, fulfill their sense of duty and develop compassion for other people's suffering (Abel, 1991; Nolan et al., 1996; Rajnovich et al., 2005). Caregivers also felt thankful that their relative had lived to an old age and received satisfaction in seeing their elderly dependent happy, in preserving their dignity and self esteem by keeping them at home longer, in being appreciated by them, and in seeing their condition improve (Fradkin & Heat, 1992; Nolan et al., 1996).

## **6.2 Impact on employers**

It was indicated previously that the number of employees who provide care to their elderly family members is likely to increase. In the 1990's, eldercare was viewed as a responsibility that was no more intensive than childcare. Many felt, in fact, that caregiving would have essentially the same impact on family interferes with work as childcare and multigenerational care responsibilities (Abel, 1991; Neal et al., 1990). A decade later, while eldercare has become a growing reality for many workplaces (MacBride-King, 1999), some research suggests that eldercare carries a certain stigma and is not acknowledged and supported by employers, to the same extent as childcare (Metlife, 2003).

As discussed in the previous section, caregivers experience significant burdens and strains that can have negative work related consequences. These consequences are related to lost income and foregone career growth for employees, but also affect an employer's bottom line. It has been documented that employees with eldercare responsibilities miss work more often than their colleagues without such duties. This is especially apparent in the 18 to 39 year old age group. The data also shows a strongly link between absence due to ill health and taking on the roles of caregiver and employee at the same time, suggesting that an inability to balance these two roles negatively affects caregivers' health (Albert & Schultz, 2010). While the data indicate that younger employees find it particularly difficult to combine all of life's demands with eldercare, there is very little information in the literature on why this might be the case. Such information is necessary given the fact that that the number of younger caregivers is expected to rise in the future (i.e. delaying parenting until one is older means that 25-year olds can have older parents).

In the Metlife (2003) study, taking time off, coming in late and leaving early were common practices in the workplace for those with caregiving responsibilities. This trend appears to be on the rise. Mathew Greenwald & Associates (2009) in 2004 stated that 65% of employed caregivers engaged in these behaviours in 2009, up from 57% in 2007. Geographic proximity between caregivers and care recipients also plays a role in workplace dynamics. About 40% of caregivers who lived more than half a day away from their parents were found to miss full days of work while only 28% of caregivers who lived in the same neighborhood as their parents did so (Statistics Canada, 2011a). Little attention has been given to the effects of multigenerational caregiving on workplace behaviours. It is unclear if caregivers in the "sandwich generation"

contribute to absenteeism and consequently reduced workplace productivity more than employees who have only childcare or eldercare responsibilities.

Apart from absenteeism, working caregivers are often not able to provide the flexibility required to perform some work related tasks. In the same Metlife study, 21% of respondents tended to refuse overtime, 31% had to forego work-related travel and 25% were considering a job change. In addition, some respondents were considering quitting work altogether, with women being more likely to do so than men (20% vs. 11%). Two factors that influence the decision to quit work are the intensity of caregiving demands and job flexibility. When caregiving duties exceed 20 hours per week and there is no job flexibility people have to choose between roles (Albert & Schultz, 2010). More flexibility at work might help employees balance these competing demands more effectively.

Available research also identifies a number of gender differences in the relationships noted above. Most of the data suggests that women find it more difficult than men to balance dual work and caregiving roles and cope by give their family responsibilities precedence over what needs to be done at work. For example, Kramer and Kipnis (1995) report that women with caregiver responsibilities tend to be more distracted at work than their male counterparts. Similarly, the 2002 General Social Survey reported that women are more likely than men to reduce their work hours, take unpaid leaves of absence and quit their jobs altogether as a way to deal with caregiving demands (Cranswick, 2002; Margolies, 2004; Pavalko & Henderson, 2006; Statistics Canada, 2011a). In fact, women are more likely to leave their jobs than reduce hours once they start caregiving and seldom return to the previous level of employment when caregiving responsibilities are complete (Mature Market Institute, 2011; Pavalko & Artis, 1997; Pavalko & Henderson, 2006). Losing staff and incurring replacement costs might be avoided with more flexible workplace policies. Workplace policies that support individuals engaged in eldercare could simply reflect those in place for parental leaves.

There are many studies that have found a relationship between caregiving to parents and reduced work hours. However, having reviewed the literature in this area, Johnson and Lo Sasso (2000) concluded that the empirical evidence regarding this issue was mixed. These inconsistencies may be explained by the various methodologies and samples used across studies. In their own study of caregivers aged 53 to 65, there was a very strong association between eldercare and hours worked. Women who provided at least 100 hours of help to their parents in the previous 12 months reduced their work hours by 459 (43%). Men in the same situation reduced their work hours by 462 (28%). Researchers found that eldercare was the second strongest predictor of labour supply after poor health. More evidence is needed to clarify the relationship between caregiving and work hours.

Evidence also supports the idea that work performance is compromised when employees have significant caregiving demands. This often comes in the form of distractions such as phone calls to coordinate care and from a lack of energy, enthusiasm and focus (Mature Market Institute, 2010; Wagner, 2003). Other research reports that employed caregivers find it difficult to accept promotions, attend meetings outside regular working hours, take on extra work and work longer hours (MacBride-King, 1999). Work disruptions are especially common when the dependent suffers from mental health problems (Health Canada, 2002). Of note is the fact that employees of

all ranks and job types, including CEO's, experience a significant reduction in workplace productivity due to eldercare responsibilities (Wagner & Lottes, 2006; Wagner, 2003).

Several attempts have been made to assign a monetary value to the costs that employers experience as a consequence of having employees with eldercare responsibilities. Direct costs from absenteeism and an employee's utilization of health benefits (from hospital admissions for stress-related illnesses) are more explicit and therefore easier to approximate (MacNride-King, 1999). The most frequently reported health problems reported by those with caregiving include depression, diabetes, hypertension and heart disease (Mature Market Institute, 2010). Metlife Institute in the U.S. included absenteeism, partial absenteeism, workday interruptions, crisis in care, supervision (covering for absent employees), replacements, unpaid leave and reduction of hours from full-time to part-time in their calculation of costs attributable to caregiving. The total estimated cost to employers for all full-time caregivers in this study was \$33.6 billion annually or an average annual cost of \$2,110 per employed caregiver (Wagner & Lottes, 2006). Indirect costs, such as lost productivity, are much harder to estimate but are also incurred by employers as a result of an employee's eldercare responsibilities (Albert & Schultz, 2010). Further costs may be incurred by employers if co-workers become involved as an informal source of support for their caregiving colleagues. These costs have never been considered in cost calculations (Mature Market Institute, 1999).

Considering productivity loss and direct costs of employees' eldercare responsibilities, organizations may benefit from introducing sponsored programs or eldercare services for employees. This formal support may help alleviate the burdens and strains associated with family responsibilities, and in turn minimize losses to organizations (Mature Market Institute, 1999). Groups that incur higher costs include women, younger caregivers, and those with multiple caregiving roles who work day shifts. These characteristics were found to predict absenteeism most strongly (Neal et al., 1993).

### **6.3 Impact on society**

Societal consequences of caregiving are experienced at a relatively macro level with some individuals feeling the effects more directly. It is likely, however, that everyone will at some point over the course of their lifetime adopt a caregiving or care recipient role, which suggests that these costs to society will increase over time and impact us all.

The care provided by informal caregivers is one of the significant "hidden costs" associated with the public health care system. If not for family caregivers, society would be responsible for providing these services (MacBride-King, 1999; Zukewich, 2003). The economic value provided by family caregivers is enormous. It is estimated that informal help and care for seniors saves the public system over \$5.3 billion per year, equivalent to the work of 276,500 full-time employees (Gignac et al., 1996). Despite the significant cost savings associated with informal caregiving, there are also costs. A caregivers' health is often adversely affected because they are subject to multiple strains and tend to neglect their own health. Ultimately, they end up seeking health services themselves and placing further burden on the health care system (Duxbury and Higgins, 2005). Poor caregiver health can also lead to earlier institutionalization of the elderly, and a further increase in public expenditures (Grunfeld et al., 1997).

The decreasing supply of caregivers is another trend threatening the future of informal caregiving. As noted earlier, the expected decrease can be attributed to changes in the demographic profile of society and the tendency for people to work longer hours and stay in the labour force beyond the typical retirement age. In response to the decreased availability of informal care, increasing demands for formal care will have serious implications on the health care budget and the taxation system. Further societal effects are seen when caregivers struggle to balance caregiving and work responsibilities and end up leaving employment. This is especially apparent for women who constitute the majority of caregivers. Foregone employment income results in decreased tax revenue and in turn imposes limits on public spending. Thus, difficulties balancing eldercare and employment will incur additional strains on society that may be felt well into the future and have impacts on subsequent generations (Duxbury et al., 2009).

#### **6.4 Challenges of caregiving for the “sandwich generation”**

As stated earlier, we do not really have a good grasp of the number of people within the “sandwich generation” in Canada at this point in time. Certainly, these individuals exist in the community and the workplace and may grow as the population demographics changed. Therefore, it is worth reviewing what little is known about the burden of caregiving experienced by this population along with its causes and consequences. There are quite a few ethno-methodological studies on this topic but the lack of quantitative studies in the area means that we do not have enough evidence to draw sound conclusions about any gender differences within this group at this time.

The literature offers substantial evidence linking responsibility for childcare and responsibility for eldercare with increased strain. Therefore, it would be logical to assume that middle-aged people providing care to seniors and children simultaneously would experience double the amount of strain. There are two schools of thought, however, with respect to this issue. One espouses the view that excess load results in negative consequences for the caregivers. The other claims that the burden of multiple caregiving roles is offset by the positive aspects of caregiving, which lessens the negative impacts of either role (Williams, 2004). Having reviewed the findings of a series of studies on this topic, Chumbler et al. (2004) concluded that both perspectives are supported in the literature. Indeed, there are too many factors at play to have a simplistic and straightforward view of what it means to be “in the middle” (Raphael & Schlesinger, 1993).

The positive outcomes of multigenerational responsibilities have been found with respect to an improvement in a women’s psychological well-being by having children around, feeling their support and being able to talk to them. When physical care demands are high, children may also help with lifting and other caregiving chores, and help each other (Chisholm, 1999; Neal et al., 1993; Raphael & Schlesinger, 1993; Spitze et al., 1994 in Chumbler et al., 2004). The 2002 General Social Survey found that most caregivers in this situation were satisfied with life in general, and only 5% felt that caregiving was an extreme burden (Williams, 2004). Loomis and Booth (1995) in their longitudinal study did not discover any effect of multigenerational caregiving on psychological well-being, quality of marital life, financial resources or satisfaction with leisure time. Of note, however, is that this sample of caregivers rarely lived with their dependents in the same household.

Conversely, studies reporting negative outcomes of multigenerational caregiving dominate in the literature. Women make up the majority of multigenerational caregivers - probably because women are more likely than men to take on the role of elder-caregiver. Since most of these women are also engaged in paid work, being “sandwiched” takes an extra toll on their time and effort. It has been observed that working “women in the middle” spent twice as many hours a month (29 versus 13) looking after their elderly dependent than men (Williams, 2004). Trying to juggle competing priorities, they also exhibit more depressive symptoms than women who do not have underage children at home (Roberts, 2012; Reid & Hardy, 1999 in Chumbler et al., 2004). It may be thought that strain primarily stems from the amount of work involved in caregiving. However, Gerstel and Gallagher (1993) found that it is not the work per se that increases depression, but rather the number and range of family members that caregivers have to look after. For example, caring for seniors and children are quite different and often have competing demands compared to providing care to more than one senior.

Mental health issues are experienced by both male and female caregivers, especially in high-intensity caregiving situations. Disrupted sleep patterns and general health problems are reported more often by high-intensity caregivers than those in low-intensity situations (Williams, 2004). Caregivers often feel guilty for not being able to devote sufficient attention to the care recipient, other family members, work, and themselves (Henderson, 2002). They feel pressed for time, find it difficult to balance work and family demands, reduce their social activities and hobbies and change travel and holiday plans (Chan, 2010; Chisholm, 1999; MacBride-King, 1999; Williams, 2004). Furthermore, family responsibilities create work-related problems for “sandwiched” caregivers. They often have to shift or reduce their work hours and take the time off resulting in lost income (Williams, 2004). However, employment does offer some benefits. It provides the financial flexibility to choose the best ways of delivering care instead of providing all of the care themselves. However, while expressing the benefits of being employed, Hicks et al. (2007) noted that it is uncertain if women who are busy earning money can still provide the necessary care to their parents.

Caregivers with multigenerational caregiving responsibilities often struggle with appropriate resource allocation. By providing financial support to parents, they may be taking money that would have otherwise contributed to their children’s college funds or other investments (Mature Market Institute, 2011). Others argue that parents might not be such a drain on family resources. This is especially evident in the U.S. where older Americans are better off than the baby boom generation and might in fact be supporting their children, not the other way around (Foreman, 1993 in Nichols & Junk, 1997).

For the limited literature that is available it appears that multigenerational caregivers are experiencing the same consequences from caregiving as those individuals in the eldercare only group. That being said, there is a need for more comparative research to explicitly explore how these groups of caregivers differ to better inform public policy and workplace support programs. One of few such studies found that the working members of the sandwich generation were more likely than those who cared for elderly alone to say that it was difficult to balance work and family responsibilities (40% vs. 22.5%), that they experienced stress (67.6% vs. 42.4%) and that they did not have time for themselves (70.2% vs. 57.6%). Employed caregivers with

multigenerational caregiving responsibilities had more absences and interruptions at work than those having only one set of caregiving responsibilities (MacBride-King, 1999). Thus, it can be suggested that all caregivers experience similar consequences but to varying degrees depending on the intensity of caregiving.

Employed caregivers in the sandwich generation were found to provide the same type of care as those in the elder caregiver group only -- but spent less time in the caregiving role (Williams 2004). It was noted earlier that working women with responsibilities for both parents and children spent more time on caregiving than men under the same circumstances. While there is not enough data to draw a definitive conclusion with respect to this issue within the sandwich group, that which does exist suggests that this gender difference may also be observed in this group. Similar to the situation with eldercare alone, women tend to perform more intensive tasks which may account for the time difference. Across studies, women usually helped with personal care, housecleaning, shopping (especially for mothers), meal preparation (especially for fathers) and supported parents emotionally, while men assisted with outside home maintenance, transportation, and financial assistance (Chisholm, 1999; Nichols & Junk, 1997; Williams, 2004). One study showed that the types of care provided differed depending on whether it was for the caregivers own parents or their in-laws. For their own parents, women provided more personal care, but for in-laws they only provided some personal care with more emphasis on emotional care and assistance with agency involvement (Raphael & Schlesinger, 1993). Based on their findings, Nichols and Junk (1997) predicted that in the future, the men in this group will be more involved in personal care and meal preparation while women will assist financially. Therefore, gender differences in the prevalence of tasks performed might subside in the future.

## **7. Framework of caregiver strain, its predictors and moderators**

Caregiving research has identified a broad range of variables associated with caregiving prevalence, intensity, strains, causes and consequences. Inconsistent conceptualization of the key components of caregiving and their interactions has made it difficult to establish a global caregiving framework with clear cause and effect relationships. Consequently, it is a challenge to assign each variable to a specific position in the framework. The same variable is often used to operationalize a burden, its predictor or outcome, or a moderator or mediator of the relationship between the burden and its cause. In this section, we categorize the major variables identified in the caregiving literature and classify them as caregiver strains, their predictors or their moderators. This information is also presented in summary form in Table. 1. Most of the variables included in our framework have been mentioned previously so they will not be discussed in any great detail in this section.

**Table 1: Summary: Causes, consequences and moderators of caregiver strain**

Causes →	Caregiver Strain →	Consequences
<p><u>Caregiver characteristics:</u> - caregiver status</p> <p><u>Caregiving situation:</u> - Intensity of caregiving (time and types) - Length of caregiving - Number of persons cared for</p> <p><u>Care recipient's characteristics:</u> - level of impairment - closeness to the caregiver</p>	<p><u>Emotional strain:</u> - stress - emotional adjustments - senior's upsetting behaviour - senior's changed personality - feeling overwhelmed</p> <p><u>Physical strain:</u> - lifting and turning - sleep deprivation - concentration required</p> <p><u>Social strain:</u> - confinement (no time to do other things) - family adjustments - changes in personal plans - work adjustments</p> <p><u>Economic strain:</u> - extra expenses - reduced budget - health care expenses for caregiver</p>	<p><u>For caregivers:</u> - physical health (e.g., muscle strain, back pain, heart health, sleep disorder) - mental health (e.g., psychological well-being, stress, anxiety, depression, fatigue, psychosomatic and psychiatric symptoms, elder abuse) - work-related (e.g., reduced employment, limited career advancement) - economic (e.g., lost present and future income, opportunity costs) - social and family (e.g., limited social activities, quality of marital life, quality of relationships, work-family conflict) - changing living arrangements - satisfaction with caregiving</p> <p><u>For employers:</u> - absenteeism - turnover - lack of flexibility - schedule adjustments - work interruptions - lost productivity - replacement costs - health benefit costs - medication costs</p> <p><u>For society:</u> - "hidden costs" of informal eldercare - caregiver poorer health and strain on public health care system - foregone tax revenue</p>

<b>Moderators</b>		
<u>Caregiver demographics:</u> - age - gender and its interactions - employment status - socioeconomic status (income, education, type of job) - marital status - - immigrant status - ethnicity, culture - health condition  <u>Caregiver characteristics:</u> - interpersonal skills - adaptability - personal adjustment - coping style	<u>Caregiver's circumstances:</u> - living arrangements - quality of the relationship with the dependent - quality of family life - caregiver role induction - willingness to provide care  <u>Resource availability:</u> - social support - family support - financial support - outside help	<u>Workplace characteristics:</u> - supportive supervisors - co-worker support - support programs - eldercare policies  <u>Dependent characteristics:</u> - age - gender - personality

## 7.1 Caregiver strain

Consistent with the definition of caregiver strain, we can view its components as being subjective (emotional and psychological) or objective (physical, social and economical).

Caregivers experience *emotional strain* when they feel overwhelmed, obliged to provide care, dissatisfied with life or when they have to make emotional adjustments. These adjustments may include such things as engaging in arguments, role reversal, dealing with inappropriate behaviours or watching how the senior's behaviour and emotions have changed especially when a mental disability is present (Fradkin & Heat, 1992; Hart et al., 2000; Robinson 1983). Stress, as noted earlier is a controversial component of emotional strain. Studies have treated it as a burden itself (e.g., Stoller, 1992) or an outcome (e.g., Hart et al., 2000).

*Physical strain*, especially when dealing with bedridden seniors or those in wheelchairs, is associated with heavy lifting and turning. If intensive care is required, sleep deprivation is a common consequence of significant concentration on care tasks (Fradkin & Heat, 1992; Guberman, 1999; Robinson 1983).

Caregivers suffer from *social strain* when they feel confined by their care duties and consequently do not have time to do things such as visiting friends, doing daily chores or engaging in leisure activities. They have to juggle competing demands from other family members, have to change their personal plans and make family and work adjustments (Montgomery et al., 2000; Robinson 1983).

Caregiving is often associated with *economic strain* when medical care, adaptive equipment, home modifications, or other purchases require extra financial resources. Women especially tend to reduce their hours of work or quit their job altogether to provide care thus creating financial strain. When caregiving leads to poor caregiver health, extra expenses for their own health care impose additional financial strain. Caregivers also perceive situations where they have to reduce their regular spending and restrict savings as straining (Bumagin & Hirn, 2001; Fradkin & Heat, 1992; Guberman, 1999; Keefe & Medjuck, 1997).

## **7.2 Causes/predictors of caregiver strain**

It can be argued that the most fundamental cause of caregiver strain is simply the occurrence of caregiving. That is, the objective conditions surrounding the care activities involved. However, there might not be a linear relationship between the objectively defined burden and the perceived impact (i.e. the subjective demands). A person might acknowledge the presence of a difficult caregiving situation, but may not feel burdened. The opposite relationship may also be true (Montgomery et al., 2000; Vitaliano et al., 1991). It is misleading to identify objective caregiving hardships and assume that they unmistakably and directly lead to subjective strain (Vitaliano et al., 1991). This supports the need to identify moderators of this relationship, which is done in section 7.3.

There are very few variables that could be categorized as pure causes of caregiver strain. Nevertheless, we have made an attempt to highlight them here. Keefe and Medjuck (1997) have categorized these caregiving conditions into two major groups: caregiver's characteristics and characteristics of the caregiving situation. Also care receiver's characteristics have been strongly related to the resulting degree of caregiver strain (Amirkhanyan & Wolf 2006; Hart et al., 2000; Nichols & Junk, 1997). In addition, an interesting finding is that the economic consequences of caregiving may predict caregiver strain suggesting that the relationship between strain and its outcomes is reciprocal rather than unidirectional. Those caregivers who envisioned all the financial consequences of caregiving, felt a higher financial burden. The effects of economic consequences might not be direct, but rather they may interact with other caregiver and caregiving variables (Keefe & Medjuck, 1997).

It has been found that the degree of caregiver burden may depend on the caregiver status. A caregiver may be a primary caregiver, secondary caregiver or a member of a caregiving network. Primary caregivers experience the greatest burden and in most cases these caregivers are women (Frederick & Fast, 1999; Johnson and Lo Sasso, 2006; Henderson, 2002; Metlife 2003).

Caregiver strain also largely depends on the intensity of caregiving. Intensity is comprised of the number of hours spent on caregiving and the types of tasks involved. Longer caregiving hours often lead to more severe strain of all types (Vitaliano et al., 1991; Williams, 2004). With respect to the types of tasks involved, a significant positive relationship has been found between providing intensive basic care and experiencing caregiver burden. Intensive basic care requires frequent presence of the caregiver and a lack of personal boundaries between the caregiver and the care recipient (Cranswick, 2002; Evercare Survey 2009; Frederick & Fast, 1999; Montgomery, 1992). Caregivers who have provided assistance for many years feel more strained and often replace their informal caregiving with formal care services (Johnson & Lo Sasso,

2000). There is also a positive relationship between the number and range of family members that caregivers have to look after and their resulting physical and emotional strain (Gerstel and Gallagher, 1993). On the other hand, Neal et al. (1993) found that having multiple roles reduced stress.

The severity of the care receiver's condition has also been found to affect caregiver strain. Different health conditions pose different demands on caregivers. The strain is much higher when dementia is involved compared to providing care for someone who is recovering from a hip fracture. A similar comparison can be made between elderly with a heart failure and those with a stroke, as the former condition does not cause as much caregiver strain (Amirkhanyan & Wolf 2006; Hart et al., 2000; Nichols & Junk, 1997; Uhlenberg & Cheuk, 2008; Vitaliano et al., 1991). It is also emotionally more difficult to watch a closely related person, especially a spouse or a parent, deteriorate than a more distant relative (Amirkhanyan & Wolf, 2006; Kramer & Kipnis, 1995; Vitaliano et al., 1991).

### **7.3 Moderators/predictors of caregiver strain**

It is difficult to classify a number of the variables that are commonly included in caregiving studies as either an antecedent or a consequence of caregiver strain. Such variables are grouped in Table 1 into the following groupings: caregiver demographics, other caregiver characteristics, caregiver's circumstances, resource availability, workplace characteristics and characteristics of the dependent. Three reasons have been given as to why it is difficult to classify these variables. First, these variables they have been found to be statistically significant in a variety of positions within the caregiving framework (typically as moderators or predictors) in different studies. Different research designs support different conclusions. Second, a number of antecedent variables may not actually be antecedents in the true sense of the word but may in fact moderate the relationship between the cause of strain and the strain itself, or between the strain and its consequences. Third, some of the research in the area reports significant interaction effects within the models supporting the idea of co-variance between various moderators. This again, makes it hard to determine how to operationalize these variables.

#### **7.3.1 Caregiver demographics**

One of the most widespread demographic characteristic included in caregiving models is the caregiver's *age*. The effects of age on caregiver strain are mixed. Kramer and Kipnis (1995) found that younger caregivers were more burdened than the older ones. Albert and Schulz (2010) found a similar effect. Employees aged 18-39 years were more likely than their older counterparts to report higher stress and lower health ratings. Neal et al. (1993) concluded that younger employees had difficulties balancing work and family roles, but found that older employees experienced higher emotional stress.

