The Etiology and Reduction of Role Overload in Canada's Health Care Sector

Authors

Dr. Linda Duxbury, Professor
Sprott School of Business
Carleton University

Dr. Christopher Higgins, Professor
The Richard Ivey School of Business
The University of Western Ontario

Dr. Sean Lyons, Professor
Department of Business
University of Guelph

This study was funded by a grant from the Workplace, Safety and Insurance Board

Abstract

This study seeks to increase our understanding of the etiology of role overload (having too many responsibilities and too little time in which to attend to them) and to identify mechanisms by which role overload can be reduced or prevented.

The study was undertaken at four Ottawa hospitals. A multi-method research approach including focus groups (n = 6), a survey (n = 1396) and in-depth interviews (n=150) was used.

Overload at work is caused by a lack of time (too many commitments, time constraints, and unrealistic work deadlines and work expectations), multiple competing priorities, a lack of help and support, understaffing, an inability to control the situation, and a non supportive organizational culture. Overload at home is related to expectations at work, a lack of time, competing demands and priorities, a lack of help and support, life cycle stage (eldercare, children at a difficult age) and an inability to control the situation.

This study links higher levels of role overload with negative emotions, poorer physical and mental health, increased work-life conflict, poorer relationships at work and at home, greater intent to turnover, increased absenteeism, greater use of EAP, and lower commitment and productivity.

This study found that hospital workers employ a myriad of strategies to cope with role overload. However, few of these supports were offered by the hospitals. It appears that supportive management, being prepared emotionally, having a plan, setting priorities and having a good support team and access to help are the best ways to cope..

We believe that organizations should address the conditions that cause overload at work (the culture, understaffing, the complexity of work). Employees who wish to improve their mental and physical health need to make an effort to get enough sleep, put their family first, seek social support from colleagues at work and friends, and reduce their use of alcohol and over the counter medication.

The Etiology and Reduction of Role Overload in Canada's Health Care Sector

Introduction

Recent decades have seen a dramatic shift in the nature of the work-family interface. The proportions of women, dual-career families and employed individuals with childcare and eldercare responsibilities have increased dramatically over the past several decades. Technologies such as e-mail, cellular telephones and laptop computers have made it possible for employees to work any time, anywhere. Global competition has increased the expectations on the part of employers that their workers will do just that. The culmination of these influences has made it increasingly difficult for employees to accommodate the various demands placed on them by their work and family lives. As men and women have struggled to manage the interplay of their family and work activities, work-family research has striven for a better understanding of the ways in which work and family intersect. While a burgeoning work-family literature has evolved since the mid-1970s, the critical concept of role overload – having too many responsibilities and too little time in which to attend to them – has garnered relatively little research attention.

The disappearance of the role overload construct from the literature is unfortunate. Research by Duxbury and Higgins (2009) indicates that overload is taking an increasing toll on workers, employers and the Canadian health care system. Specifically, high levels of role overload have been