The most prevalent control variable in the caregiving literature is *gender* and in fact gender has been a consideration in all relevant sections of this review. It would not be appropriate to explain the caregiving context and outcomes without considering gender (Rajnovich et al., 2005). The methodology used in studying gender differences in caregiving is important to note because gender often strongly co-varies with other factors. Therefore, to make definitive conclusions

about gender differences, these interactions should be identified and their effects isolated. The most common covariates are age of the caregiver, employment status, other roles, caregiver's and receiver's health condition and sibling networks (Brody 1990; Chumbler et al, 2004; Dwyer & Coward, 1992; Harris, 1998; Mui, 1995). Very few of the reviewed studies have made note of these interactions. The methodological limitations associated with the research designs typically used to study caregiving are also important to note. The reviewed studies often did not discuss these concerns. Future studies may want to address the limitations associated with the predominance of women in sample populations, small sample sizes that do not allow for the control of important variables, focusing only on primary caregivers and leaving out the whole caregiving network and the concern that male respondents tend to under-report their mental health issues (Herowitz, 1992).

As a result of the wide application of gender in the caregiving literature, it is difficult to delineate its application and function as a predictor vs. a moderator. Kramer and Kipnis (1995) found gender to be a significant predictor of caregiver burden, all other variables controlled. Other studies present gender as a moderator between caregiver status and caregiver strain (Johnson and Lo Sasso, 2006; Henderson, 2002).

*Employment status* is another significant predictor or moderator in the caregiving literature. This review has focused on employed caregivers but on several occasions comparisons have been made to unemployed caregivers. The employment effect across studies is mixed. Neal et al. (1993), having reviewed several studies, concluded that employment worsened caregiver stress levels in some cases but had no effect in others. This might suggest that employment may not directly cause strain but may have different effects depending on the other variables considered. For example, employment status has been positively associated with better mental health, but when it co-varied with marital status, the interaction created the opposite effect (Chumbler et al., 2004). Employment status also co-varies with other moderators or predictors such as intensity of care (e.g., Soller & Pugliesi, 1989 in Chumbler et al., 2004) and gender (e.g., Reid & Hardy, 1999 in Chumbler et al., 2004). When employment status itself was not found to influence caregiver strain, effects were observed that could be linked to the employee's job type. More specifically, employees in managerial or professional roles have been found to experience less strain and to be better able to manage caregiving demands, a finding that has been attributed to the fact that this group typically enjoys greater workplace flexibility (Neal et al., 1993).

Closely related to employment and job type is the *income level* of the caregiver. Income level has been found to be negatively associated with depression (Brody, 1990). Employees with higher incomes were also better able to balance work and family roles (Neal et al., 1990). However, a different conclusion was reached by Walker (2005, in Rajnovich et al., 2005). Women with higher incomes reported being more stressed than their colleagues with lower income while men with higher incomes were better able to cope with caregiving strain. Again, there were significant interaction effects between income, employment and gender.

In some studies, *marital status* has been found to be a significant predictor of caregiver strain. Chumbler et al. (2004) reported that married caregivers had lower levels of depressive symptoms than their unmarried counterparts. When employment status was added to the equation, there was a negative effect on mental health. Research by Davey and Szinovacz (2008), on the other hand,

reported that marital status is an important moderator of the relationship between strain and caregiving outcomes.

There are several studies that have identified an individual's *ethnicity and immigrant status* as moderators of caregiving outcomes. Rajnovich et al. (2005) and Remennick (1999) have pointed out that recent immigrants experience high caregiving strain due to lack of information, lower incomes and cultural family care traditions.

Finally, the *health condition* of the caregiver may affect caregiving outcomes. Keefe and Medjuck (1997) included a caregivers' health condition in their regression analysis, but it was not statistically significant. Nonetheless, knowing that caregiving affects caregivers' health, suggests that there might be reciprocal effects on their ability to provide care. Further research is needed to draw conclusions about the affects of this variable.

### **7.3.2 Other caregiver's characteristics**

Although not empirically tested, other potential predictors or moderators of caregiver strain have been proposed. Loomis and Booth (1995) suggested that caregivers with strong interpersonal skills would be better equipped to deal with caregiving situations and thus reduce the degree of perceived burdens. Chisholm (1999) identified the ability to adapt and make personal adjustments as a valuable asset in dealing with caregiver strain, especially when the caregiver belongs to the "sandwich generation". Finally, an effective coping style when faced with stressful situations can lead to better caregiving outcomes (Chumbler et al., 2004; Davey & Szinovacz, 2008).

### **7.3.3 Caregiver's circumstances**

It has been established that living arrangements may directly or indirectly influence caregiving outcomes. Some research shows that strain is greater when the care recipient lives in the caregiver's household. This is especially apparent for caregivers in the "sandwich generation", as there are more opportunities for interpersonal conflicts in a multigenerational household (Brody, 1990). Conversely, there is evidence to suggest that having children living in the same household might ease eldercare burden for women (Chisholm, 1999; Neal et al., 1993; Raphael & Schlesinger, 1993).

The quality of the relationship with the dependent and the quality of a caregivers' family life have also been identified as factors that may affect the caregiving experience (Brody, 1990; Montgomery, 1992). A strong family support system provides a buffer in tense caregiving situations and has been identified as a mitigating factor for caregiver strain (Loomis & Booth, 1995). Finally, caregivers are less likely to perceive their role as burdensome when they have made a free choice to provide care. Role induction was found to be associated with willingness to provide care which in its turn, was found to lead to reduced strain (Berg-Weger & Rubio, 2000).

### **7.3.4 Resource availability**

Resources include social, financial, and internal supports that help caregivers manage their stressful experience. The social support offered by family, friends, neighbours and colleagues has been found to be the most effective resource for managing caregiver strain. Likewise, the presence of siblings has the same effect. Siblings, especially sisters, help decrease strain because they usually accept the role of secondary care providers (Montgomery, 1992). Caregivers who have access to and can afford outside help also reported lower negative effects of caregiving (Brody, 1990; Kramer & Kipnis, 1995; Montgomery et al., 2000).

### **7.3.5 Workplace characteristics**

Workplace support, which may include work flexibility or eldercare programs and policies, can ease the burden of caregiving (Pyper, 2006; Barr et al., 1992). Especially powerful is a supportive supervisor and coworkers (Metlife, 2003). Employer support is discussed in greater detail in the next section.

### **7.3.6 Dependent's characteristics**

Objective and demographic characteristics of the dependent have been identified as predictors and moderators of caregiver strain. Some of the objective characteristics, such as impairment level, were previously identified as having a direct influence on caregiver strain. On the other hand, some of the demographic characteristics of the dependent have been found to have a moderating effect. Age, gender and personality characteristics of the dependent may moderate the relationship between caregiving and caregiver strain, or between caregiving strain and its consequences. For example, types of care and support provided often differ depending on whether the senior is a mother or a father, which in turn may influence the caregiving experience. The personal characteristics of the elderly may also affect the way the caregiver perceives his or her role (Brody, 1990; Chumbler et al., 2004).

## **8. Dealing with caregiver strain**

In this section we discuss four types of coping strategies that can be implemented to manage caregiver strain. These strategies can be implemented at the level of the caregiver and their networks, in the workplace, in the community or at the level of public policy. The literature suggests that such strategies will benefit caregivers regardless of employment circumstances.

### **8.1 Caregiver network strategies**

There are several ways that individual caregivers can cope with the strains associated with balancing eldercare and paid employment. To prepare for a caregiving role, a person may obtain information from the local library, health professionals, social workers, for-profit and non-for-profit caregiving providers family, friends, colleagues, other caregivers, aging or disease-specific organizations, government programs or the internet (De Graff, 2002; Mathew Greenwald & Associates, 2009). There may also be benefits to inquiring about training and skill development options, respite services, help with day to day chores and sources of emotional and financial

support (Gahagan et al., 2004). Apart from seeking help externally, caregivers may also develop and utilize their own internal resources. A potentially powerful cognitive coping strategy is positive thinking and/or identifying the rewarding aspects of caregiving (Nolan et al., 1996).

When caregivers were asked what assistance would be most useful to them, “occasional relief” was the most frequent response (Pyper, 2006). Almost 70% of caregivers reported that they needed a break from caregiving responsibilities either frequently (21%) or occasionally (47%) (Gahagan et al., 2004; Pyper, 2006). While the desire for occasional relief was quite common among low-intensity caregivers, high intensity caregivers (employees who combined longer hours of work with long hours of physically and emotionally taxing caregiving) reported an even greater need for relief. Occasional relief comes from a variety of sources including family members, paid formal help or government-arranged home care (Pyper, 2006). Interestingly, in a Statistics Canada report, individuals in the “sandwich generation” were more likely than those caring for elderly alone to feel as though they could do a better job if respite care was available (52% vs. 46%) (Williams, 2004).

Men and women seek support in different ways. Women have broader and more intimate networks of friends and colleagues; they attend support groups more often and consult therapists. On the other hand, men often avoid speaking about their eldercare issues at work and tend to limit discussions on the subject with their spouse. Men are also more likely to use online bulletin boards or establish phone-based caregiver networks (Abel, 1991; Harris, 1998; Henderson, 2002; Metlife, 2003). The literature is quite supportive of informal networks. Evidence suggests that women who share their care responsibilities with their informal network report 30% less stress than women who try to cope on their own. Despite the fear of exposure or being judged, reaching out for support is a strategy that women should be using more often (Neufeld & Harrison, 2000). In any case, family offers the strongest caregiving network. The 2002 General Social Survey identified that in 82% of cases, additional assistance was found within the family (Stobert & Cranswick, 2004). Women most often turn to their sisters for help with caregiving tasks while spouses and children are also frequently asked to help out. Women rarely seek help with basic care from their brothers as they tend to engage in more sporadic assistance, financial support, and problem solving (Brody, 1990; Harris, 1998; Montgomery, 1992).

At work, caregivers may talk to their co-workers and supervisors and negotiate ways to adjust their work schedules to be able to meet their caregiving obligations (Mature Market Institute, 1999). It is worth noting that work itself can serve as a respite from caregiving for both men and women. In fact, one study found that men who worked more hours suffered from less caregiving distress (Chumbler et al., 2004).

## **8.2 Employer support**

Flexible work arrangements were commonly identified as a way of easing the difficulties of caregiving (Pyper, 2006; Barr et al., 1992). This could involve rearranging regular work hours or allowing time off as needed. Neal et al. (1993) found that flexible schedules and workplace policies supporting caregivers was linked to increased productivity due to stronger employee morale, reduced stress and a feeling of loyalty to the employer. Similarly, ‘flexible work arrangements’ (flextime, compressed work weeks, irregular work hours, reduced hours of work,

flexible location and protected part-time status) were found to be associated with decreased work interference (Scharlach 1994). Flexible scheduling, job sharing, telecommuting, family illness days, family leave and similar policies have been consistently advocated in the literature to help reduce the conflict between work and caregiving responsibilities (Guberman 1999; Duxbury and Higgins, 2003).

While the benefits of workplace support programs are commonly reported, there are also limitations to note (Boddy et al., 2006; Lechner and Gupta 1996; Neal et al. 1993). Many workplace programs are available to only a minority of Canadian workers. They are often limited to employees working for large companies and provided in a discretionary manner (Guberman 1999). Furthermore, workplace factors that contribute to difficulties balancing work and caregiving are still common. These factors include: heavy workloads, non-supportive management, unclear policies, continuous change, temporary, part-time and contingent work and organizational culture (Fredriksen and Scharlach 1999; Duxbury et al. 2003). Still missing in the workplace is a cultural acceptance of eldercare responsibilities.

With the appropriate policies and supports in place, employment has the potential to offer significant advantages to caregivers. Employment provides caregivers with relief from their care responsibilities, greater financial and social resources and additional support networks (Rosenthal et al., 2004).

### **8.3 Community support**

Caregivers and their families rely on a variety of community supports to meet their needs. Some caregivers actively request support from the community in order to provide better care, while others are unaware of what supports exist and which ones will help. Caregiver requests have included the development or expansion of educational, informational and support programs that enable care providers to offer better care and successfully cope with the strains of caregiving (Keefe, 2002). Counseling services that provide coping strategies, advice and support have also been identified as necessary and helpful. Another important support is information and referral services to help caregivers navigate community services. Caregiving necessitates a continuum of services and supports including training and education, respite and other care services in conjunction with workplace policies, job security and income compensation programs (Rajnovich et al., 2005).

### **8.4 Public policy**

The challenges that caregivers face when dealing with social policy are compounded by the “ambiguous status of caregivers” (Rajnovich et al., 2005). Since caregivers are not official clients of the health and social services systems, they are generally only entitled to services through the care receiver (Guberman 1999). Assessments tend to give little attention to caregivers’ needs despite research that supports the need to do so. Furthermore, when determining needs and entitlements, the underlying premise of many care programs is that families, often women, are responsible for providing care. “Services are provided not to support or ease the burden of caregiver, but only as a last option to fill gaps not being met by family”

(Guberman, 1999). This practice must be challenged and public policy must look at the social and economic needs of caregivers.

Currently, there exists a fragmented array of supports. Tax credits, compensation programs and workplace policies have been identified as critical to relieving and supporting caregivers. However, conditions for accessing such programs are often limiting and are cited as requiring re-examination (Eales, et al., 2001).

In 2004 the Government of Canada introduced The Compassionate Care Benefits Employment Insurance (CCB)<sup>3</sup> program:

“Compassionate Care is a special benefit of Employment Insurance. It provides temporary income support for eligible workers who take leave to provide care or support for a family member who has a significant risk of death within six months. To be eligible, it will be necessary to submit a medical certificate from the attending physician of the family member who is ill.”

The CCB is considered Canada’s foremost workplace policy support for emergency caregiving situations and is a concrete recognition of the diversity and strain experienced by employed caregivers. In light of the increasing heterogeneity of families, the CCB in June, 2006 expanded its definition of ‘family’ to include a broader conceptualization of the term. While a step in the right direction, critics of The Compassionate Care Benefit have noted several additional ways that this program could be improved. These suggestions include expanding eligibility (include *all* who provide significant levels of care), increasing the benefit amounts (current benefits are inaccessible to some low income workers), extending eligible caregiving relationships to include in-laws, aunts and uncles, friends and neighbours, expanding the program to provide access to contract, temporary, self-employed and part-time workers who are currently not eligible and extending the amount of paid leave time (White & Keefe, 2005).

## **9. Areas for future research**

Informal caregiving came to the attention of researchers in the early 1980s. It became apparent that an increasing proportion of the population was experiencing the pressure of juggling multiple family and work responsibilities. These pressures took a toll on an individual’s well-being and on workplace outcomes (Singleton, 1998). Since then, knowledge has been expanding beyond general family caregiving. The literature has explored the deeper issues, conditions, influencing factors and consequences of caregiving provided to children, disabled adults, and elderly. As the influential baby boom cohort has reached middle age and its earliest members have just started retiring, new issues and concerns enter caregiving discourse. It can be observed that the literature for informal caregiving is quite fragmented and still lacks established theoretical frameworks and unifying perspectives on many issues (Davey & Szinovacz, 2008). This literature review identified several gaps in our current knowledge. More research in the following areas would help us move the caregiving agenda forward:

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<sup>3</sup> For a description of this program see [http://www.hrsdc.gc.ca/en/ei/types/compassionate\\_care.shtml](http://www.hrsdc.gc.ca/en/ei/types/compassionate_care.shtml)

- Developing common definitions for key terminology such as “caregiving”, “informal caregiving”, “family caregiving”, “caregiver burden”, “caregiver strain” and “caregiver stress”. The use of these terms is variable in the literature and a meta-analysis of the application of these terms would help establish their common understanding and usage.
- The current concept of caregiver is too narrow and needs to be expanded. Most research has focused on the caregiving burden on relatives-- especially on the wives and daughters who do the majority of care, to the neglect of understanding the contribution and burden of men.
- Generating more studies to arrive at unifying conceptual frameworks relating caregiver strains, their causes and consequences.
- More longitudinal studies to explore the dynamics of the caregiving context. Studies that look at the change in predictors and outcomes of employed caregiver strain over time, short-term and long-term coping strategies used and longer-term effects of employer, state and community support to caregivers.
- Generating more studies that assess cultural influences of caregiving. Canada is a multicultural country and there is still limited understanding of how ethnicity and length of time living in Canada affects caregiving decisions and preferences.
- More multivariate research is necessary to broaden our understanding of the predictors and consequences of strain. Although there are a variety of factors relating to eldercare that have been proposed across studies, few studies have included a comprehensive list of variables to help understand the complexity of interactions among them.
- More comparative studies based on various care recipients’ characteristics (e.g., impairment levels, age, gender, living arrangements) and caregiver profiles (e.g., education, income, occupation, social status, personality features) are needed to appreciate the heterogeneity of caregiving patterns.
- More studies to assess the “sandwich generation” are needed. To date, there are no estimates of current and future predicted size of the “sandwich generation,” its prevalence in the workforce, and how its caregiving responsibilities will affect individuals and workplaces. What is the extent and nature of sandwich generation responsibilities and how do these differ from those with only childcare or eldercare responsibilities? What effect might this distinction have on policy and ‘care’ conceptualizations? What will the future impacts and costs become for increasingly squeezed caregivers?
- More studies assessing the caregiving burdens and consequences experienced by the “sandwich generation” compared to burdens of those providing care to only elderly.
- More studies looking at how the shift from institutional care to increased responsibility for informal caregivers has impacted caregivers, care receivers, caregiving networks, and the whole public health care system.

- More studies that include individuals under 45 and over 65 years. The vast majority of studies have reported findings for employed caregivers between the ages of 45 and 64. Younger cohorts may be involved in eldercare, and we know very little about their experiences.
- More research on the caregiving network is needed. Providing care to elderly is not a solitary endeavour. Thus far, research has focused on primary caregivers rather than exploring the roles and relative contributions of the whole caregiving network (including secondary caregivers) and how the caregiving responsibilities affect its members.
- More prevalence data is needed. Studies to establish trends in the prevalence of elderly disability and requirements for formal and informal caregiving would help project potential sources of caregiver strain.
- There are methodological gaps in the caregiving research literature. Problems here include small sample sizes; rigid and faulty measurement categories; definitional issues in surveys and statistical analyses that need theoretical grounding; better conceptual explanations; lack of longitudinal studies as well as a lack of comparative regional, national and international studies. Research addressing these issues is needed to inform policy development in this area.
- We lack an understanding of how place of residence (e.g., urban versus rural) influences caregiving. How do out-migration of young people and in-migration of retirees to rural areas affect caregiving networks? How do we address the lack of caregiving services in rural compared to urban areas? What impact do inter-provincial differences with respect to the availability of formal supports for caregiving have on the caregiver?
- We do not understand how income, education and socio-economic-status affect caregiving patterns. There is currently a lack of data on the impact of caregiving on low-income workers.
- We do not know enough about the context of care. Currently we do not understand how the benefits and costs are distributed across families, communities, markets and employers and how this distribution is affected by policies. Future research needs to be done to increase our understanding of how the interconnected consequences of the caregiving burden (e.g., increased expenditures, reduced incomes, increased strain and stress that unpaid care providers often experience as result of taking on caregiving impact family members) are shared among family members.

Our research program was designed to address these gaps in the literature.

## Chapter Three: Methodology

As noted in the preamble, this report is the second in a series written using the data collected as part of the 2011-12 National Study on Work, Family and Caregiving. The following information has been reported in Report One<sup>4</sup> and will not be repeated here: recruitment of the sample, a description of the complete sample of 25,000 people who filled out the 2011-12 survey and a description of the survey instrument. Rather, the methodology section of report two will present unique information on the 7966 individuals who completed a special section of the survey that was designed to help us better understand the challenges faced by employed Canadians as they attempt to balance employment, caregiving, and (for some respondents) childcare. This section is divided into 2 parts. The measures included in the caregiving section of the questionnaire are discussed first. This is followed by a summary of the procedures used in this study to analyse the data.

### 1. The Questionnaire

The survey instrument was divided into 7 sections: your job and your organization; your manager; work-life balance; management of work and family demands; caregiving; physical and mental health; and “information about you”. All of the scales used in the questionnaire are psychometrically sound measures that have been well-validated in other studies. To allow comparisons over time, many of the survey measures that were used in our 2001 national work-life study were incorporated into the 2011 study questionnaire. A summary of the measures used including the working definition of each of the variables, the source of the measure and its interpretation were included in Report One and are summarized in Appendix A. The data itself are shown in Appendix B.

#### 1.1 The Caregiving Section of the Survey

This section of the report discusses the measures included in an optional section of the survey entitled "Caregiving" which was designed to give us a greater understanding of how combining the roles of employee and caregiver impacts work-life conflict and the organizational bottom line. We took a number of steps to ensure that only people who were actively engaged in caregiving completed this section of the survey. Rather than predefine who should and should not be in the caregiving group, we allowed respondents to self-define as to whether or not they considered themselves to be caregivers. We did this a number of ways. First, we put the "Caregiving" section of the survey (Section D) immediately after a section which focused on "Work-Life Balance." Second, we put the following prompt into the survey:

*"As our population ages many Canadian employees find themselves providing some kind of care, be it financial, help with chores or concrete caregiving activities, for their elderly parents or in-laws. The following questions deal with the challenges of providing such care. If you do not have any caregiving responsibilities, please skip to Section E, question 35."*

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<sup>4</sup> Report one can be found at <http://sprott.carleton.ca/duxbury/>

Respondents had to click a radio button acknowledging that they engaged in caregiving before they were allowed to see the questions in Section D. To confirm that these individuals had selected appropriately we then included the following as the first question in Section D:

*If you are providing care for an elderly family member (i.e., you provide emotional care and/or concrete caregiving activities) please answer the following questions. If you are not, please skip to question 35.*

As a final step in this process we asked respondents to "think of a specific individual for whom you provide care when answering the questions in this section" and to "Please confirm that you provide care to an elderly family member: (a) yes, (b) no. Only then were the respondents asked to fill out the Caregiving questions included. The last step was also designed to help us interpret the data as it made it possible for us to include several open ended questions on the care recipient as well as gave the respondent a reference point to think of when responding to the questions. The following section provides information on the measures included in this section.

## **1.2 Predictors**

Our review of the literature helped us identify a number of key predictors of caregiver strain. Included in Section D of the survey were questions to assess caregiving demands, caregiving intensity and subjective caregiver demands. We also collected information on the recipient of care. Details are given below.

*Care Recipient:* We began the caregiving section by asking people to provide two pieces of information on the person that they were caring for (the care recipient): their age and their relationship to the respondent.

*Caregiving Demands:* We asked respondents to indicate the number of elderly relatives in each of three categories that they felt that they had some responsibility for: (1) living in the respondent's home, (2) living nearby (i.e. within a one hour drive), and number of relatives living elsewhere (i.e. more than an hour drive away). We also asked them to tell us how many hours they spent per week engaged in caregiving.

*Caregiving Intensity:* Caregiving takes different forms and displays different levels of intensity at different points in time. Caregiving Intensity was measured in this study using a modified version of the scale that was developed by Montgomery, Gonyea & Hooyman, 1985 supplemented with items from Simms-Gould & Martin Matthews, 2008. Respondents were given a list of twelve key caregiving activities and then asked to indicate, for each of these roles, the level of demands (i.e., time, energy) that the role places on them in a typical month. The respondent was given the following choices in terms of response: do not spend time/energy in the role, almost no time/energy, a little time/energy, a moderate amount of time/energy and a lot of time/energy.

When analyzing this measure we first looked at the percent of the sample engaging in each of the roles (percent yes/no) as well as the per cent who engage in the role who say that this role is minimally demanding, moderately demanding and very demanding. We factor analyzed the 12

tasks to determine if these twelve tasks could be linearly reduced into a smaller set of factors as suggested in the literature. We also calculated a summary measure that we called "Caregiving Intensity" using all 12 items. Operationally we defined intensity as follows:

- Little to no energy (respondent engaged in 0 or 1 caregiving role requiring high energy),
- Moderate energy (respondent engaged in 2 or 3 caregiving roles requiring high energy),
- High energy (respondent engaged in 4 or 5 caregiving roles requiring high energy), and,
- Very high energy (respondent engaged in 6 or more caregiving roles requiring high energy),

*Caregiving Roles:* We also categorize respondents with respect to the number of roles they engaged in: 1-2 roles, 3-4 roles, 5-6 roles and 7 or more roles.

*Subjective caregiver demand* is the respondents' attitudes toward or emotional reactions to the caregiving experience. Subjective demands were measured in this study using the twelve item measure of subjective caregiver burden developed by Montgomery, Gonyea & Hooyman (1985). This measure asks respondents how often (rarely, some of the time, most of the time) they had experienced certain feelings, such as guilt, towards the person to which they were providing care. The literature is unclear on whether or not burden is best modeled as a predictor of strain or an outcome of strain. Conceptually we felt subjective demands would predict strain - a result that is borne out in our analysis.

### **1.3 Caregiver Strain**

*Caregiver Strain* is a multi-dimensional construct which is defined in terms of "burdens" or changes in a caregiver's day to day life that can be attributed to the need to provide care (Robinson, 1983). Research has linked high levels of caregiver strain to increase levels of depression, anxiety, fatigue, anger, family conflict, guilt, self-blame, emotional strain, and sleep loss. It has also been linked to financial problems, psychosomatic disorders, health problems and feelings of isolation. We used Robinson's measure to quantify Caregiver Strain in this study. Respondents were asked to indicate (using a five point scale) how often they experienced physical, financial or emotional strain because of caregiving. Options given included: never, monthly, weekly, several days per week or daily (i.e. the higher the score the greater the strain). Total caregiver strain was calculated as the summed average of these three items.

### **1.4 Outcomes**

Our review of the literature helped us identify a number of outcomes of relevance to this study. Included in Section D of the survey were questions to assess objective caregiver demands (burden). *Objective caregiver demands* is the extent of observable disruptions or changes in various aspects of the caregivers' life and household that can be attributed to their caregiving responsibilities. Objective caregiver demands were measured in this study using the nine measure of objective caregiver burden developed by Montgomery, Gonyea & Hooyman (1985). This measure asks respondents to look back over the last three months and indicate the extent to which challenges with respect to caregiving have caused a reduction in time for themselves, personal freedom, energy, etc. (no change, moderate change, substantial change). Generally speaking the higher the percent of the sample in the "little change" group the better from perspective of the individual and their family.

Other outcomes included in other sections of the survey of relevance to this analysis and the measures used to operationalize them are provided in Table 1. The interested reader is advised to go to Report One for a more complete discussion of each of these outcomes.

**Table 2: Measures Used in 2011 National Survey on Work, Family and Caregiving**

<b>Construct</b>	<b>Measure</b>
<b>Role Overload</b>	
Total Role Overload	Bohen & Viveros-Long (1981)
Work role overload	Caplan et al. (1980)
Family role overload	Based on Caplan et al. (1980) and Bohan & Viveros-Long (1981)
<b>Work-Family Conflict</b>	
Work Interferes Family	Guttek et al (1991)
Family Interferes Work	Guttek et al (1991)
<b>Organizational Outcomes</b>	
Commitment	Mowday, Steers and Porter (1979)
Job Satisfaction	Quinn and Shepard (1974)
Intent to Turnover	Hrebaniak and Alutto (1972)
Absenteeism	Developed by authors and tested in previous research
Employment changes index	Pyper (2006): Used in the GSS
<b>Individual Outcomes</b>	
Perceived stress	Cohen, Kamarck & Mermelstein, ( 1983)
Depressed Mood	Moos et al (1988)
Perceived Health	Moos et al (1998)
Life Satisfaction	Diener et al (1985)
<b>Moderators</b>	
Organizational Culture	Allen (2001)
Control over work	Dwyer & Ganster (1991)
Control over home life	Walters et al. (1996).

## **1.5 Moderators**

*Choice to care:* One moderator specific to the study on caregiving was included in this study: choice to care. The measure of this construct was developed by Decima Research (2004). Respondents were given a number of reasons why someone might care for an elderly dependent and asked to what extent they agreed that each of these reasons applied in their case. Some of the reasons represent high control (I chose to provide care, I believe it is a family responsibility) while other reasons are indicative of low control (there is no one else available, there is a lack of health services, there is a lack of homecare services). Other moderators included in other sections of the survey of relevance to this analysis and the measures used to operationalize them are provided in Table 1.

## 2. Statistical Analyses

The following types of analysis are used in Report Two.

- *Frequencies*: calculated as the percent of the sample giving a particular response (e.g. gender, elderly dependent lives with respondent).
- *Means*: calculated as the sample's average response to open ended questions (e.g. age, hours in dependent care per week).
- Chi-Square Analysis
- Factor Analysis
- *Partial least squares analysis (PLS)*.

Details are given below

### 2.1 Frequencies:

Most of the survey items are part of an established scale and were answered on a 5-point Likert scale. For example, we have scales measuring stress, work-family conflict, and role overload, to name a few. For scales, we first computed an overall mean by averaging each of the individual items making up a scale. So if a scale had 6 questions we'd take the average score of the six questions. We then use population norms to recode the scale average into three categories as follows:

- Low (mean scores less than 2.75).
- Neutral (mean scores between 2.75 and 3.75).
- High (mean scores high than 3.75).

We then calculated the per cent of the sample with scores in each of these categories. For those scales where a different recoding procedure (i.e. stress, depressed mood) was used we make a note in the text on how the categorization was done.

Many of the individual questions in the survey were also answered on a 5-point Likert scale. For these questions we recoded the variables into three categories as follows:

- Low/Disagree (scores of 1 and 2 on the question).
- Neutral (score of 3).
- High/Agree (scores of 4 and 5).

We then calculated the per cent of the sample with scores in each of these categories. For those questions not measured on a 5-point scale we make a note in Appendix C on how the categorization was done.

## **2.2 Means:**

Several of the absenteeism questions ask for mean number of days absent. We recoded these variables in two ways. First, we calculated the mean number of days for everyone. We also calculated the mean number of days for those for which a mean score was appropriate. For example, for elder care we would only include a person in this calculation if they had elder care responsibilities. If they did not have elder care responsibilities, they were not included in the calculation of this mean score.

## **2.3 Between Group Comparisons**

This research report takes a fairly unique approach to the analysis of gender impacts on caregiving by examining gender differences within "lifecycle stage" (eldercare only, sandwich group). The focus in this report is on significant between-group differences that are "substantive" in nature<sup>5</sup>. For the purposes of this report we have defined substantive as being a difference of 5% or more for the gender by lifecycle stage comparisons.

## **2.4 Factor Analysis**

In this study we conducted factor analysis on each of the scales included in the Caregiving section of the survey. Factor analysis is a statistical procedure used to identify a small number of factors that can be used to represent the relationships among a set of related variables. In this analysis we used principal components factor analysis - a method of factor extraction where linear combinations of the observed variables are formed. The first principal component is the combination of variables or "items" that explains the largest amount of variation in the sample. The second principal component explains the second highest amount of variance and is not correlated with the first component, and so on. We also used a varimax rotation to simplify the structure of the analysis and minimize the number of items with high loading on each factor.

## **2.5 PLS:**

In this study we test a number of theoretical models using a statistical technique called Partial Least Squares (PLS). For those not familiar with PLS, it is basically the same as regression but with two enhancements. First, regression only allows you to run a model with one dependent variable. PLS allows for multiple dependent variables. Second, PLS allows you to estimate measurement error while regression does not. Measurement error largely comes about when a person's response on a survey does not match what their actual response would be. Consider a simple example. Let's say you ask people how satisfied they are with their job and give them 5 response categories. Suppose they select a 4. But let's say their actual job satisfaction is not one of the 5 response categories but rather between two of the response categories (say 3.5). The scale has measurement error of .5 for this person. Although we can't solve this problem easily, with survey questions we can get a sense of measurement error by asking multiple questions about the variable of interest. So to measure job satisfaction we would ask 5-6 questions. PLS is

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<sup>5</sup>This requirement was necessary as the very large sample size meant that virtually all between group differences were statistically significant.

then able to determine how much measurement error there is on each individual question using answers to the other questions as a guide.

PLS analysis has two distinct steps. In step one, we assess measurement error and eliminate unreliable questions (note: a question with large measurement error is considered unreliable). In step two we estimate the relationship between variables (in a regression sense). In statistical terms we determine if the relationship between any two variables is significant. What this means in practice is that the predictor variable (independent variable) can explain some of the movement (variance) of the dependent variable. For example, if total overload is responsible for high levels of individual stress, the path between overload and stress will be significant. We test if a path is significant using what is called a T Test. If the result of the T test is a coefficient greater than 2, than that path is significant with less than a 5% chance of error (note: error refers to the possibility that the sample does not truly reflect the population). As a measure of how strong the relationship is between two variables we calculate an  $R^2$ .  $R^2$  ranges from 0 to 1 with low values close to zero indicating that the prediction is not very good. Generally, in this type of research, we like to see  $R^2$  in the range of .3 and above. The interested reader can consult the article by Barclay, Higgins and Thompson (1995) for more in-depth information on PLS.

We used the SmartPLS software package Release 2.3 for all of our analyses. Information on this package can be found at <http://www.smartpls.de>.

*Testing for Moderation:* Moderation is concerned with the strength of a relationship between variables. For example, suppose you were looking at the relationship between family role overload and total role overload. Let's now look at the relationship for two levels of financial status: economically well off and financially struggling. There is a good chance that financial status will moderate the relationship between family role overload and total role overload. Employees who are well off should, for example be able to purchase supports that allow them to cope with the overload at home while those who are more economically challenged will not be able to purchase such supports. Thus, the relationship between family overload and total overload would be stronger for the employee with less disposable income than for their counterparts with more disposable income.

Testing for moderation has historically been a tedious process. The process required that the analyst center all the variables involved in the moderation (independent, dependent, and moderator variables). However, SmartPLS has moderation analysis built into the system. The researcher only needs to specify the dependent variable, the independent variable and the moderator. The software takes care of all the required data manipulation (i.e., centered data).

## Chapter Four: Profile of Caregivers

This chapter provides a brief profile of the men and women who responded to the caregiver section of the survey. This chapter has three purposes: (1) describe the 7966 caregivers who responded to the caregiver section of our study, (2) examine the impact of gender and caregiver group on our findings, and (3) outline key findings for variables included in the caregiving models tested in Chapter Six. Details have already been in Report One for much of the data presented in this chapter and will not be repeated here. Instead this chapter focuses on situating the current study within a larger context. The data in this chapter can be found in Appendix A (data tables) and Appendix B (interpretation guide).

### 4.1 Demographics

#### Most of the caregivers in the sample were women

Almost 8000 employed Canadians (n = 7966) filled in the "caregiver" section of the survey. Information on how this sample was distributed is shown in Table 3. The following observations can be made from these data:

- Most of the caregivers in the sample were women (70%),
- The majority of the respondents (60%) had multi-generational caregiving responsibilities (i.e. in sandwich group), a finding that is consistent with the fact that all respondents were in the workforce (i.e. younger),
- There were twice as many women as men in the sandwich group sample, and
- There were three times as many women as men in the eldercare group sample.

These data support the idea that women are more likely than men to provide caregiving

**Table 3: Sample distribution: Caregiver Group**

	Sandwich		Eldercare	
	Women n = 3172	Men n = 1574	Women n = 2428	Men n = 792
% of sample	39.8	19.8	30.5	9.9

#### Demographically the samples were very similar

The following observations can be drawn with respect to the demographic characteristics of the individuals in the four caregiver groups examined in this analysis:

- The sample is geographically diverse. Where our respondents live (i.e. population of community, province) is not associated with caregiver group

- The majority of respondents are in managerial, professional and technical positions. Job type is not associated with caregiver group.
- Most of the respondents have some form of post secondary education. Education is not associated with caregiver group.
- Most of the respondents earn incomes of \$60,000 per year or more. Income is not associated with caregiver group.
- Two-thirds of the men and women in the eldercare group have never had children. The rest have children who are over 18 and no longer live at home.
- The number of children at home is not associated with gender within the sandwich group. Half the men and women in the sandwich group have two children. Twice as many respondents have three or more children as have one child.
- The age of children at home is not associated with gender within the sandwich group. Most of the employees in this group are parents to teenagers (approximately 40%) and adolescents (35%). One in five is a parent to children under the age of 5.

The lack of demographic differences within the sample suggest that any between-group differences in the outcomes in our models can be attributed to factors associated with the caregiving situation rather than uncontrolled confounds.

### **Employees with multi-generational responsibilities are younger**

The caregiver sample was well distributed with respect to age. More specifically:

- 5% of our caregivers were under age of 30,
- 35% of our caregivers were between 30 and 45,
- 44% of our caregivers were 46 to 55, and
- 17% of our caregivers were 56 or older.

The higher number of younger workers in our caregiving sample is likely reflective of our focus on Canadians who are still in the workforce.

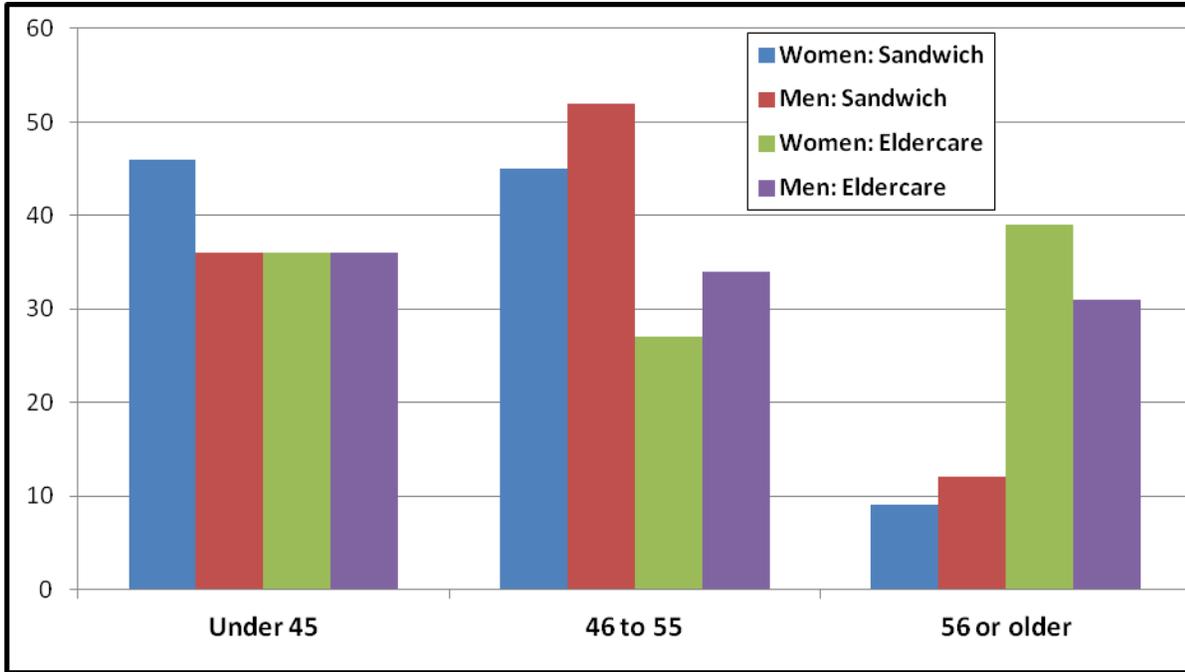
Age is strongly related to caregiver group as shown in Figure 1. More specifically, employees in the eldercare group are older than those in the sandwich group. This is not surprising given that fact that by definition, those in the sandwich group still have children at home.

### **Money is more likely to be an issue in families with multi-generational caregiving**

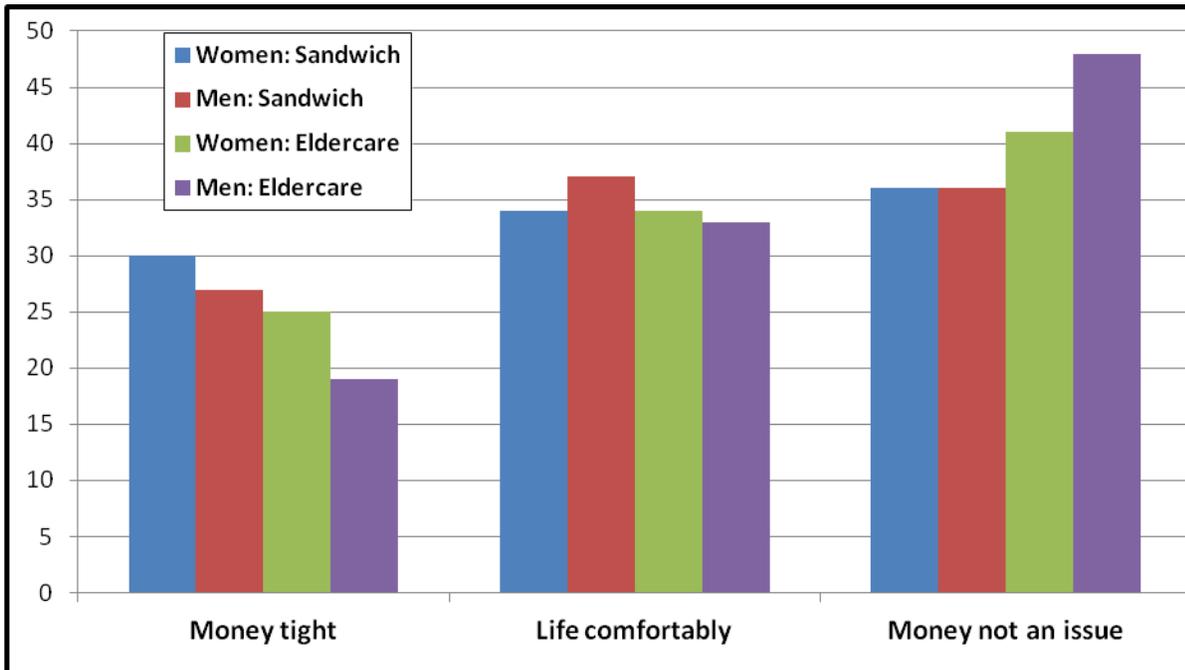
As shown in Figure 2, family financial situation is associated with caregiving group with employees in the sandwich group being more likely to say that money is tight in their family while employees in the eldercare group are more likely to say that money is not an issue in their family (comparison done within gender). This finding is particularly interesting given the data showing that when gender is taken into account, employment income is not associated with

caregiver group. These findings suggest that taking on the role of eldercare is more likely to be a financial strain in families with children still living in the home.

**Figure 1: Age by Caregiver Group**



**Figure 2: Family Financial Status by Caregiver Group**

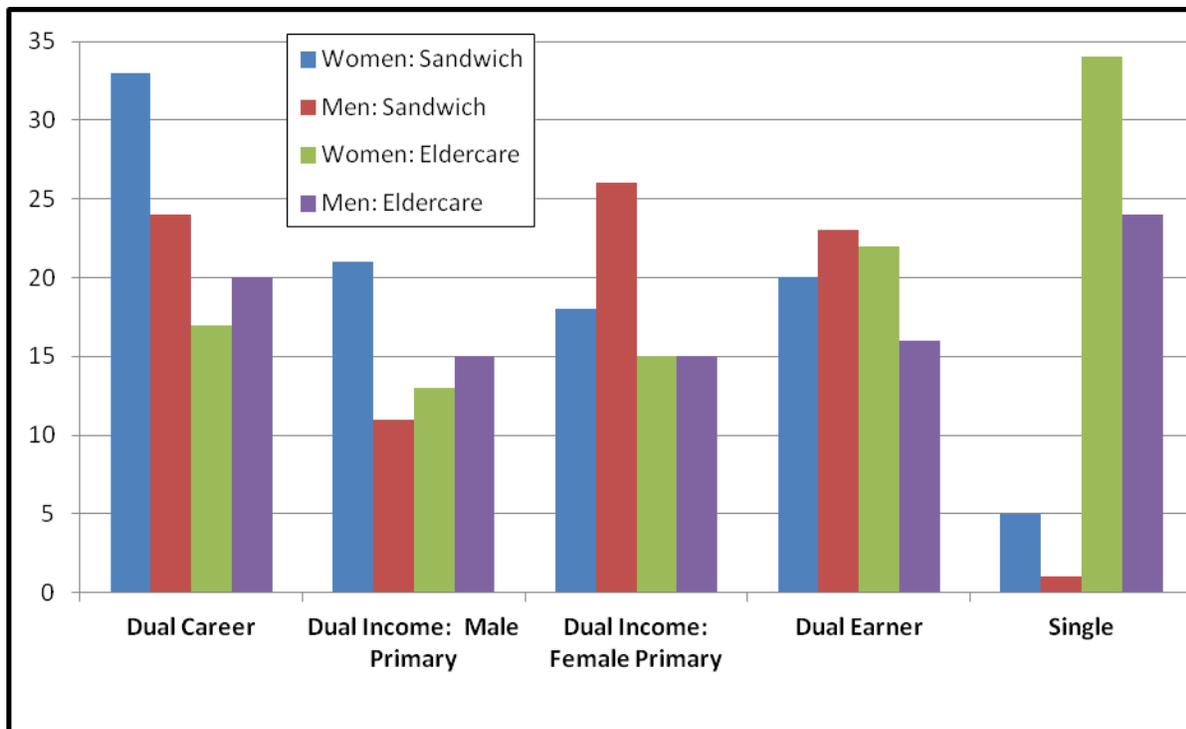


### Many single employees provide eldercare

Data classifying our respondents by family type are shown in Figure 3. A number of interesting conclusions can be drawn from these data.

- Many employees who provide eldercare are single.
- Employees in the sandwich group are more likely to be in dual career families. While these families are more likely to have the financial resources to help them cope with their caregiving demands, the respondents in this group are also more likely to have challenges balancing the time demands of managing two careers with two sets of dependent care needs.
- Employed parents who take on eldercare are more likely to live in a family where their partner is the primary breadwinner, suggesting either that they are taking on this role because their partner has a secure income and/or that these individuals have reduced their commitment to their career as a way to manage their dual caregiving demands.

**Figure 3: Family Type**



### Role responsibilities are shifting within many Canadian families

We asked respondents to evaluate how breadwinning and caregiving role responsibilities were distributed within their families. The following findings have relevance to this study:

- Breadwinner status: men are more likely to say that they were primary breadwinner in their families, women more likely to say that breadwinning was shared in their families.
- Women in the sandwich group are more likely to say that they have primary responsibility for childcare in their family than are their male counterparts (50% of women in the sandwich group have primary responsibility for childcare while 58% of the men in the sandwich group say that their partner has primary responsibility for childcare).
- One in three of the women in the sandwich group say that their partner has primary responsibility for childcare in their family - double the percent of women in families with just childcare who gave this response. This finding suggests that eldercare may be shifting who does what at home in some families in the sandwich group.

## **4.2 Predictors**

### **Employed caregivers devote a substantial amount of their time to their work role**

Over half the sample devoted more than 45 hours per week to paid employment. More specifically:

- Men in the sandwich group spent 52 hours per week on average in paid employment,
- Men in the eldercare group spent 50 hours per week on average in paid employment,
- Women in the sandwich group spent 48 hours per week on average in paid employment, and
- Women in the eldercare group spent 47 hours per week on average in paid employment.

Men spent more hours per week in paid employment than their female counterparts.

### **The partner's of the employed caregivers in our sample also devote a lot of time to work**

Additional information can be gained from looking at the work demands of the respondent's spouse. The majority of the employed caregivers in this sample had a partner who also worked outside the home. The data on partner's time in paid employment again suggest that women in the sandwich group face different challenges than their male counterparts and women in the eldercare group. More specifically, the women in the sandwich group indicated that their partner devoted 48 hours per week to paid employment - 10 hours more per week than the partners of the respondents in the other three groups.

### **Employees in the sandwich group are more likely to bring work home**

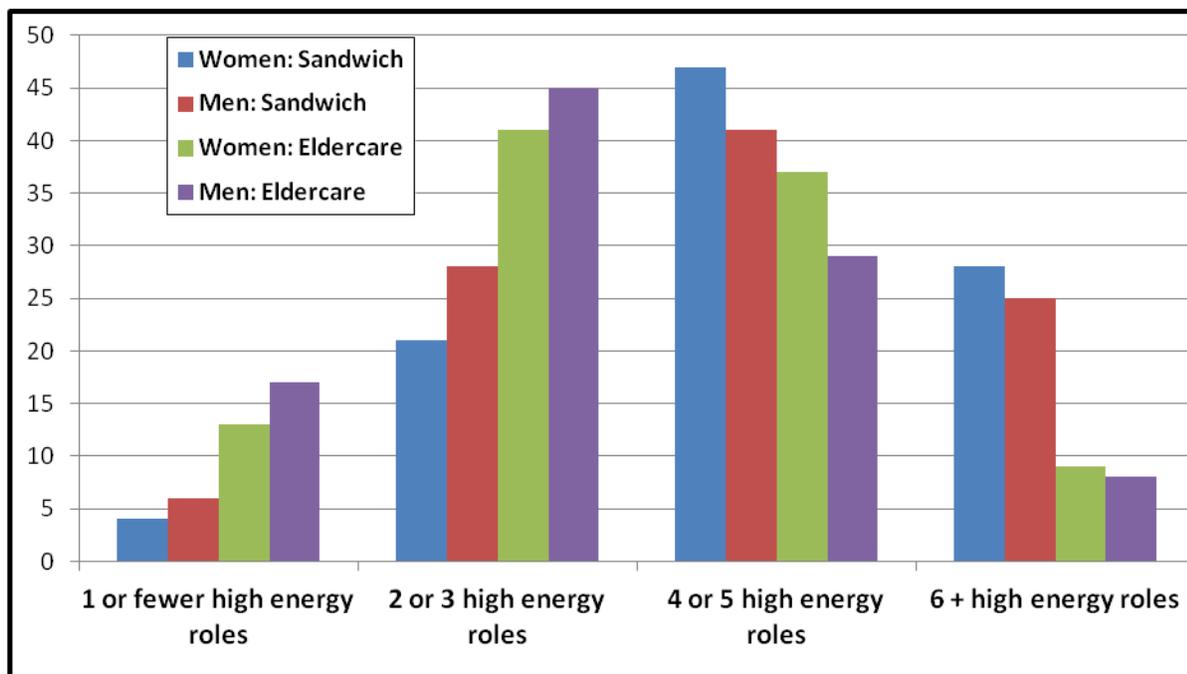
Men and women in the sandwich group are significantly more likely to take work home to complete in the evening and on weekends (supplemental work at home - SWAH) than are their counterparts in the eldercare group. Time in SWAH per week (approximately 7 hours per week) is not however associated with caregiver group for those who engage in such activities

## Canadians are busy people

Canadians participate in a number of roles other than those associated with paid employment and dependent care. In the survey we provided a list of 12 roles and asked respondents which of these roles they participated in and how much energy the role required. The analysis undertaken for Report One found that energy required by total role set was one of the main predictors of both work and family role overload in the sample. Figure 4 presents data on total energy required by role set by caregiving group. These findings are very indicating and support the following conclusions:

- Women take on more high energy roles than men, and
- Those in the sandwich group are more likely to be engaged in a higher number of high energy roles than those in the eldercare group

**Figure 4: Number of High Energy Roles By Caregiver Group**



## 4.3 Outcomes

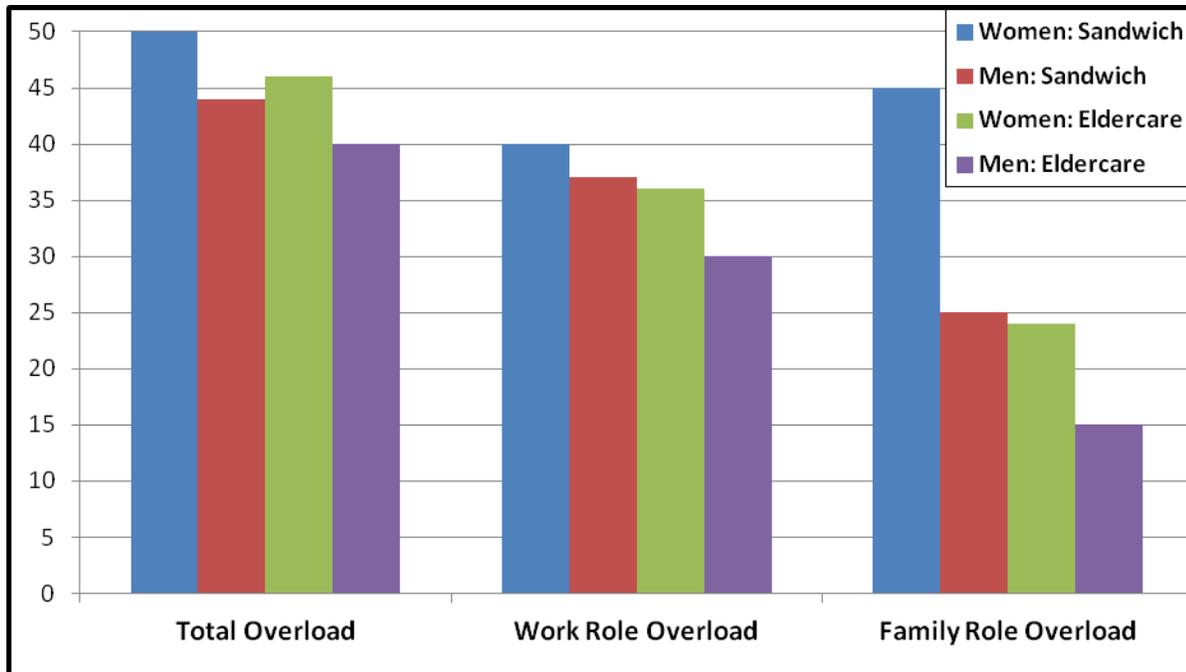
### Women in the sandwich group report very high levels of family role overload

Overload is strongly associated with caregiving as shown in Figure 5. The data from this study support the following conclusions with respect to overload:

- Women report higher levels of total role overload and family role overload than men,
- Employees in the sandwich group report higher levels of all three forms of role overload (if comparison done within gender),

- Men in the eldercare group report the lowest levels of all three forms of role overload, and
- Women in the sandwich group report very high levels of all three types of role overload. The high levels of family role overload experienced by the women in this group are particularly striking and probably account for the higher levels of total role overload experienced by these women.

**Figure 5: Role Overload by Caregiver Group: % report high levels of**



**Employees with multigenerational caregiving report high levels of work-life conflict**

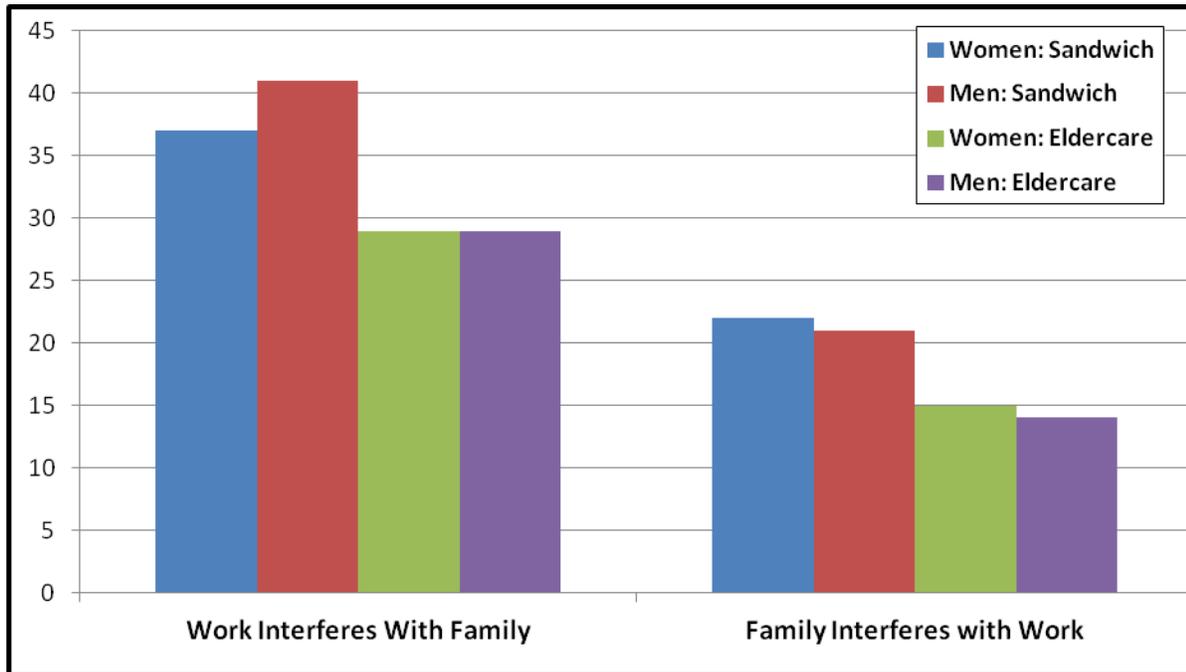
Examination of the data (see Figure 6) indicate that employees in the sandwich group report higher levels of work interferes with family and family interferes with work than those with just eldercare regardless of gender.

**Caregiving responsibilities impact absenteeism**

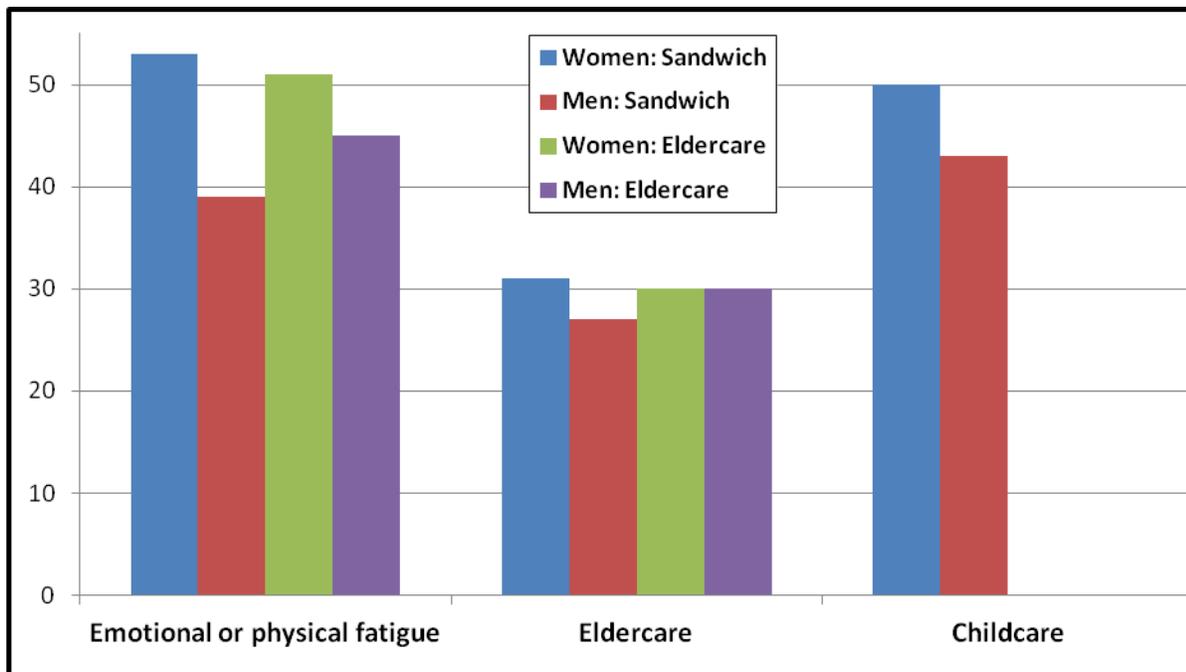
Caregiver group is not associated with a number of key organizational outcomes including organizational commitment, intent to turnover, job satisfaction and employment change index. It is, however, associated with absenteeism. The data in Figure 7 and Appendix A support the following observations:

- Women are more likely than men to be absent from work.
- Women in the sandwich group are the most likely to be absent from work while the men in the sandwich group are the least likely to be absent from work suggesting that there are gender differences in how men and women enact multigenerational caregiving.

**Figure 6: Work-Life Outcomes by Caregiver Group: % report high levels of**



**Figure 7: Absenteeism By Caregiver Group: % Absent Due to:**



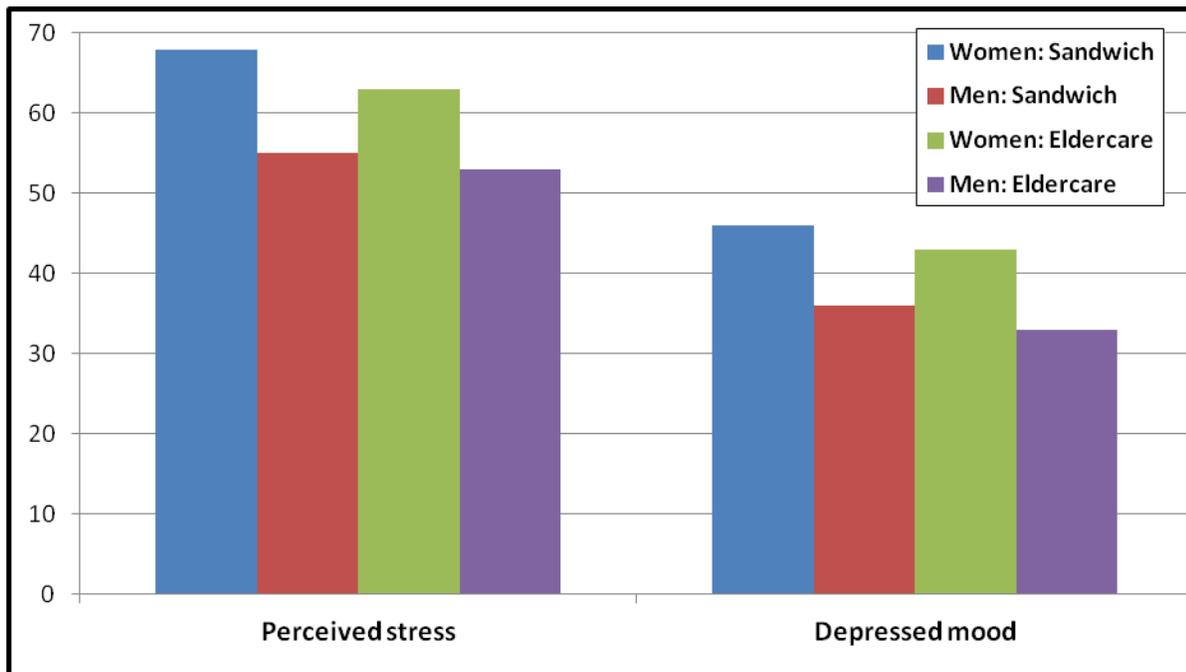
- One in ten employees in caregiving sample indicated that they reported in sick because a personal leave day not granted.
- Approximately one in three employees with caregiving responsibilities misses work because of issues with respect to eldercare.

**Multi-generational responsibilities appear to be particularly challenging for women**

While caregiving is not associated with a number of the employee indicators included in our study (e.g. perceived health, life satisfaction, use of the health care system) it does appear to be linked to employee mental health. The data shown in Figure 8 support the following observations with respect to this issue:

- Women report higher levels of stress and depressed mood than men, and
- Multi-generational responsibilities appear to be particularly challenging for women.

**Figure 8: Employee Mental Health Outcomes by Caregiver Group: % reporting high:**



## 4.4 Moderators

With one exception (control at home), caregiver group was not associated with any of the moderators included in this study. More specifically:

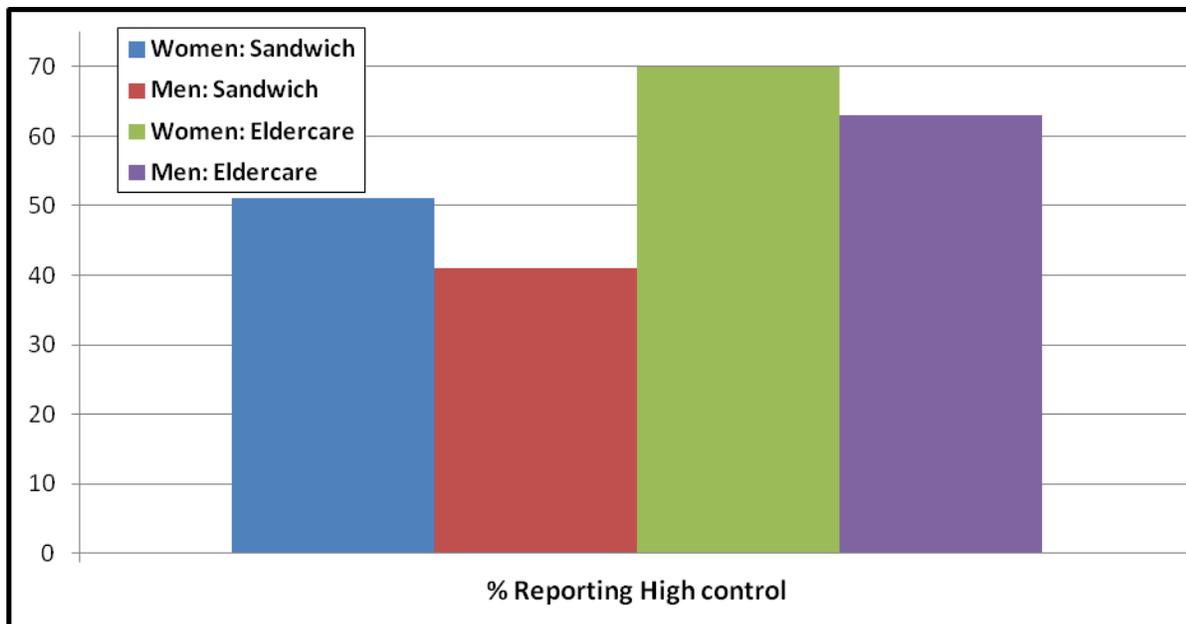
- Perception of the culture within their organization not strongly associated with caregiver group,
- Control at work not associated with caregiver group,
- The likelihood that one will view their immediate manager as support is not strongly associated with caregiver group, and
- Perceived flexibility at work is not associated with caregiver group (one in three of the respondents in all three groups indicated that they have very little flexibility).

### **Men perceive that they have less control over their situation at home than do women**

The data from this study (see Figure 9) support the following conclusions with respect to the relationship between caregiver group and perceived control at home:

- Those in the sandwich group are less likely than those in eldercare group to report high levels of control at home, and
- Women are more likely than men to report high levels of control at home

**Figure 9: Control at Home by Dependent Care Group**



## Chapter Five: Caregiving

This chapter summarizes key findings with respect to employed caregivers in Canada obtained using the data collected as part of the 2011-12 National Work, Life and Caregiving study. The section is divided into six parts. Data on family demands (collected in both the main body and caregiving sections of the survey) are presented first. This is followed in section two by a discussion of the data which speaks to why the employees in this sample chose to take on the role of caregiver. Data on caregiver strain are presented in section three while section four explores the data on intensity of the caregiver role. Data on Subjective Caregiver Demands are presented in the fifth part of this chapter. The final section of the chapter (section six) presents data on how caregiving impacts employees (objective caregiver demands) and employers (employment change index).

### 5.1 Caregiving Demands

A number of questions were included in the survey to help us understand the objective family demands borne by the caregivers in the sample. More specifically, in the main body of the survey we asked respondents:

- how many elderly dependents they felt that they had some responsibility for and where these respondents lived (in the respondent's home, nearby, elsewhere),
- to estimate how many hours per week they spent in childcare and eldercare, and,
- to estimate how many hours per week their spouse/partner spent in childcare and eldercare.

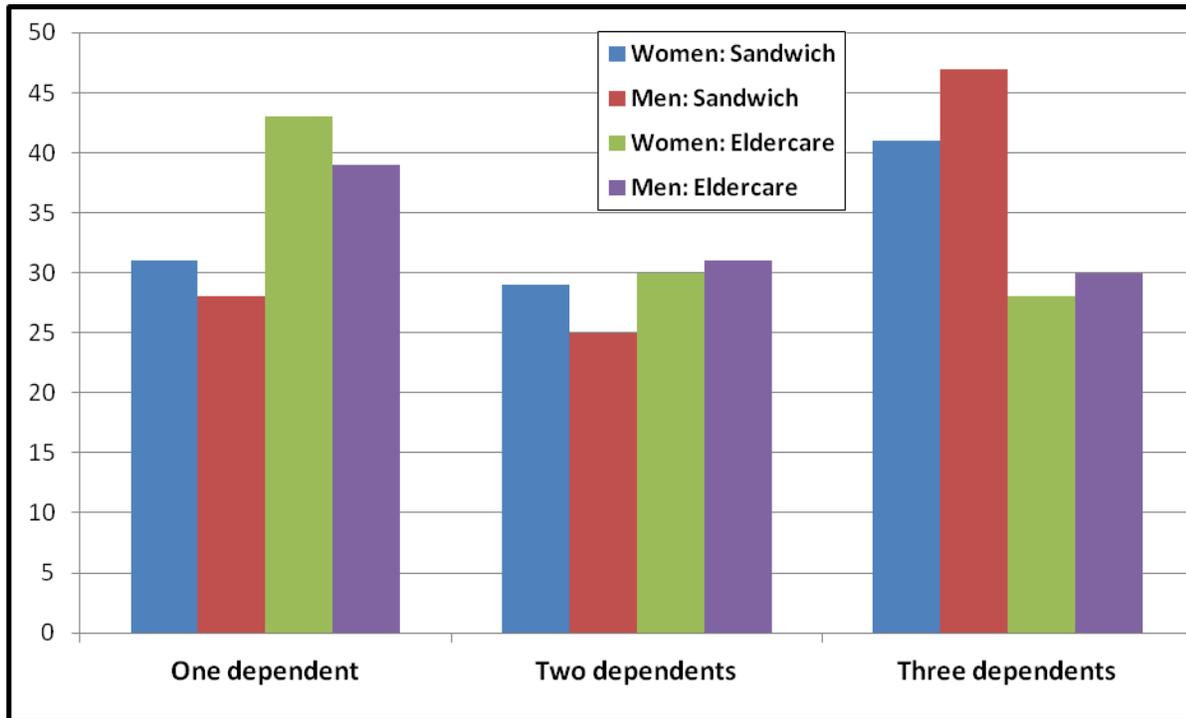
Then, in the caregiver section of the survey we asked them to estimate the number of hours per week they spent providing care for the referent care recipient.

Data collected from the main survey are presented first. This is followed by more specific data on caregiving for the referent care recipient.

Data showing the number of elderly dependents respondents feel that they have some responsibility for are shown in Figure 10 by caregiver group. The following conclusions are supported by this data:

- The majority of respondents feel "responsible" for the well-being of two or more dependents.
- Respondents in the sandwich group are more likely than those in the eldercare group to feel responsible for the well-being of three or more dependents. This difference is likely due to the fact that the respondents in the sandwich group are younger which, by extrapolation, increases the chances that their parents and in-laws are still alive.
- Gender is not associated any straight forward fashion with the number of dependents the employee feels responsible for.

**Figure 10: Number of Dependents by Caregiver Group**



**Very few employees care for an elderly dependent who lives with them**

Data where the elderly dependent lives with respect to their caregiver are shown in Table 4. A number of conclusions can be drawn from these data.

First, very few employed caregivers (11.4%) care for a dependent that lives with them. That being said, approximately 8% of the sample care for one dependent who lives with them and just under 3% care for two dependents who live in the respondent's home. The likelihood of caring for an elderly dependent in one's home is not associated with caregiver group.

Second, the sample is well distributed with respect to providing care for an elderly dependent that lives "near-by" (i.e. within an hour's drive). Employees in the sandwich group are slightly more likely to provide care for a parent and/or in-law who live nearby. This finding might be attributed to the fact that either the respondent's parents and/or in-laws have moved to live in the same community as their children and/or the fact that the younger employees in this sample are more likely to live in the community where they grew up. It should also be noted that this is the most common "care arrangement" in this sample.

Finally, while just over half the employees in the sample feel no responsibility for the care of an elderly dependent that lives at a distance, the other half of the sample do. Most of these employees say that they have responsibility for one (20%) or two (16.3%) dependents who live elsewhere. One in ten feels responsible for three or more dependents that live at a distance. The

likelihood of feeling responsible for the well-being of an elderly dependent that lives at a distance is not associated with caregiver group.

**Table 4: Where do elderly dependents live?**

Where does elderly dependent live?	Men:		Women		Total
	Sandwich	Eldercare	Sandwich	Eldercare	
In Respondent's Home					
• 0	89.0	86.9	89.2	88.1	88.6
• 1	7.2	10.0	7.8	9.1	8.3
• 2	3.0	3.0	2.5	2.6	2.7
• 3 or more	0.3	0.1	0.5	0.2	.5
Near-by (< an hour's drive)					
• 0	29.7	41.4	28.6	36.0	32.3
• 1	25.3	28.4	29.1	31.4	29.0
• 2	25.0	18.7	25.7	22.1	23.8
• 3 or more	19.9	11.5	16.7	10.5	14.9
Elsewhere (> an hour's drive)					
• 0	50.6	51.6	54.3	56.4	53.9
• 1	19.1	21.1	18.6	21.7	19.9
• 2	17.3	17.9	17.2	14.0	16.3
• 3 or more	12.9	9.3	9.9	8.0	9.9

**Time per week in caregiving strongly associated with gender and caregiving situation**

The self-report data on hours per week in child and/or eldercare by the respondent and their spouse are shown in Table 5. These data support the following conclusions:

- Women spend more time per week in childcare than men,
- Gender is not related to the amount of time spent in eldercare,
- While employees in the eldercare only group spend more time per week in eldercare than their counterparts in the sandwich group, the difference is not substantive,
- The men in the sample receive more caregiving support from their partners than do the women, regardless of their caregiving situation, and
- The employees in the sandwich group spend significantly more time overall in family activities than their counterparts in the eldercare group (approximately triple the amount of time).

These data are consistent with the higher levels of role overload reported by those in the sandwich group.

**Table 5: Time in Caregiving by Respondent and their Spouse**

Demographics	Men:		Women	
	Sandwich	Eldercare	Sandwich	Eldercare
<b>Respondent</b>				
Hours per week in childcare	16.9	0	20.1	0
Hours per week in eldercare	6.1	7.1	6.4	7.9
Total hours in caregiving per week	23.0	7.1	26.5	7.9
% saying that their partner spends no time in eldercare per week	18%	14%	28%	20%
<b>Respondent's Partner</b>				
Hours per week in childcare by spouse of	24.6		17.4	
Hours per week in eldercare by spouse of	8.8	8.7	5.9	5.8
Total hours/week in caregiving by spouse of	33.4	8.7	23.3	5.8

**Women in the sandwich group receive less support with caregiving from their partner**

The majority of respondents (over 80%) said that their partner also spent time each week in childcare and/or eldercare, a finding that suggests that caregiving is now a shared responsibility within most Canadian families. That being said, women in the sandwich group were less likely than respondents in the other three groups to say that their partner spent time each week in eldercare (see Table 4) - a finding that is consistent with the data showing that these women are more likely to have a partner who is also in a demanding career who spends a substantive amount of time in paid employment per week.

**Most respondents provide care for one of their parents**

We began the caregiving section of the survey by asking respondents to think of one dependent to which they provided care when answering the caregiving questions. Most individuals (70.7%) indicated that the person they were thinking of was one of their parents. Others indicated that they either cared for one of their in-laws (16.8%) or an extended family member (12.1% cared for an aunt, an uncle, an older sibling). Less than 1% of the respondents cared for someone who was not related to them. There was no between-group differences in who the respondent was thinking of when answering the caregiver questions.

Most people spent between 6 and 8 hours per week caring for someone who was in their late 70s (see Table 6). Many of the findings observed in Table 6 (referent person) are similar to those reported in Table 5 (general survey) which reinforces our confidence in the following two observations:

- While employees in the eldercare only group spend more time per week in eldercare than their counterparts in the sandwich group, the difference is not substantive, and

- The men in the sample receive more caregiving support from their partners than do the women, regardless of their caregiving situation.

**Table 6: Demographics on "Reference" Person**

Demographics	Men:		Women		Total
	Sandwich	Eldercare	Sandwich	Eldercare	
How old is "referent" dependent?	78.21	79.27	76.97	79.07	78.08
How many hours per week spent caring for elderly dependent	6.09	6.55	6.65	7.83	6.89
Spouse: Hours spent in elder-care activities	6.74	6.44	3.25	3.03	4.34

## 5.2 Why Take on Caregiver Role?

Why do the employees in our sample say they have taken on the roll of caregiver to their parents/in-laws? Answers to this question are provided in Table 7. Examination of these data show that the majority of respondents take on the caregiver role because they feel it is a family responsibility (90% agree) that they choose to take on (83% agree). That being said, a substantive portion of the sample take on the role because no one else is either available (42% agree) and/or willing (35% agree) to take on the role. Finally approximately 30% of the sample indicates that they took on the role of caregiver due to a lack of homecare and appropriate health services. The likelihood that a respondent will mention any of these reasons is not strongly associated with either gender or caregiver situation.

**Table 7: Why do you care for this person(s)?**

Reasons for taking on role Because:	Men:		Women		Total
	Sandwich	Eldercare	Sandwich	Eldercare	
I believe it's a family responsibility:					
• Disagree	2.8	4.6	3.1	5.1	3.8
• Neutral	6.7	6.5	5.7	6.8	6.3
• Agree	90.6	88.8	91.2	88.1	89.9
I choose to provide the care :					
• Disagree	4.8	5.2	5.4	5.0	5.1
• Neutral	11.7	13.3	12.4	11.1	12.0
• Agree	83.5	81.5	82.2	84.0	82.9
I believe no one else is available:					
• Disagree	37.7	41.5	36.2	37.6	37.5
• Neutral	21.8	22.6	20.3	20.3	20.8
• Agree	40.5	35.8	43.5	42.1	41.7
There is a lack of health services:					
• Disagree	42.4	47.9	38.4	43.6	41.7
• Neutral	30.3	28.6	29.7	27.8	29.1
• Agree	27.3	23.5	31.8	28.6	29.2
There is a lack of homecare services:					
• Disagree	41.4	46.0	38.2	43.9	41.3
• Neutral	30.3	28.2	28.9	27.0	28.5
• Agree	28.3	25.8	32.9	29.1	30.2
There is no one is willing:					
• Disagree	43.4	45.4	38.4	41.8	41.1
• Neutral	25.2	22.7	24.9	22.9	24.1
• Agree	31.4	31.9	36.7	35.2	34.8

Factor analysis of the items in this measure identified three "reasons for caregiving" factors:

- **Factor One: Lack of Services:** Because there is a lack of homecare services; Because there is a lack of health services
- **Factor Two: There is no one else:** Because I believe no one else is available; Because I believe no one else is willing
- **Factor Three: Personal choice:** Because I choose to provide the care; Because I believe it is a family responsibility

Scores on each of these three factors are shown by caregiver group in Table 8.

**Table 8: Why do you care for this person(s)?: Factors**

Reasons for taking on role: Factor Scores	Men:		Women		Total
	Sandwich	Eldercare	Sandwich	Eldercare	
Lack of Services:					
• Disagree	38.4	44.6	36.0	41.1	38.9
• Neutral	39.2	34.6	36.0	35.0	35.9
• Agree	22.4	20.8	28.0	23.9	25.3
Personal Choice:					
• Disagree	.7	1.8	.8	.9	.9
• Neutral	17.6	18.7	17.9	18.0	18.0
• Agree	81.7	79.6	81.3	81.1	81.1
There is no one else:					
• Disagree	31.8	35.4	28.8	31.9	30.9
• Neutral	41.4	38.9	40.3	38.6	39.8
• Agree	26.9	25.7	30.9	29.6	29.2

Examination of the data in this table support our assertion that reasons for providing care are not strongly associated with either gender or caregiving situation. That being said, the data does suggest that women in the sandwich group are more likely to take on the role because of a lack of support services within their parent's/in-laws community. In other words, while the women in this group "chose to care", many also feel that they have no choice but to care due to a lack of appropriate supports within the community.

### 5.3 Caregiver Strain

Table 9 summarizes key findings on with respect to the extent to which the employees in our sample report three kinds of caregiver strain. Inspection of the data in this table supports the following conclusions:

- Approximately one in five of the employees in our sample report high levels of caregiver strain: 5% report experiencing strain several times a week or daily and 12% report strain on a weekly basis.
- The incidence of total caregiver strain is not associated with caregiver group.
- More employees report high levels of physical caregiver strain (29% report they experience this form of strain weekly or more) than report high levels of emotion or financial strain.
- The incidence of physical caregiver strain is not associated with caregiver group.
- Just over one in five of the employees in this sample report that they find eldercare to be overwhelming on either a weekly basis or a daily basis.

- The incidence of emotional caregiver strain is not associated with caregiver group.
- Only one in ten of the employees in this sample report high levels of financial caregiver strain. The relatively low incidence of this form of strain is likely due to the fact that the employees in this sample are relatively well paid professionals.
- The incidence of financial caregiver strain is not associated with caregiver group.

**Table 9: Caregiver Strain by Caregiver Group**

Caregiver Strain:	Men:		Women		Total
	Sandwich	Eldercare	Sandwich	Eldercare	
Overall Caregiver Strain:					
• Monthly	85.9	84.7	81.6	81.6	82.8
• Weekly	9.4	9.3	12.7	13.1	11.8
• Several times a week/daily	4.7	6.0	5.7	5.3	5.4
Physical Caregiver Strain:					
• Monthly	72.9	73.8	70.7	69.8	71.1
• Weekly	17.6	14.2	17.1	17.7	17.1
• Several times a week/daily	9.5	12.0	12.2	12.5	11.8
Financial Caregiver Strain:					
• Monthly	90.0	89.6	89.2	91.2	90.0
• Weekly	4.7	4.4	5.0	4.4	4.7
• Several times a week/daily	5.3	6.0	5.9	4.4	5.3
Caregiving is overwhelming:					
• Monthly	84.0	83.9	76.7	77.6	79.1
• Weekly	9.0	8.0	12.2	10.7	10.7
• Several times a week/daily	6.9	8.1	11.1	11.7	10.2

## 5.4 Caregiving Intensity

As noted earlier in this report, caregiving involves a broad range of activities that take many forms and levels of intensity at different points in time. This study looked at intensity several ways. First, we asked respondents to indicate if they engaged in a variety of caregiving activities that represented the various forms of care outlined in the literature. Their responses to this question are provided in Table 10 in descending order (i.e. tasks performed most frequently are provided first).

Virtually everyone in the sample (97%) said that provided emotional/moral support to the dependent (i.e. emotional care) that they were supporting as well as general care (i.e. ran errands, drove them around). Approximately two thirds of the respondents said that they provided financial assistance, home and yard maintenance, and helped with household chores - activities that are commonly referred to within the literature as "Instrumental activities of daily living (IADLs)." Finally, approximately a third of the respondents stated that they provided personal

care (toileting, feeding) and nursing care (medications, bed transfer). Personal care activities are typically referred to in the literature using the label "Activities of daily living (ADLs)."

**Table 10: Caregiving Intensity: Percent Undertaking Various Caregiving Tasks**

	Men:		Women		Total
	Sandwich	Eldercare	Sandwich	Eldercare	
Moral/emotional support:	96.3	95.0	97.5	96.0	96.6
General care (i.e., transportation, running errands)	85.6	82.3	84.7	82.2	83.9
Financial Assistance/Support (money management, personal business)	72.8	73.5	66.5	64.7	67.9
Home-yard maintenance (housework, yard care)	73.2	66.1	62.3	56.7	63.2
Household chores (laundry, meals)	61.6	59.1	61.7	59.1	60.6
Personal Care (toileting, feeding)	43.8	39.2	37.0	35.4	38.1
Nursing care (i.e., bathing, dressing, medications, bed transfer, wheelchair transfer)	40.1	34.4	33.1	30.6	33.9

Examination of the data in table 10 indicate that gender and/or caregiver situation are associated with the likelihood that an employee will spend time on the various caregiver tasks considered in this analysis. More specifically:

- The likelihood that an employee will provide emotional support, perform general errands, and undertake household chores is not associated with caregiver group.
- The men in the sample are more likely than their female counterparts to provide financial assistance and yard work. They are also more likely to provide personal care and nursing care than their female counterparts - a finding that runs counter to what is reported in the literature.

We then asked respondents to indicate how demanding they found each of the caregiving roles that they engaged. Their responses to this question are provided in Table 11 in descending order (i.e. more demanding tasks are provided first). The data is shown in two ways: data showing the percent of the sample saying that the role is very demanding are presented first followed by those saying the role is moderately to very demanding.

The following observations can be made from looking at the "role is very demanding" data. First, with one exception (home-yard maintenance) women were more likely than men to report they found all the caregiver roles examined in this study to be very demanding. The gender difference with respect to providing emotional support is particularly large. Second, while many people say they engage in these different roles, in most cases they do not find performance of the role to be demanding. These gender differences are also apparent when one looks at the "role is

moderately to very demanding" data. These results suggest that researchers should look beyond who does what with respect to caregiving to how much energy the caregiver spends in the role.

**Table 11: Caregiving Intensity by Caregiver Group**

	Men:		Women		Total
	Sandwich	Eldercare	Sandwich	Eldercare	
<b>Percent of the sample saying that this role is very demanding</b>					
Moral/emotional support:	24.1	27.1	43.5	43.8	38.3
General care (i.e., transportation, running errands)	13.7	14.3	23.4	25.2	21.2
Financial Assistance/Support (money management, personal business)	12.2	14.9	17.2	17.0	15.9
Home-yard maintenance (housework, yard care)	12.1	15.9	12.3	13.5	13.0
Household chores (laundry, meals)	5.4	5.7	13.8	12.0	10.9
Nursing care (i.e., bathing, dressing, medications, bed transfer, wheelchair transfer)	2.8	3.4	8.5	8.5	7.2
Personal Care (toileting, feeding)	2.9	4.8	8.5	4.2	5.7
<b>Percent of the sample saying that this role is moderately to very demanding</b>					
Moral/emotional support:	78.9	69.6	83.7	82.0	79.0
General care (i.e., transportation, running errands)	52.7	50.1	60.5	63.2	58.9
Financial Assistance/Support (money management, personal business)	43.3	42.3	42.5	42.9	42.3
Home-yard maintenance (housework, yard care)	45.9	48.8	33.6	38.6	41.3
Household chores (laundry, meals)	27.1	29.0	36.7	32.1	24.3
Personal Care (toileting, feeding)	15.6	17.7	22.3	23.2	21.5
Nursing care (i.e., bathing, dressing, medications, bed transfer, wheelchair transfer)	15.1	16.0	21.2	20.2	19.1

Factor analysis of the items in the caregiving intensity measure identified two intensity factors:

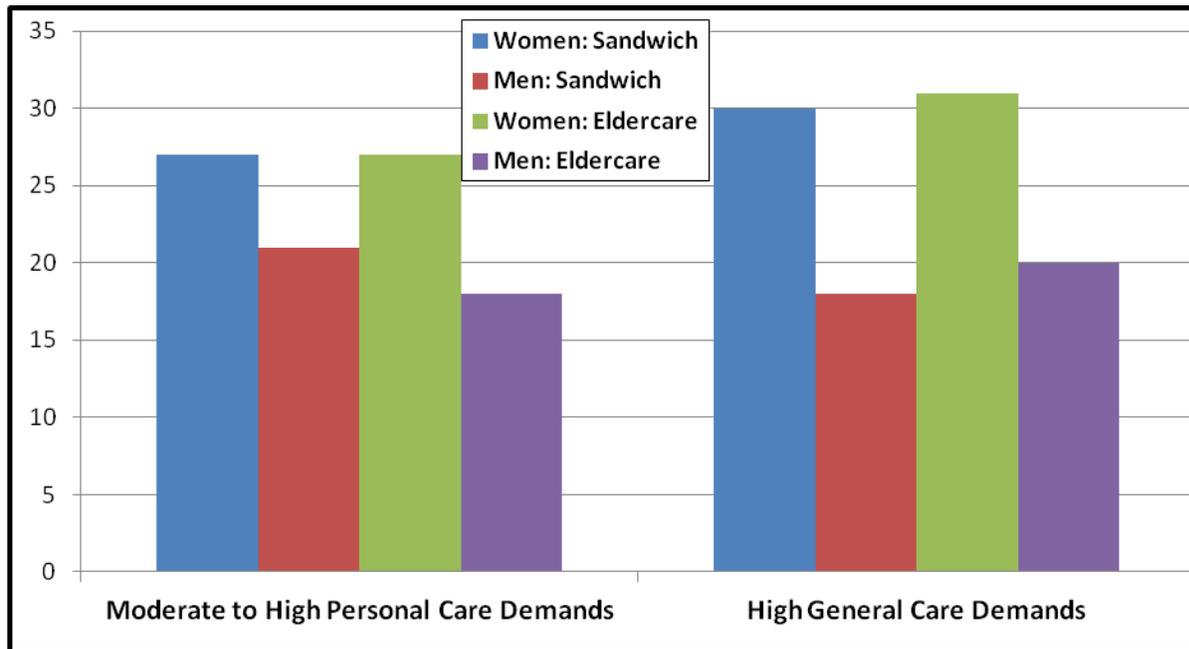
- **Factor One: Personal Care:** Personal care (i.e., feeding, toileting); Nursing care (i.e., bathing, dressing, medications, bed transfer, wheelchair transfer); Household chores (i.e., laundry, meal preparation)
- **Factor Two: General Care;** Moral/emotional support (i.e., social support); General care (i.e., transportation, running errands, socializing); Financial assistance/support (i.e., money management, personal business); Home-yard maintenance (i.e., housework, yard care).

The first factor seems to be a combination of tasks that researchers have labeled Health Care and Activities of Daily Living. Factor two is very similar to Instrumental Activities of Daily Living. Scores on each of these two factor are shown by caregiver group in Table 12 and Figure 11.

**Table12: Caregiving Intensity (Factor Scores)**

	Men:		Women		Total
	Sandwich	Eldercare	Sandwich	Eldercare	
Personal Care:					
• Low demands	83.5	81.6	73.2	73.2	75.9
• Moderate demands	13.0	14.9	17.6	20.7	17.4
• High demands	3.5	3.5	9.2	6.1	6.7
General Care:					
• Low demands	43.3	41.0	27.7	27.4	31.9
• Moderate demands	39.1	39.2	42.0	41.4	41.0
• High demands	17.6	19.8	30.3	31.2	27.1

**Figure 10: Personal and General Care Demands by Caregiver Group**



Three conclusions can be drawn from these data. First, women find caregiving to be more demanding than their male counterparts. Second, having children at home does not seem to impact perceived caregiving intensity. Third, regardless of gender, general care demands seem to be more demanding than personal care demands - a finding that runs counter to much of the research in this area.

Finally, we calculated an overall caregiving intensity role by looking at how many demanding roles each respondent performed. These data are shown in Table 13. How demanding do employees find caregiving? According to our data 40% of the sample indicate that the role consumes very little of their energy, 42% say that it requires a moderate amount of energy, and 17% say that the role requires a high or very high amount of their energy. Neither gender nor caregiver situation are related to this aspect of caregiving intensity.

**Table 13: Caregiving Intensity**

Number of High Energy roles	Men:		Women		Total
	Sandwich	Eldercare	Sandwich	Eldercare	
Little to no Energy: 1 or fewer	45.6%	44.1%	38.6%	38.8%	40.5%
Moderate Energy: 2-3	39.0%	41.1%	43.1%	43.5%	42.3%
High Energy: 4-5	12.0%	11.7%	14.3%	14.9%	13.8%
Very High Energy:	3.3%	3.1%	3.9%	2.8%	3.4%

## 5.5 Subjective Caregiver Demands

We began our analysis of the subjective caregiver burden data by factor analyzing the items included in the measure. This analysis showed that subjective caregiver burden had three dimensions: strained/frustrated, useful/needed and guilty/fearful. The items included within each of these factors are shown in Box 1. Data on the subjective caregiver burden of our respondents are shown in Table 14.

<b>Subjective Caregiver Demands: Factors</b>
<p><b><i>Factor One: Strained/Frustrated</i></b>            I feel that my relative makes requests which are over and above what s/he needs            I feel that my relative tries to manipulate me            I feel that my relative doesn't appreciate what I do for him/her            I feel that my relative seems to expect me to take care of him/her as if I were the only one s/he could depend on            I feel strained in my relationship with my relative            I feel nervous and depressed about my relationship with my relative</p>
<p><b><i>Factor Two: Useful/Needed</i></b>            I feel that I am contributing to the well-being of my relative            I feel useful in my relationship with my relative            I feel pleased with my relationship with my relative</p>
<p><b><i>Factor Three: Guilty/Fearful</i></b>            I feel it is painful to watch my relative age            I feel afraid for what the future holds for my relative            I feel that I don't do as much for my relative as I could or should            I feel guilty over my relationship with my relative</p>

**Table 14: Subjective Caregiver Demands by Caregiver Group:**

With respect to your relative, how often do you feel:	Men:		Women		Total
	Sandwich	Eldercare	Sandwich	Eldercare	
Factor One: Strained, frustrated					
• Seldom	78.8	78.6	71.1	74.0	74.2
• Sometimes	16.5	14.9	19.5	19.5	18.5
• Often	4.6	6.5	9.3	6.4	7.3
That they try to manipulate you:					
• Seldom	78.2	77.8	69.1	71.9	72.5
• Sometimes	14.0	13.2	16.5	15.8	15.5
• Often	7.8	9.0	14.4	12.3	12.0
That they doesn't appreciate what you do for him/her:					
• Seldom	76.8	78.0	71.9	73.1	73.8
• Sometimes	13.5	13.8	16.4	16.8	15.7
• Often	9.7	8.2	11.7	10.1	10.5
Nervous and depressed about your relationship with them:					
• Seldom	82.4	80.7	77.6	78.2	79.0
• Sometimes	12.6	11.1	13.6	13.1	13.0
• Often	5.0	8.2	8.8	8.8	8.0
That they seems to expect you to take care of him/her as if I were the only one s/he could depend on					
• Seldom	69.4	69.4	62.7	63.1	64.8
• Sometimes	16.5	14.7	15.0	15.9	15.6
• Often	14.2	15.9	22.3	20.9	19.7
Strained in your relationship with them					
• Seldom	63.6	63.6	58.0	60.4	60.4
• Sometimes	22.3	22.3	23.4	22.4	22.8
• Often	14.1	14.1	18.6	17.2	16.9
That they make requests which are over and above what s/he needs					
• Seldom	79.3	78.0	74.6	77.9	76.8
• Sometimes	13.6	13.8	14.0	13.7	13.8
• Often	7.1	8.2	11.4	8.4	9.4

With respect to your relative, how often do you feel:	Men:		Women		Total
	Sandwich	Eldercare	Sandwich	Eldercare	
Factor Two: Useful, needed					
• Seldom	7.4	7.1	8.2	6.3	7.4
• Sometimes	25.2	23.0	22.2	19.2	22.0
• Often	67.4	69.9	69.5	74.5	70.7
Useful in the relationship:					
• Seldom	11.4	12.0	10.7	8.5	10.3
• Sometimes	30.1	23.9	27.2	23.9	26.4
• Often	58.5	64.0	62.1	67.6	63.3
Pleased with your relationship:					
• Seldom	11.4	10.7	12.5	11.3	11.7
• Sometimes	18.7	18.1	21.0	18.6	19.5
• Often	69.9	71.3	66.5	70.1	68.7
You are contributing to their well-being:					
• Seldom	9.3	8.9	7.6	6.2	7.6
• Sometimes	24.6	21.8	24.9	20.6	23.2
• Often	66.1	69.3	67.5	73.3	69.2
Factor Three: Fearful/Guilty					
• Seldom	32.7	35.2	23.3	22.5	26.0
• Sometimes	38.1	35.0	34.3	34.7	35.2
• Often	29.2	29.8	42.4	42.8	38.8
Afraid for what the future holds for them:					
• Seldom	32.9	33.3	24.3	24.2	26.8
• Sometimes	30.1	28.6	30.3	29.2	29.8
• Often	37.0	38.1	45.4	46.6	43.5
I feel it is painful to watch my relative age					
• Seldom	31.5	29.8	21.6	20.5	23.9
• Sometimes	38.0	38.6	36.2	35.5	36.6
• Often	30.6	31.6	42.2	44.0	39.5
I feel guilty over my relationship with my relative					
• Seldom	72.5	75.1	64.7	67.0	67.9
• Sometimes	17.4	16.4	19.1	18.0	18.2
• Often	10.0	8.5	16.2	15.0	13.9
I feel that I don't do as much for my relative as I could or should					
• Seldom	35.7	41.2	31.4	31.2	33.1
• Sometimes	34.8	33.7	28.6	30.5	30.9
• Often	29.5	25.1	40.0	38.3	36.0

The following observations can be made with respect to the prevalence of the different forms of subjective caregiver demands in our sample of employed caregivers:

- Almost 40% of the sample felt fearful and guilty sometimes or often. This is the most common form of subjective caregiver demand experienced by the employees in this sample.
- Women are more likely than men to report feeling fearful and guilty.
- One in four reported feeling strained and frustrated sometimes/often.
- Women are more likely than men to report feeling strained and frustrated.
- Women in the sandwich group seem to be at higher risk with respect to this form of subjective demand than employees in the other three groups.
- While the majority of respondents feels useful and needed, almost 30% of the sample only feels useful/needed sometimes or seldom.
- Women in the eldercare group are more likely than employees in the other three groups to feel useful and needed.

## **5.6 Key Outcomes of Caregiver Strain**

Two outcomes of caregiver strain are considered in this analysis: objective caregiver demands (Table 15) and employment changes (Table 16).

*Objective Caregiver Demands:* The majority of the respondents indicated that caregiving has had little impact on their physical health (78%), their personal finances, (76%), their mental health (72%), their personal privacy (69%), and the amount of vacation time they have (65%). A smaller, but still substantive proportion of the sample stated that caregiving has not impacted the amount of personal freedom they have (59%), the amount of time they have to spend in recreation and social activities (58%), their energy levels (56%) and the amount of time they have to themselves (52%).

On the other hand, approximately one in five of the employed caregivers in this sample reported that caregiving had substantially reduced the amount of energy they have, the amount of time they have for social and recreational activities, the amount of time they have for themselves, their ability to take a vacation, the amount of privacy they have and their personal freedom. Furthermore, approximately one in ten of the employed caregivers in this sample reported that caregiving had substantially reduced the amount of money they have for personal expenses and resulted in poorer physical and mental health. Also interesting are the data showing that in virtually all cases, the men in the eldercare group are less likely to report these negative outcomes than are the employees in the other three groups. Also relevant are the data showing that the women in the sandwich group are more likely to report that caregiving has reduced their personal freedom and their energy levels.

**Table 15: Objective Caregiver Demands**

Caregiving has:	Men:		Women		Total
	Sandwich	Eldercare	Sandwich	Eldercare	
Reduced amount of time for self:					
• Little Amount	54.1	66.0	48.3	52.3	52.5
• Moderate Amount	28.3	22.4	29.9	28.5	28.5
• Substantial Amount	17.6	11.5	21.8	19.1	19.0
Reduced the amount of privacy you have:					
• Little Amount	65.4	72.4	67.7	72.8	68.7
• Moderate Amount	19.6	17.9	16.6	13.4	16.8
• Substantial Amount	15.0	9.6	15.6	13.8	14.5
Reduced the amount of money available to meet expenses:					
• Little Amount	74.4	76.9	73.4	80.2	75.7
• Moderate Amount	15.8	16.0	14.5	10.4	14.0
• Substantial Amount	9.8	7.1	12.2	9.4	10.3
Reduced the amount of personal freedom you have:					
• Little Amount	60.4	66.7	54.0	59.4	58.3
• Moderate Amount	23.6	24.4	24.6	22.1	23.7
• Substantial Amount	15.9	9.0	21.3	18.5	18.0
Reduced your energy levels:					
• Little Amount	60.4	72.0	48.7	55.9	55.9
• Moderate Amount	21.8	20.4	25.4	22.2	23.1
• Substantial Amount	17.8	7.6	25.9	21.9	21.0
Reduced the amount of time you spend in recreational and/or social activities:					
• Little Amount	58.9	70.7	55.4	60.8	59.0
• Moderate Amount	21.8	19.7	23.3	17.5	21.1
• Substantial Amount	19.3	9.6	21.3	21.7	19.8
Reduced the amount of vacation activities and trips you take:					
• Little Amount	63.8	72.4	63.3	66.5	65.0
• Moderate Amount	18.5	14.7	17.3	12.8	16.3
• Substantial Amount	17.7	12.8	19.3	20.7	18.7
Resulted in poorer physical health					
• Little Amount	77.8	86.0	76.7	77.5	78.0
• Moderate Amount	14.2	10.2	12.5	11.8	12.6
• Substantial Amount	8.1	3.8	10.8	10.7	9.4
Resulted in poorer mental health:					
• Little Amount	74.4	85.4	68.6	70.8	72.2
• Moderate Amount	14.8	10.2	16.2	14.6	14.9
• Substantial Amount	10.8	4.5	15.2	14.6	12.9

*Employment Changes Index:* Examination of the data in Table 14 indicates that the inability to balance employment and caregiving is negatively impact the organization's bottom line. Our data suggests that approximately one in four of the employees in this sample of caregivers say that caregiving responsibilities had contributed to a moderate/substantial increase in absenteeism (29%) and the use of employee benefits (25%) and decreased their work productivity (25%) as well as the number of hours they could devote to work (22%). Fourteen percent indicated that it had lead to their turning down a promotion at work.

Of note are the data showing that women in the sandwich group were more likely than employees in the other three groups to say that caregiving had meant a moderate to substantial increase in their use of benefits and absenteeism. Also relevant are the data showing that those in the sandwich group are more likely than those in the eldercare group to say that caregiving had meant that they had reduced their work hours and turned down a promotion.

**Table 16: Employment Changes Index**

Challenges with caregiving have caused you to:	Men:		Women		Total
	Sandwich	Eldercare	Sandwich	Eldercare	
Reduce your work hours:					
• Not really	76.9	80.2	75.0	80.3	77.5
• Yes - Moderate Amount	14.8	13.3	14.9	12.3	13.9
• Yes - Substantial Amount	8.3	6.5	10.1	7.4	8.6
Reduce your work productivity:					
• Not really	73.1	77.9	72.4	77.4	74.6
• Yes - Moderate Amount	17.6	14.8	17.1	14.7	16.2
• Yes - Substantial Amount	9.3	7.2	10.6	7.9	9.2
Turn down a job offer or promotion:					
• Not really	80.9	88.1	85.5	90.3	86.3
• Yes - Moderate Amount	7.9	5.5	5.2	4.3	5.5
• Yes - Substantial Amount	11.2	6.5	9.3	5.3	8.2
Suffer a reduction in your income:					
• Not really	84.5	91.0	86.5	89.7	87.5
• Yes - Moderate Amount	7.4	4.6	4.9	4.5	5.2
• Yes - Substantial Amount	8.1	4.4	8.5	5.8	7.2
Be absent more often from work:					
• Not really	73.3	76.1	66.4	73.7	71.3
• Yes - Moderate Amount	16.1	14.0	18.2	15.2	16.5
• Yes - Substantial Amount	10.6	9.9	15.4	11.1	12.2
Increase your use of the benefits offered by you organization:					
• Not really	77.2	80.2	71.1	76.5	74.9
• Yes - Moderate Amount	12.2	10.0	12.9	11.7	12.1
• Yes - Substantial Amount	10.6	9.8	16.0	11.9	13.0

## Chapter Six: Testing the Models

This chapter presents our findings with respect to the key predictors of caregiver strain and perceived stress (section one), role overload (section two), work-life conflict (section three), organizational outcomes, (section four) and individual outcomes (section five). The ability of the moderators to impact the relationship between domain specific overload and total role overload is presented and discussed in section six.

As noted in the methodology section, we used Partial Least Squares analysis to test the model. All significant path coefficients are shown on the figures included in this chapter. A significant path coefficient means that the predictor variable (e.g., caregiving intensity) can explain some of the movement (variance) in the dependent variable (e.g., caregiver strain). We use a T test to determine if the path is significant. Significance is noted on each diagram as follows: \* significant at  $< 0.05$ ; \*\* significant at  $< 0.01$ ; and \*\*\* significant at  $< 0.001$ . As a measure of how strong the relationship is between variables we calculate an  $R^2$ .  $R^2$  ranges from 0 to 1 with low values close to zero indicating that the prediction is not very good and values close to one indicating a strong predictive model. Typically one reports  $R^2$  as a percent of the variation in the outcome variable explained by the predictors in the model.

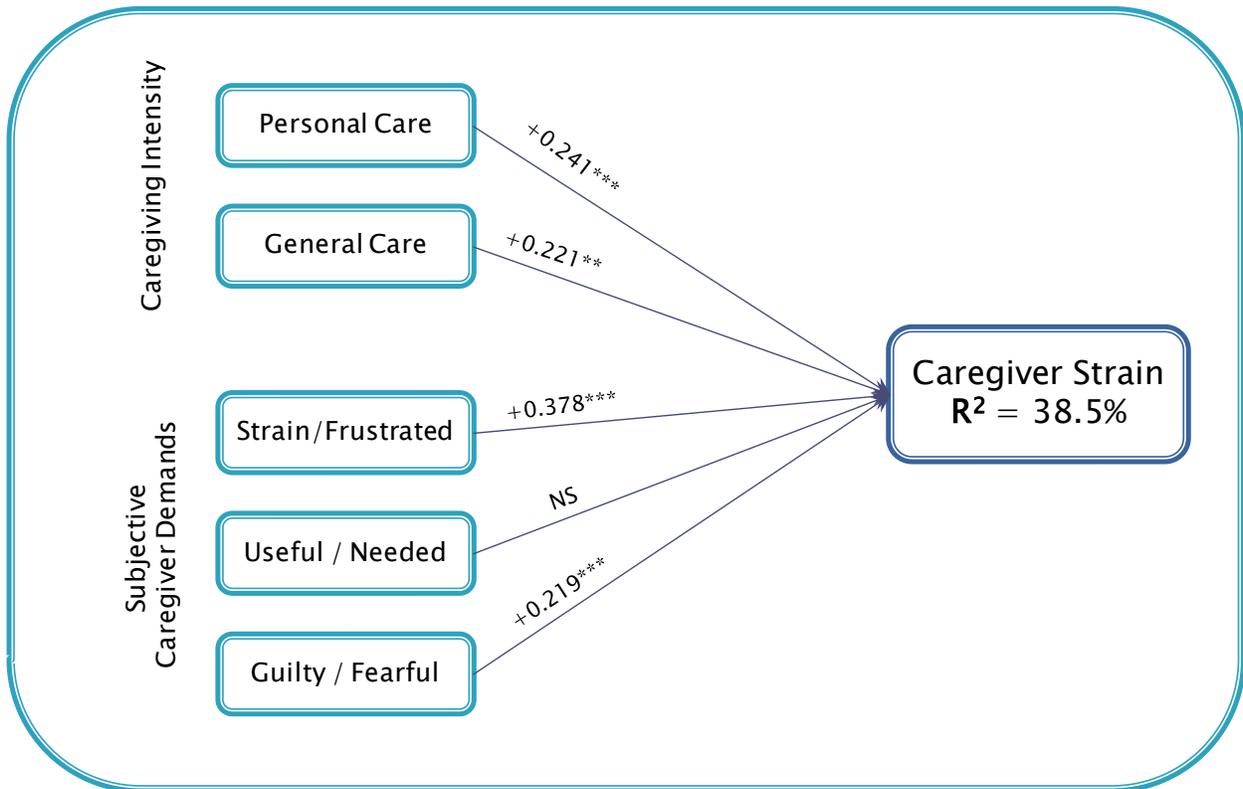
### 6.1 Prediction of Caregiver Strain

We began our analysis by testing models that included the two caregiving intensity factors, the three subjective caregiver demands factors, and two key outcomes: caregiver strain and perceived stress.

The following conclusions with respect to the prediction of caregiver strain can be drawn from our testing of the model in Figure 11:

- Four predictors (personal care, general care, strained/frustrated and guilty/fearful) explain 38.5% of the variation in caregiver strain. The more personal care and general care the employee provides the higher the level of caregiver strain.
- Personal care (i.e., feeding, toileting, bathing, dressing, medications, bed transfer, wheelchair transfer, laundry, meal preparation) is a more important predictor of caregiver strain than general care (i.e. social support, transportation, running errands, socializing, money management, personal business, housework, yard care).
- The more the employee experiences two forms of subjective caregiver demand, strained/frustrated and guilty/fearful, the higher the level of caregiver strain.
- The third subjective caregiver demand factor, useful/needed is not a significant predictor of caregiver strain suggesting that the positive facets of caregiving have little impact on the etiology of caregiver strain.

**Figure 11: Relationship Between Caregiving Intensity, Subjective Caregiver Demands and Caregiver Strain**

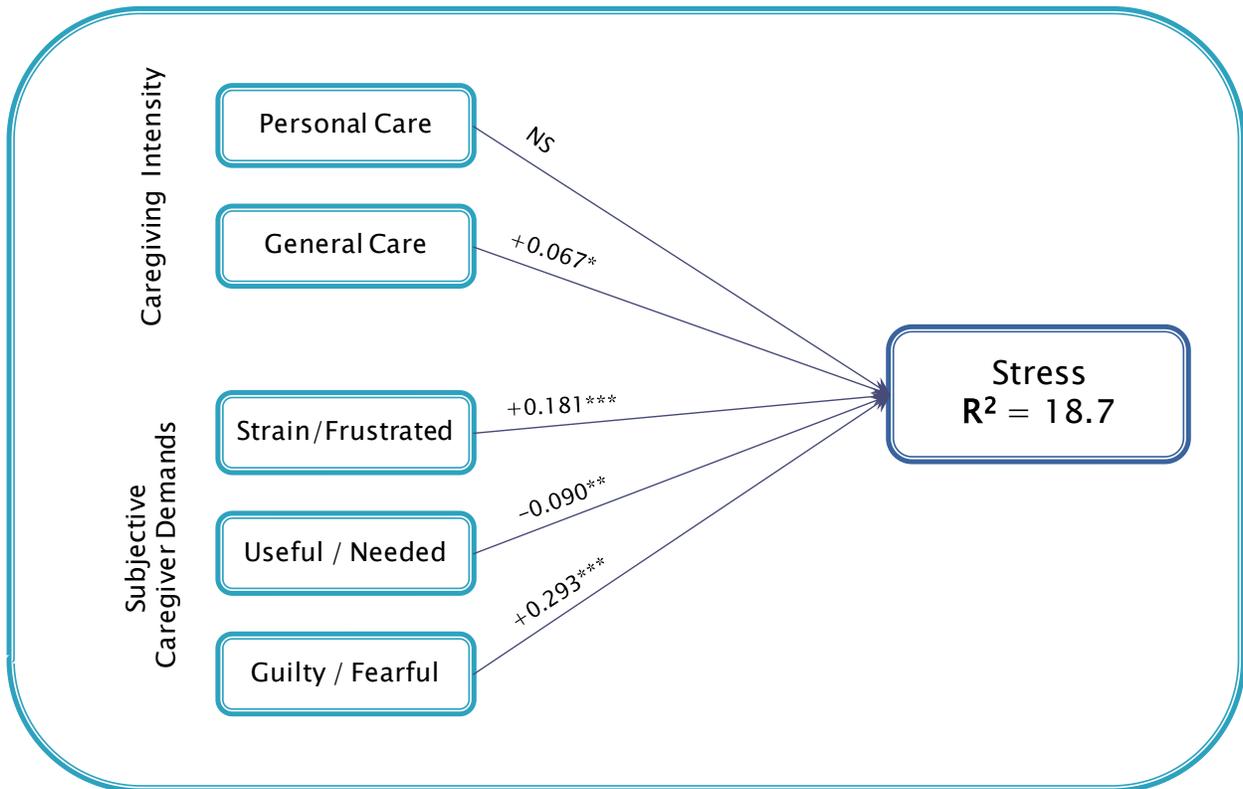


The following conclusions with respect to the prediction of perceived stress can be drawn from our testing of the model in Figure 12:

- Four predictors (general care, strained/frustrated, useful/needed and guilty/fearful) explain 18.7% of the variation in perceived stress. The more general care (i.e. social support, transportation, running errands, socializing, money management, personal business, housework, yard care) the employee provides the higher the level of perceived stress.
- The more the employee experiences the following two of the forms of subjective caregiver demands, strained/frustrated and guilty/fearful, the higher the level of perceived stress.
- The more the employee experiences the third form of subjective caregiver demand, useful/needed, the lower level of perceived stress.
- Personal care is not a significant predictor of caregiver strain.

Finally, it is important to note that the predictors of perceived stress are somewhat different from the predictors of caregiver strain.

**Figure 12: Relationship Between Caregiving Intensity, Subjective Caregiver Demands and Stress**



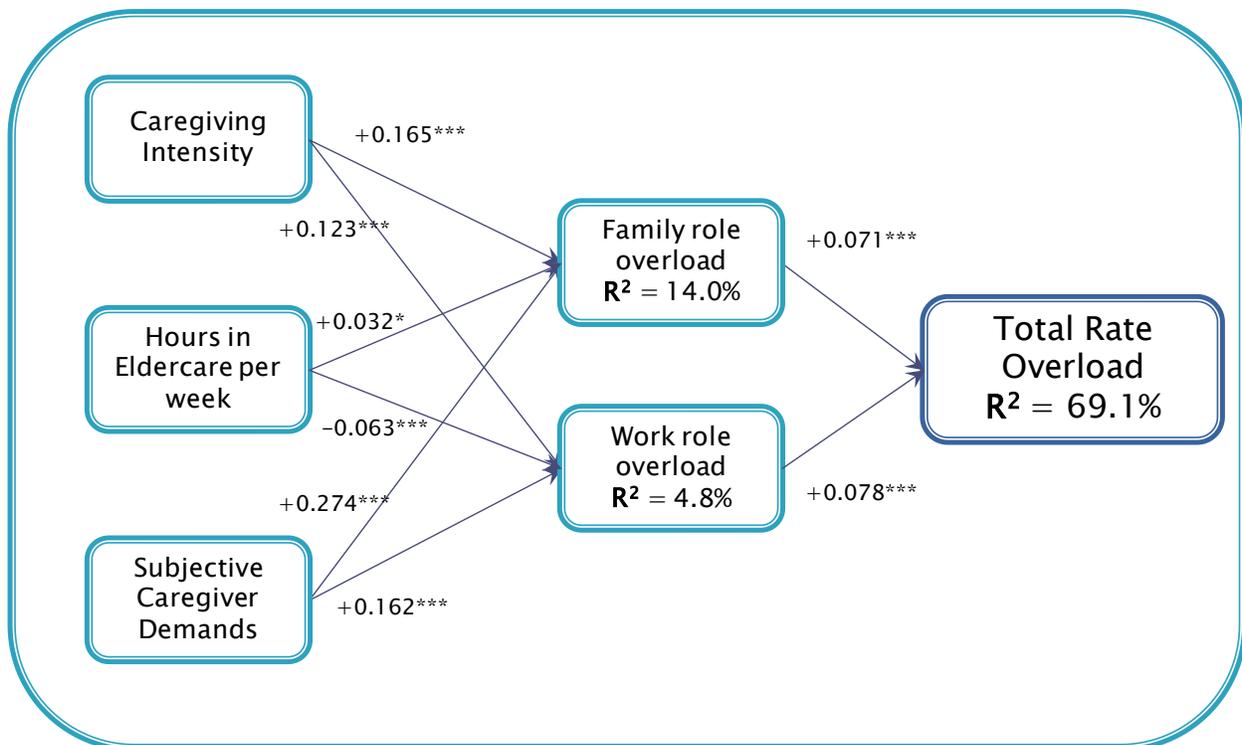
## 6.2 Prediction of Total Role Overload

The following conclusions with respect to the prediction of total role overload can be drawn from our testing of the model in Figure 13:

- Three predictors, caregiving intensity, hours in eldercare per week and subjective caregiver demands explain 14% of the variation in family role overload. The greater the caregiver intensity, the higher the levels of subjective caregiver demands and the more hours the employee devotes to eldercare per week, the greater the family role overload.
- The actual hours spent per week in eldercare are not as important a predictor of family role overload as caregiving intensity and subjective caregiver demands.
- Three predictors, caregiving intensity, hours in eldercare per week, and subjective caregiver demands explain 4.8% of the variation in work role overload.
- The fact that caregiving intensity and subjective caregiver demands contribute to increased overload at work supports the idea that the demands of strain of caregiving spillover into the work domain (i.e. employees who come to work exhausted, stressed and frustrated and more likely to feel overwhelmed with all they have to do at work).

- The negative relationship between hours per week in eldercare and work role overload suggests that people who spend more time in caregiving have less time and energy to devote to work. This relationship also suggests that people who have to spend a lot of time per week in the caregiving role cope by cutting back at work.
- Caregiving intensity, hours in caregiving and subjective caregiver demands are more closely linked to family role overload than to work role overload.
- Two predictors, work role overload and family role overload, explain 69.1% of the variation in total role overload. The higher the overload at work and/or at home, the greater the total role overload.
- Work role overload and family role overload are equally strong predictors of total role overload.

**Figure 13: Relationship Between Caregiving Intensity, Hours in Caregiving per Week, Subjective Caregiver Demands and Role Overload**

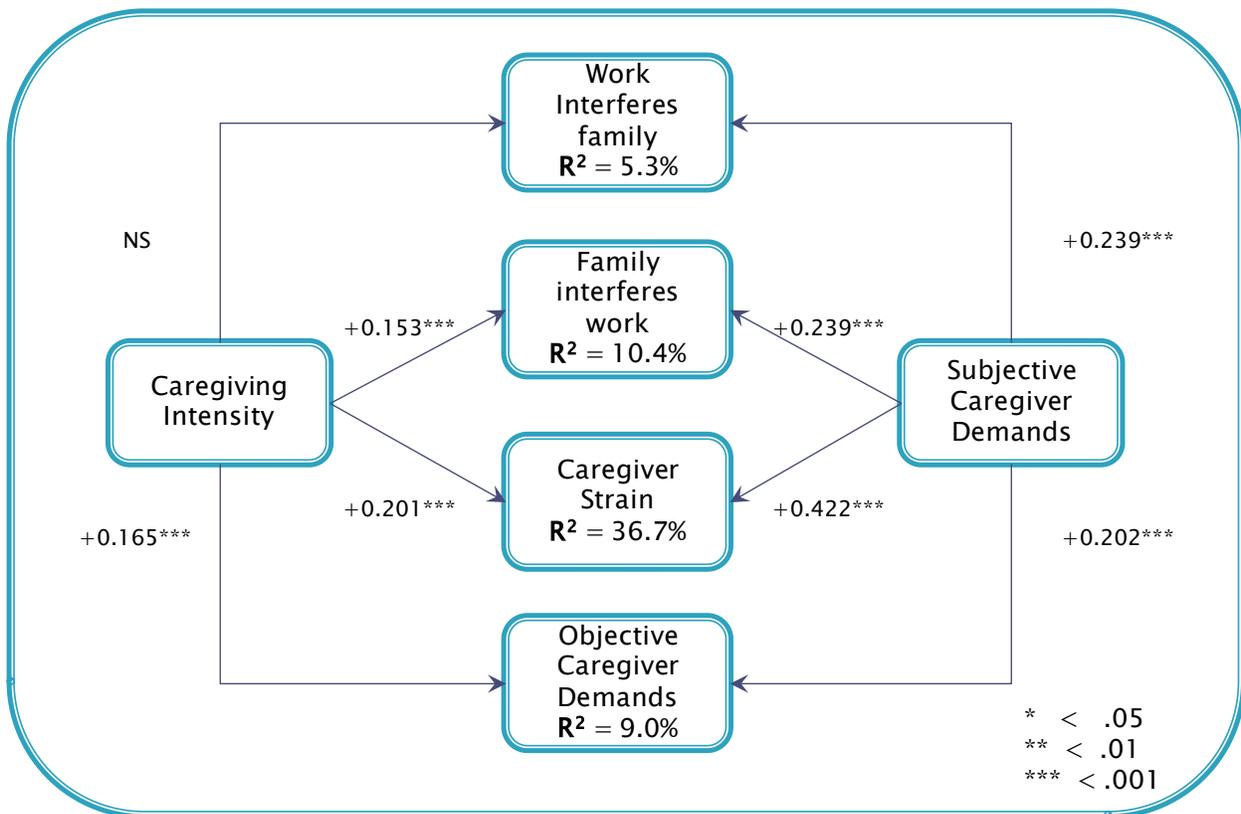


### 6.3 Prediction of Work-Life Conflict

The following conclusions with respect to the prediction of work-life conflict can be drawn from our testing of the model in Figure 14:

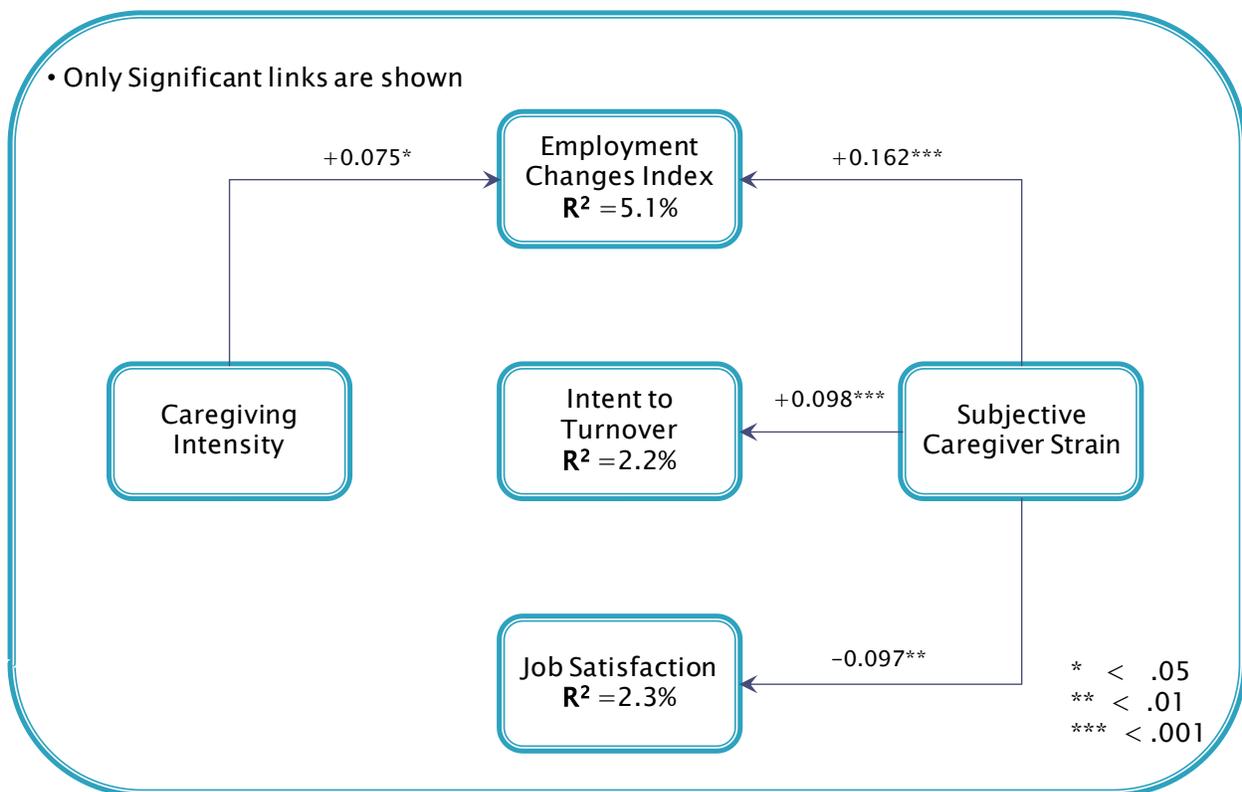
- Two predictors, caregiving intensity and subjective caregiver demands explain 36.7% of the variation in caregiver strain. Higher strain is associated with greater caregiving intensity and higher subjective caregiver demands. Subjective caregiver demand is a more important predictor of caregiver strain than caregiving intensity.
- Two predictors, caregiving intensity and subjective caregiver demand explain 10% of the variation in family interferes with work. The greater the caregiver intensity and the higher the levels of subjective caregiver demand, the greater the family interferes with work.
- Subjective caregiver demand explains 5.3% of the variation in work interferes with family. Higher interference is associated with subjective caregiver demand. Caregiving intensity is not, however, associated with work interferes with family.

**Figure 14: Relationship Between Caregiving Intensity, Subjective Caregiver Demands and Work-life Conflict**



- Caregiving intensity and subjective caregiver demands are more powerful predictors of family interferes with work than of work interferes with family.
- Two predictors, caregiving intensity and subjective caregiver demand explain 9.0% of the variation in objective caregiver demand. Higher objective caregiver demand is associated with greater caregiving intensity and higher subjective caregiver demand.
- The actual hours spent per week in eldercare does not predict any of the aspects of work-life conflict included in this model.

**Figure 15: Relationship Between Objective and Subjective Caregiver Demands and Organizational Outcomes**



## 6.4 Prediction of Organizational Outcomes

The following conclusions with respect to the prediction of organizational outcomes can be drawn from our testing of the model in Figure 15:

- Neither caregiving intensity nor subjective caregiver demand predict absenteeism or organizational commitment.
- Caregiving intensity is not a significant predictor of intent to turnover or job satisfaction.

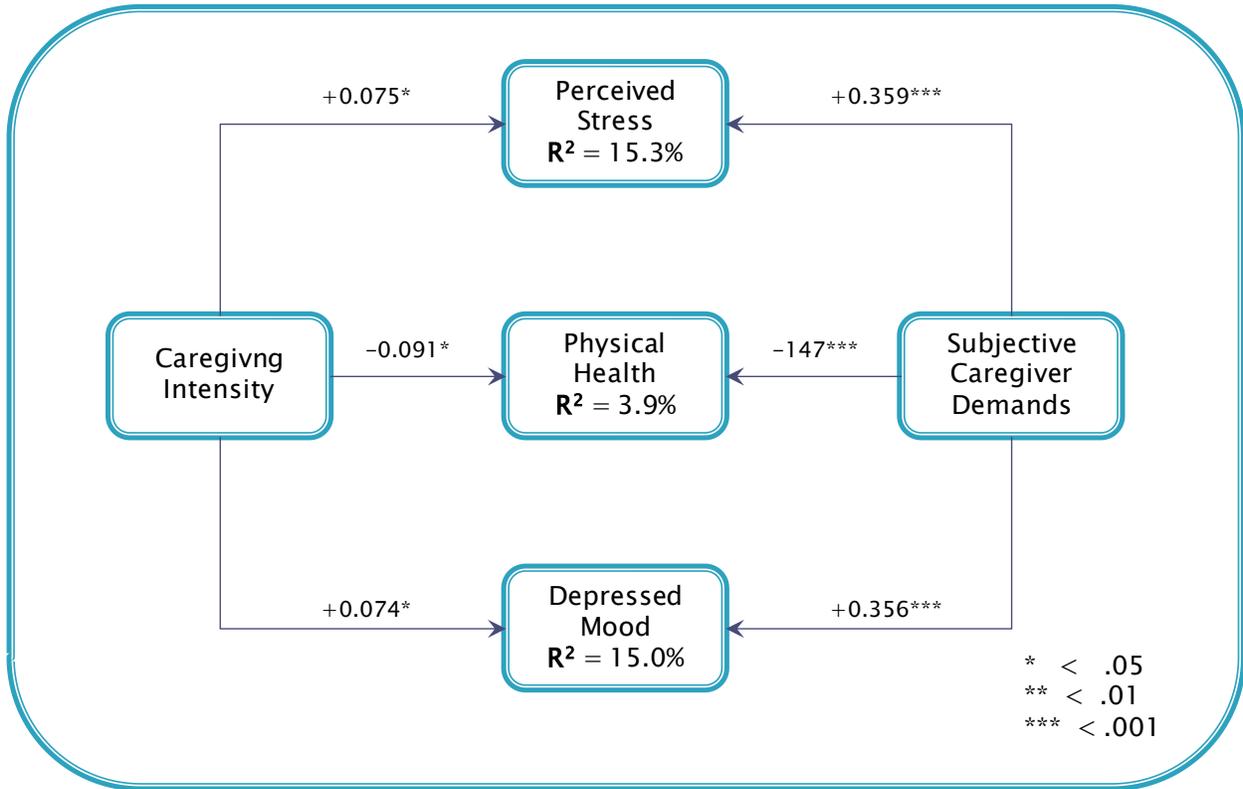
- Two predictors, caregiving intensity and subjective caregiver demand explain 5% of the variation in the employment changes index. Employees who experience higher levels of caregiver intensity and higher subjective caregiver demand are more likely to say that eldercare has caused them to reduce their hours of work, increase their use of employee benefits, etc.
- Subjective caregiver demand explains 2.2% of the variation in intent to turnover. The greater the subjective caregiver demand, the more likely the employee is to be thinking of quitting their job.
- Subjective caregiver demand explains 2.3% of the variation in intent to job satisfaction. The greater the subjective caregiver demand, the less satisfied the employee is with their job.

## **6.5 Prediction of Employee Well-being**

Testing of the model shown in Figure 16 allows us to draw the following conclusions with respect to the prediction of the various measures of employee well-being included in this analysis:

- Two predictors, subjective caregiver demand and caregiving intensity explain 15.3% of the variation in perceived stress. The higher the caregiving intensity and the subjective caregiver demand, the greater the stress.
- Two predictors, subjective caregiver demand and caregiving intensity explain 3.9% of the variation in perceived health. The higher the caregiving intensity and the subjective caregiver demand, the less likely the employee is to say that they are in good health. Subjective caregiver demand is a more important predictor of perceived health than caregiver intensity.
- Two predictors, subjective caregiver demand and caregiving intensity explain 15.0% of the variation in depressed mood. The higher the caregiving intensity and the subjective caregiver demand, the higher the depressed mood score.
- Subjective caregiver demand is a more important predictor of employee well being (stress, perceived health, depressed mood) than caregiver intensity.

**Figure 16: Relationship Between Caregiving Intensity, Subjective Caregiver Demands and Employee Well-being**

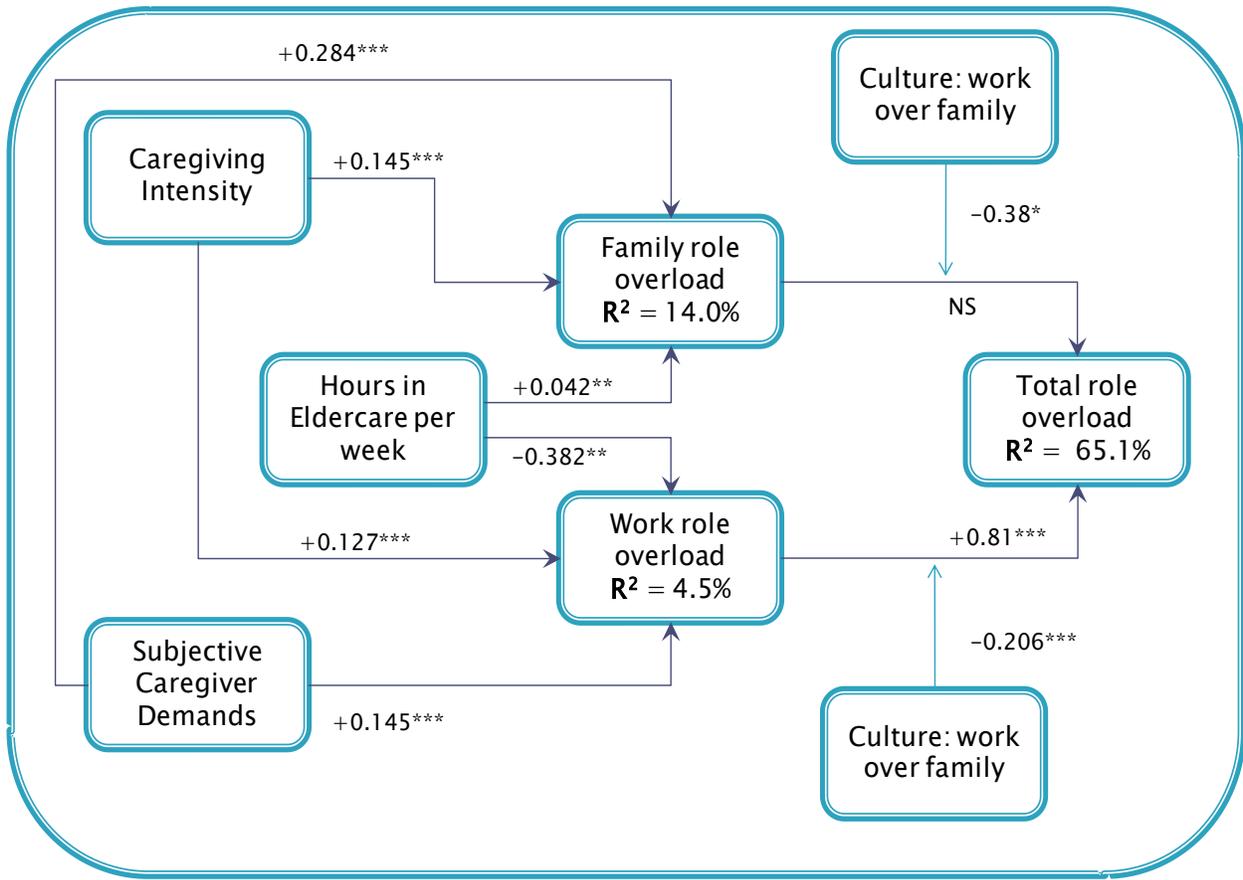


## 6.6 Moderation

The final step in our model testing involved determining the extent to which the following constructs moderated the relationship between work role overload and total overload and family role overload and total role overload: gender, caregiving situation, family financial situation, organizational culture, supportive manager, perceived flexibility, control over work, control over family, and reasons for providing care.

The choice to position our moderators between domain specific overload and total role overload was made for several reasons. First, the analysis undertaken for report one determined that role overload is an important and significant predictor of all the outcomes considered in this study. If, therefore, we can reduce the extent to which work and family overload lead to total overload we can positively impact employees and their families as well as employers. Second, none of the variables considered in this study moderated the relationships between intensity, burden and strain/stress but did moderate the relationship between domain specific overload and total overload. Third, theoretically, total role overload, the sense of being overwhelmed by all one has to do and feeling crunched for time, seems to be strongly linked to the experiences of employed caregivers. A more complete discussion of the overload construct is found in Report One.

**Figure 17: Moderation: Organizational Culture**



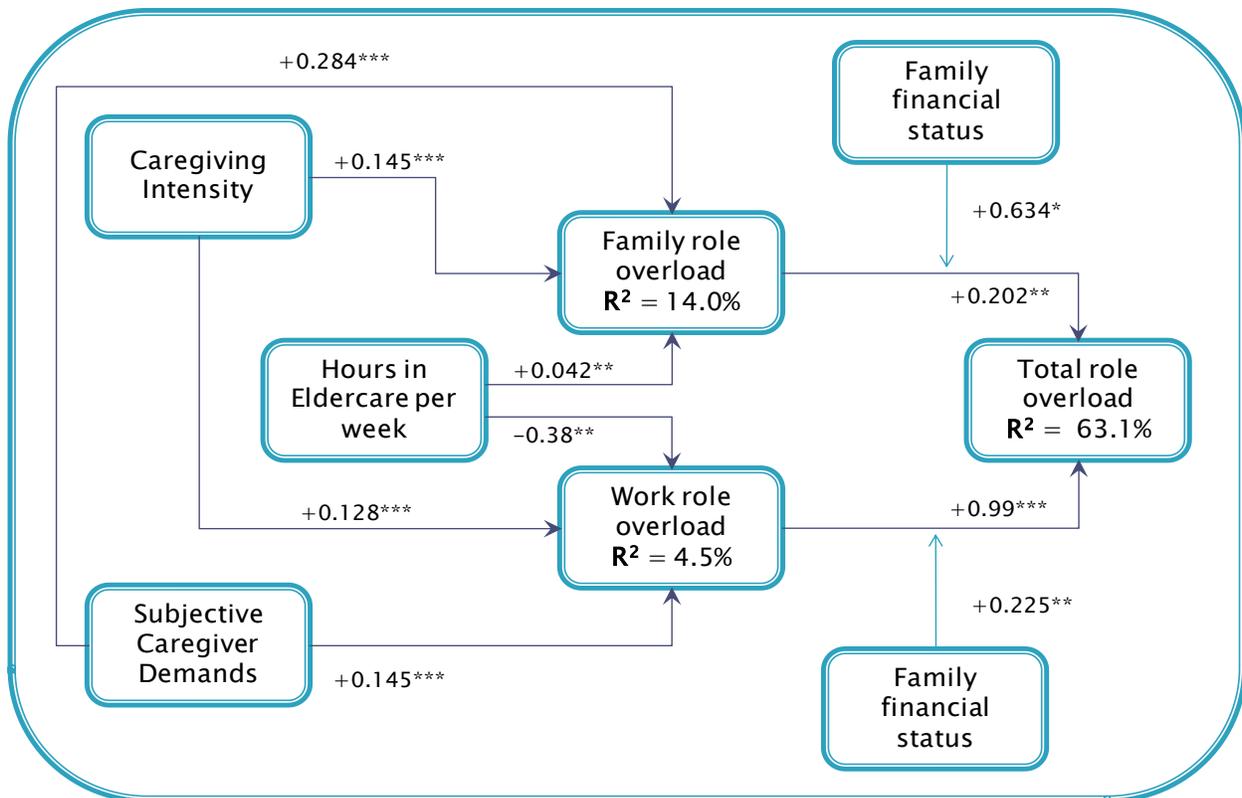
Our analysis determined that supportive manager, perceived flexibility, and control over work did not moderate any of the paths in the models reviewed above. This suggests that work place policies and practices do little to change (for the better or the worse) the caregiving experience of employed caregivers.

Also of note are the findings that neither caregiver situation nor gender moderated any of the models noted above. Instead we found that gender and caregiving situation were significant predictors of stress, family role overload, total role overload and caregiver strain. More specifically, we found that being a women and being part of the sandwich group strengthened all the paths in our models.

Finally, we identified four significant ( $p < .01$ ) moderators of the relationships between family role overload and total role overload (only significant relationships are shown in the Figures 17 to 20 where the results of this analysis are shown). More specifically the analysis determined that:

- Employees who work for an organization with a culture that values employees who give work priority over family and conveys to employees that they need to keep work and family domains separate (i.e., myth of separate worlds) will experience a stronger relationship between family role overload and total overload than those who work for an organization where such a culture is not as strong (i.e., this type of culture strengthens the relationship between family role overload and total role overload).

**Figure 18: Moderation: Family Financial Status**

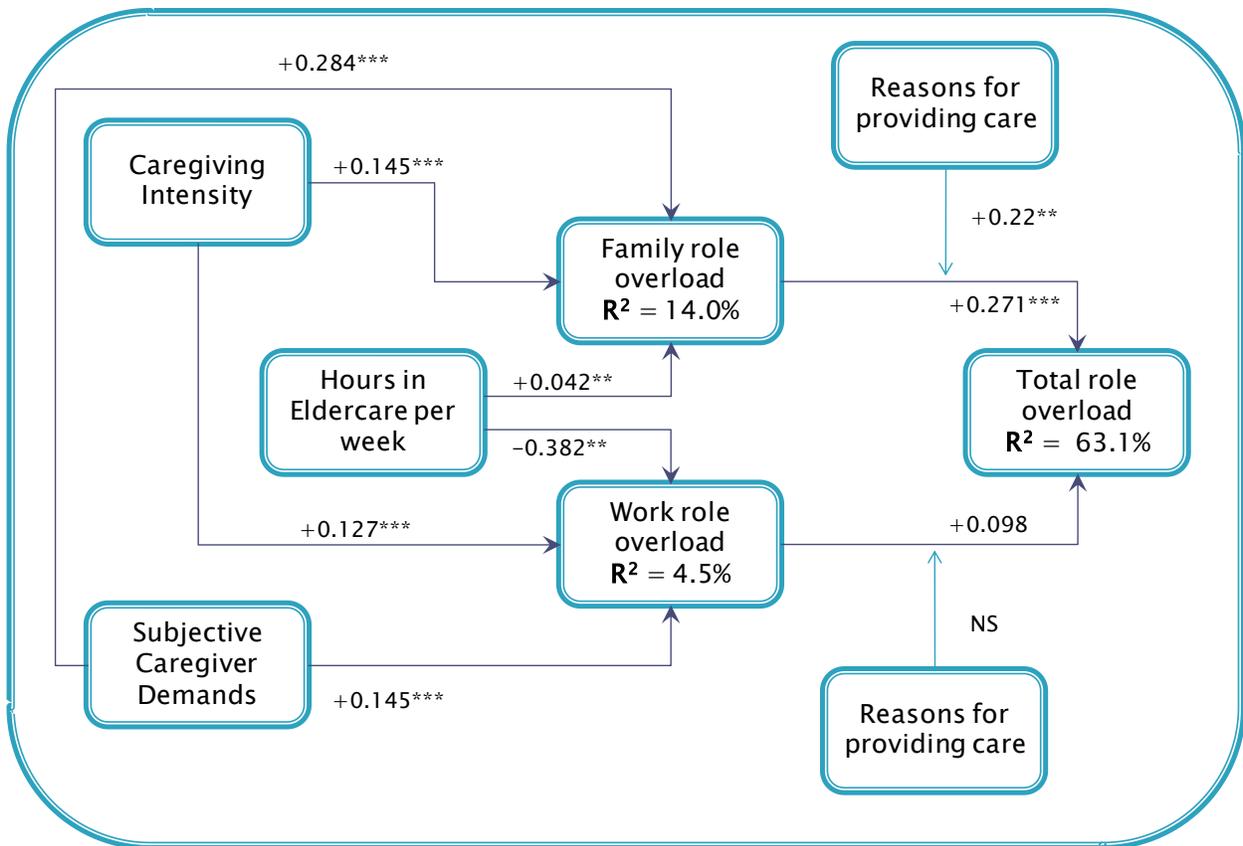


- Employees who live in families where money is not an issue experience a weaker relationship between family role overload and total overload than those who live in families where money is tight (i.e., the more financially strapped the family the stronger the relationship between family role overload and total role overload). This suggests that employees who are financially better off are able to purchase services that help them cope with family role overload.
- Reason for providing caregiving also moderates the path between family role overload and total role overload (path: +.22\*\* for the total measure). Additional information on how reasons for providing care impacted this path were obtained by undertaking six additional analysis where we substituted each of the six reasons for caring into the model shown in Figure 19. This analysis determined that the more likely the employee is to agree that they provide care because of a lack of homecare (path: +0.387 \*\*\*) or a lack of health care (path: +0.186 \*\*\*) services, and because no one else is willing (path: +0.453 \*\*\*) to care for the

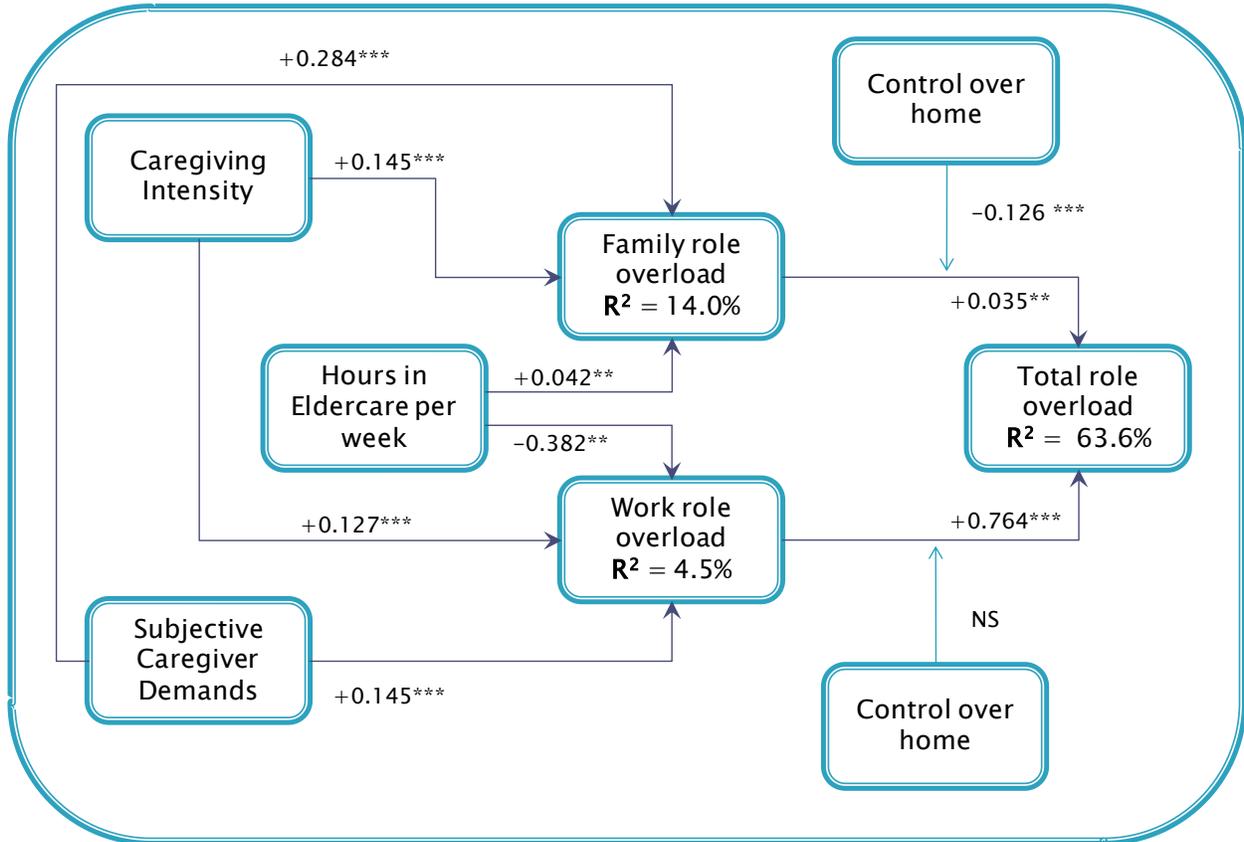
dependent, the stronger the relationship between family role overload and total overload. On the other hand, the more likely the employee is to agree that they chose to provide care (path: -0.279 \*\*\*) the weaker the path between family role overload and total overload. In other words, making the personal choice to provide caregiving reduces the strength of the relationship between family role overload and total role overload while feeling that one has to take on the role of caregiver strengthens this relationship. The other two reasons for choosing to care (it is a family responsibility, no one else is willing) were not significant moderators.

- The more control an employee has over their family domain, the weaker the relationship between family role overload and total role overload.

**Figure 19: Moderation: Reasons for Providing Care**



**Figure 20: Moderation: Control over home**



## Chapter Seven: Conclusions

In this chapter we outline the main conclusions that can be drawn from this study. These conclusions are organized by research question.

### 7.1 What do we know about the caregivers who answered the survey?

This section summarizes key findings and conclusions relating to research Objective One: *To better understand which employees take on the role of caregiver and why.*

The following conclusions with respect to the caregiving situation of the knowledge workers in this sample can be drawn from the data:

- Sixty percent of the employees in the caregiving sample had multi-generational caregiving responsibilities (i.e. in sandwich generation) while 40% were in the eldercare group. The higher proportion of employees were in the sandwich group of caregivers than the eldercare only group is consistent with the fact that Canadian employees in professional positions are delaying parenting and are hence more likely to have both older parents and younger children at home.
- Most of the caregivers in the sample were women (70%), a finding that is consistent with much of the research literature in this area.
- Many single people assume the role of caregiver (two-thirds of the men and women in the eldercare only group have never had children) suggesting that caregiving is not just an issue for couples.
- A substantive number (40%) of the employed caregivers in the sample were under the age of 45, suggesting that caregiving is not only an issue for employees who are near to retirement.
- Employees care for family members: The majority of the employees in this sample provided care for one of their parents (58% cared for their mother and 17% their father). Just under one in five (16%) cared for one of their in-laws or an extended family member (12% cared for an aunt, an uncle, an older sibling).
- There is a lot of variability with respect to the age of the care recipient. The mean age of the care recipient of the employees in this sample was 77.9 years of age (sd 9.3). One in four employees care for family member who is over 86 years of age (what is typically referred to in the literature as "the fragile elderly") while 13% care for someone under the age of 65.
- Caregiving is not a transitory activity. On average, the employees in this sample have spent an average of 6.3 years (sd 5.8) in caregiving.
- The majority of the employed caregivers in this sample feel "responsible" for the well-being of two or more dependents

- While one in ten (11%) employees care for at least one elderly dependent who lives with them, the majority care for one or more dependents who live nearby (66%) or at more than an hour away from their home (47%).
- Why do employed Canadians take on the role of caregiver? The survey data indicate that they provide such care because they feel it is a family responsibility (90% agree), they choose to take on the role (83% agree), no one else was available to provide the care (42% agree), no one else was willing (35% agree) to take on this role, and because of a lack of homecare and appropriate health services (30%).
- What types of activities are undertaken by the employed caregivers in this sample? Virtually all respondents said that provided emotional/moral support to the dependent (i.e. emotional care) as well as general care (i.e. ran errands, drove them around). Approximately two thirds of the employees in the sample said that they also helped with home and yard maintenance as well as household chores - activities that are commonly referred to within the literature as "Instrumental activities of daily living (IADLs)." Finally, approximately a third of the respondents stated that they provided personal care (toileting, feeding) and nursing care (medications, bed transfer). Also of note are the data showing that the partners of these employees offer similar types of care but less often than the employees themselves.
- While many employees people say they engage in a number of different caregiving activities, in most cases they do not find performance of the role to be demanding. How demanding do employees find caregiving? According to our data 40% of the sample indicate that the role of caregiver consumes very little of their energy, 42% say that it requires a moderate amount of energy, and 17% say that the role requires a high or very high amount of their energy.

## **7.2 Can we quantify the work and family demands of employed caregivers?**

This section summarizes key findings and conclusions relating to research Objective Two: *Quantify the work and family demands facing employed caregivers in Canada.*

There is conflicting evidence regarding how employment impacts the time people spend on caregiving to the elderly. This is especially apparent when discussing the impacts of employment according to gender. The self-report data on hours per week in child and/or eldercare and employment support the following conclusions with respect to the demands faced by the employed caregivers in this sample can be drawn from the data:

- The amount of time parents and their partners spent in childcare is highly variable with peaks at 1 to 10 hours (parents of older children) and at more than 30 hours per week (parents of younger children).
- The amount of time employees and their partners spent in eldercare is highly variable but in many cases substantive. Employees in this sample spent an average of 10.7 (sd 13.6) hours per week in caregiving while partners spent an average of 5.6 (sd 7.1) hours per week.

- The majority of respondents (over 80%) said that their partner also spent time each week in childcare and/or eldercare, a finding that suggests that caregiving is now a shared responsibility within most Canadian families.
- Employed caregivers also devote a substantial amount of their time to their work role. Sixty percent of our sample of caregivers devoted more than 45 hours per week to paid employment.
- More than half the employees in the sample bring work home to complete in the evening and on weekends (supplemental work at home - SWAH).

### **7.3 Prevalence Of Caregiver Strain in Canada's workforce**

This section summarizes key findings and conclusions relating to the first part of Research Objective Three: *Estimate the prevalence of caregiver strain in Canada's workforce.*

Caregiver strain is a multi-dimensional construct which is defined in terms of "burdens" or changes in a caregiver's day to day life that can be attributed to the need to provide physical, financial, or emotional support to an elderly dependent. Research has linked high levels of caregiver strain to increase levels of depression, anxiety, fatigue, anger, family conflict, guilt, self-blame, emotional strain, and sleep loss. Our data paint the following picture with respect to the prevalence of the various forms of caregiver strain for the knowledge workers in our sample:

- More employees report high levels of physical caregiver strain (29% report they experience this form of strain weekly or more) than report high levels of emotional or financial strain.
- Just over one in five of the employees in this sample report that they find eldercare to be emotionally overwhelming on either a weekly basis or a daily basis.
- One in ten of the employees in this sample report high levels of financial caregiver strain. The relatively low incidence of this form of strain is likely due to the fact that the employees in this sample are relatively well paid professionals.

### **7.4 What factors put Canadian employees at risk of caregiver strain?**

This section summarizes key findings and conclusions relating to the second part of Research Objective Three: *Identify what factors put employees at risk with respect to caregiver strain*

Most of the research in this area links intensity to the number of hours spent on caregiving and the types of tasks involved (longer caregiving hours, more years in caregiving, more time providing intensive basic care are all associated with greater strain). Our data shows that it is not just time spent in the role that is important. Rather, we found a strong link between the subjective caregiver demand and higher strain and stress. Subjective caregiver demand is the respondents' attitudes toward or emotional reactions to the caregiving experience. This analysis showed that subjective caregiver demand had three dimensions: strained/frustrated, useful/needed and guilty/fearful. The following observations can be made with respect to the

prevalence of the different forms of subjective caregiver strain in our sample of employed caregivers:

- Almost 40% of the sample felt fearful and guilty sometimes or often. This is the most common form of subjective caregiver strain experienced by the employees in this sample.
- One in four reported feeling strained and frustrated sometimes/often.
- While the majority of respondents feels useful and needed, almost 30% of the sample felt useful/needed sometimes or seldom.

The following conclusions with respect to the prediction of *caregiver strain* can be drawn from structural equation modeling undertaken as part of this study this study:

- Four predictors, provide personal care (i.e., feeding, toileting, bathing, dressing, medications, bed transfer, wheelchair transfer, laundry, meal preparation), provide general care (i.e. social support, transportation, running errands, socializing, money management, personal business, housework, yard care), feel strained/frustrated and feel guilty/fearful) explain 38.5% of the variation in caregiver strain. The more personal care and general care the employee provides the higher the level of caregiver strain.
- Personal care is a more important predictor of caregiver strain than general care.
- The more the employee experiences two forms of subjective caregiver demand, strained/frustrated and guilty/fearful, the higher the level of caregiver strain.
- The third subjective caregiver demand factor, useful/needed is not a significant predictor of caregiver strain suggesting that the positive facets of caregiving have little impact on the etiology of caregiver strain.
- Four predictors (general care, strained/frustrated, useful/needed and guilty/fearful) explain 18.7% of the variation in perceived stress. The more general care the employee provides the higher the level of perceived stress.
- The more the employee experiences the following two of the forms of subjective caregiver demand, strained/frustrated and guilty/fearful, the higher the level of perceived stress.
- The more the employee experiences the third form of subjective caregiver demand, useful/needed, the lower level of perceived stress.
- Personal care is not a significant predictor of caregiver strain.
- The predictors of perceived stress are somewhat different from the predictors of caregiver strain.

## 7.5 What can be done to reduce caregiver strain?

This section summarizes key findings and conclusions relating to the third part of Research Objective Three: *Identify what can be done to reduce caregiver strain for employed Canadians?*

The final step in our model testing involved determining the extent to which a number of factors identified in the research literature moderated the relationship between work role overload and total overload and family role overload and total role overload. The following conclusions with respect to the ability of these factors to help employees deal with caregiver strain:

- Supportive management, perceived flexibility, and control over work do not moderate any of the paths in the models tested in this study suggesting that work place policies and practices do little to change (for the better or the worse) the caregiving experience of employed caregivers.
- We identified four significant ( $< .01$ ) moderators of the relationships between family role overload and total role overload.
- Employees who work for an organization with a culture that values employees who give work priority over family and conveys to employees that they need to keep work and family domains separate (i.e., myth of separate worlds) will experience a stronger relationship between family role overload and total overload than those who work for an organization where such a culture is not as strong (i.e., this type of culture exacerbates the extent to which family role overload contributes to increased levels of total role overload).
- Employees who live in families where money is not an issue experience a weaker relationship between family role overload and total overload than those who live in families where money is tight (i.e., the more financially strapped the family the stronger the relationship between family role overload and total role overload). This suggests that employees who are financially better off are able to purchase services that help them cope with family role overload.
- The more the employee agrees that they have chosen to provide caregiving the weaker the relationship between family role overload and total role overload.
- The more the employee feels that they have no choice but to provide caregiving (agree that they provide care because of a lack of homecare, a lack of health care services, and because no one else is willing to care for the dependent) the stronger the relationship between family role overload and total overload (i.e. the more likely family role overload is to lead to higher levels of total role overload).
- The more control an employee has over their family domain, the weaker the relationship between family role overload and total role overload.

## 7.6 Why should employers and employees care about caregiver strain?

This section summarizes key findings and conclusions relating to Research Objective Four: *Quantify the impact caregiving strain has on employees who provide care as well as the organizations that employ them.*

The data from this study support the idea that the inability to balance employment and caregiving will negatively impact the organization's bottom line and make it more difficult for companies to manage their human capital. The following data support these conclusions.

- Approximately one in four of the knowledge workers in the caregiving sample said that balancing employee and caregiving had contributed to a moderate to substantial *increase* in the likelihood that they would be absent from work, use employee benefits and turn down a promotion
- Approximately one in four of the knowledge workers in the caregiving sample said that balancing employee and caregiving had contributed to a moderate to substantial *decrease* in their work productivity and the number of hours they could devote to work.
- Caregiving responsibilities impact absenteeism. More specifically approximately one in three employees with caregiving responsibilities missed work because of issues with respect to eldercare.

Our data also link caregiving to a decline in employee well-being. The following data support this assertion:

- Approximately one in five of the employed caregivers in this sample reported that caregiving had substantially reduced the amount of energy they have, the amount of time they have for social and recreational activities, the amount of time they have for themselves, their ability to take a vacation, the amount of privacy they have and their personal freedom.
- Approximately one in ten of the employed caregivers in this sample reported that caregiving had substantially reduced the amount of money they have for personal expenses and resulted in poorer physical and mental health.

Our analysis also showed a strong link between caregiving and role overload. More specifically:

- Three predictors, caregiving intensity, hours in eldercare per week and subjective caregiver demand explain 14% of the variation in family role overload. The greater the caregiver intensity, the higher the levels of subjective caregiver demand and the more hours the employee devotes to eldercare per week, the greater the family role overload.
- The actual hours spent per week in eldercare are not as important a predictor of family role overload as caregiving intensity and subjective caregiver demand.

- Three predictors, caregiving intensity, hours in eldercare per week, and subjective caregiver demands explain 4.8% of the variation in work role overload.
- The fact that caregiving intensity and subjective caregiver demand contribute to increased overload at work supports the idea that the demands of strain of caregiving spillover into the work domain (i.e. employees who come to work exhausted, stressed and frustrated and more likely to feel overwhelmed with all they have to do at work).
- The negative relationship between hours per week in eldercare and work role overload suggests that people who spend more time in caregiving have less time and energy to devote to work. This relationship also suggests that people who have to spend a lot of time per week in the caregiving role cope by cutting back at work.
- Caregiving intensity, hours in caregiving and subjective caregiver demand are more closely linked to family role overload than to work role overload.

Our analysis also showed a strong link between caregiving and work-life conflict. More specifically:

- Two predictors, caregiving intensity and subjective caregiver demand, explain 36.7% of the variation in caregiver strain. Higher strain is associated with greater caregiving intensity and higher subjective caregiver demand. Subjective caregiver demand is a more important predictor of caregiver strain than caregiving intensity.
- Two predictors, caregiving intensity and subjective caregiver demand explain 10% of the variation in family interferes with work. The greater the caregiver intensity and the higher the levels of subjective caregiver demand the greater the family interferes with work.
- Subjective caregiver demand explains 5.3% of the variation in work interferes with family. Higher interference is associated with subjective caregiver demand. Caregiving intensity is not, however, associated with work interferes with family.
- Caregiving intensity and subjective caregiver demands are more powerful predictors of family interferes with work than of work interferes with family.
- Two predictors, caregiving intensity and subjective caregiver demand explain 9.0% of the variation in objective caregiver demand. Higher objective caregiver demand is associated with greater caregiving intensity and higher subjective caregiver demand.
- The actual hours spent per week in eldercare does not predict any of the aspects of work-life conflict included in this model.

Our analysis also showed a strong link between caregiving and three indicators of organizational well-being. More specifically:

- Two predictors, caregiving intensity and subjective caregiver demand explain 5% of the variation in the employment changes index. Employees who experience higher levels of caregiver intensity and higher subjective caregiver demand are more likely to say that eldercare has caused them to reduce their hours of work, increase their use of employee benefits, etc.
- Subjective caregiver demand explains 2.2% of the variation in intent to turnover. The greater the subjective caregiver demand, the more likely the employee is to be thinking of quitting their job.
- Subjective caregiver demand explains 2.3% of the variation in intent to job satisfaction. The greater the subjective caregiver demand, the less satisfied the employee is with their job.

Our analysis also showed a strong link between caregiving and employee well-being. More specifically:

- Two predictors, subjective caregiver demand and caregiving intensity explain 15.3% of the variation in perceived stress. The higher the caregiving intensity and the subjective caregiver demand, the greater the stress.
- Two predictors, subjective caregiver demand and caregiving intensity explain 3.9% of the variation in perceived health. The higher the caregiving intensity and the subjective caregiver demand, the less likely the employee is to say that they are in good health. Subjective caregiver demand is a more important predictor of perceived health than caregiver intensity.
- Two predictors, subjective caregiver demand and caregiving intensity explain 15.0% of the variation in depressed mood. The higher the caregiving intensity and the subjective caregiver demand, the higher the depressed mood score.
- Subjective caregiver demand is a more important predictor of employee well being (stress, perceived health, depressed mood) than caregiver intensity.

## **7.7 Caregiving more problematic for female employees than male employees**

This section summarizes key findings and conclusions relating to the first part of Research Objective Five: *Determine the impact of gender on the above issues*. There are a number of gender differences in our data that are important to note:

- Women were more likely than men to be employed caregivers: More specifically, the female employees in the survey sample were twice as likely as their male employees to be in the sandwich generation and three times more likely to be in the eldercare only group. This finding is particularly relevant given the fact that the men and women in the sample were approximately the same age.

- While the women in the sample spent more time per week in childcare than their male counterparts, gender was not related to the amount of time spent in eldercare.
- The men in the sample receive more support for the caregiver support from their partners than their female counterparts, regardless of lifecycle stage.
- The women in the sample took on more high energy roles than the men regardless of their caregiving roles.
- Regardless of family type the men in the interview sample were more likely than their female counterparts to engage in two types of caregiving: the provision of financial assistance and yard work - caregiving activities that are more typically done by men than women. They were also more likely to provide personal care and nursing care than their female counterparts - a finding that runs counter to what is reported in the literature.
- With one exception (home-yard maintenance) women were more likely than men to report they found all the caregiver roles examined in this study to be very demanding. The gender difference with respect to the demands associated with the provision of emotional support is particularly large.
- Challenges in balancing employment and caregiving were more likely to have a negative impact on the women in the sample (less time for self, less time for sleep, loss of personal energy, reduction in their social life) than the men, regardless of caregiving roles.
- Women were more likely than men to report that caregiving leaves them feeling fearful, guilty, strained and frustrated.

Finally it is important to note that within family type there were no gender differences in perceived physical health or work role overload. Nor were there any gender differences in the extent to which the caregivers in this sample stated that caregiving had negatively impacted the number of hours they spent in work or their productivity.

## **7.8 Employees with multi-generational caregiving responsibilities are struggling**

This section summarizes key findings and conclusions relating to the second part of Research Objective Five: *Determine the impact of caregiving situation on the above issues.*

The data from this study support the following conclusions with respect to this issue. More specifically, the data from this study indicate that regardless of gender, employees in the sandwich generation:

- were demographically distinct from the employees in the eldercare only group. More specifically, employees in the sandwich generation were evenly split between the Gen X

(40% are 30 to 45 years of age) and Baby Boomer (50% are over 45 years of age) cohorts. Most were married (88%), lived in dual-earner families and balanced the demands of parenting adolescents (5 to 12) and teenage children with often onerous eldercare demands. One in ten indicated that they had at least one elderly dependent living with them (11%) and a plurality (44%) had responsibility for 3 or more elderly dependents (41%).

- were more likely than those in the eldercare group to provide care for a parent and/or in-law who lived nearby. This finding might be attributed to the fact that either the respondent's parents and/or in-laws moved to live in the same community as their children and/or the fact that the younger employees in this sample are more likely to live in the community where they grew up.
- were more likely to say that money was tight in their family. This finding is particularly interesting given the data showing that when gender is taken into account, employment income is not associated with family type. These findings suggest that taking on the role of eldercare is more likely to be a financial strain in families with children still living in the home.
- were more likely than those in the eldercare group to say that they had assumed the role of caregiver because they lived near the dependent (pragmatic reasons) and because the dependent was experiencing health problems and needed care (no choice but to care).
- engaged in a wider range of caregiving activities than those in the eldercare only group. More specifically, they were more likely to provide emotional support, take their family member to appointments, shop and run errands for them, and do housework for them. Many of these activities are very time consuming. There were no cases where those in the eldercare group were more likely than those in the sandwich generation to provide any of the types of caregiving examined in this study.
- spent significantly more time overall in family activities than their counterparts in the eldercare group (approximately triple the amount of time)
- were significantly more likely to take work home to complete in the evening and on weekends (supplemental work at home - SWAH) than their counterparts in the eldercare group.
- were more likely to be engaged in a higher number of high energy roles than those in the eldercare group.
- were more likely than those in the eldercare group to spend time in the following caregiving demands home/yard work, personal care and nursing care.
- faced more challenges than their counterparts with only one caregiving role. More specifically they reported the highest levels of work, family and total role overload, the highest levels of stress and depressed mood, the highest incidence of both work interferes with family and family interferes with work, and the poorest levels of physical health in the

total sample. They were also more likely to be absent from work and to say that work-life balance issues had negatively impacted their productivity at work and increased their use of company benefits.

- were more likely than those in the eldercare only group to say that challenges with caregiving had led them to turn down a promotion and be absent more often from work.
- were more likely than any other group in the sample to say that their inability to balance work and family had resulted in a loss of time for sleep and social activities and a reduction in personal energy.
- were more likely than those in the eldercare only group to say that the time demands and the emotional intensity of the caregiving situation had left them feeling overwhelmed.
- were 1.4 times more likely than those in the eldercare only to say that caregiving had negative implications for their career/job,
- were 1.5 times more likely than those in the eldercare only to say that caregiving made them feel frustrated,
- were more likely than those in the eldercare only group to say that their work demands conflicted with their personal demands in terms of timing and available energy.
- were more likely than those in the eldercare only group to experience emotional caregiver strain.

Other conclusions of note include the following:

- Regardless of the outcome being considered, people with no dependent care were "better off" while those in the sandwich group were worse off.
- Family interferes with work appears to be more a function of childcare demands than the need to provide eldercare (those in the childcare and sandwich stages of the lifecycle are more likely to report this form of work-life conflict).
- Perceived stress appears to be more a function of childcare demands than the need to provide eldercare (those in the childcare and sandwich stages of the lifecycle are more likely to report high levels of perceived stress).
- Depressed mood appears to be more a function of eldercare than childcare (those in the eldercare and sandwich stages of the lifecycle are more likely to report high levels of depressed mood).
- Employees in the childcare stage of the lifecycle are more likely than their counterparts in the sandwich generation to miss work due to childcare. This difference might be due to the fact

that these employees have younger children at home. Alternatively, it might be that elderly dependents are able to help employees deal with unexpected issues at home.

There were also a number of gender differences within the sandwich group that are worth noting. The females in the sandwich generation were:

- more likely than others in the sample to say that they took on the role of caregiver because of a lack of support services within their parent's/in-laws community.
- less likely than others in the sample to say that their partner spent time each week in eldercare and more likely to have a partner who devoted long hours per week paid employment - findings that are consistent with the data showing that these women are more likely to be part of a dual career family.
- more likely than others in the sample to report very high levels of all three types of role overload. The high levels of family role overload experienced by the women in this group are particularly striking and probably account for the higher levels of total role overload experienced by this group of women. They are also consistent with the fact that the women in this group have higher total role sets, a partner who spends a lot of time in paid employment, higher work demands and receive less support from their partner for caregiving activities.
- more likely than others in the sample to say that caregiving had meant a moderate to substantial increase in their use of employee benefits and the amount they were absent from work.
- more likely than others in the sample to have sought care from their family physician -- a finding that is consistent with the higher demands reported by these women.

Compared to the rest of the sample, the men in the sandwich generation, on the other hand,

- were twice as likely to say that work-life challenges had caused them to turn down a promotion,
- were more likely to be absent from work due to mental and emotional fatigue.
- were more likely to report high levels of work-interferes with family.

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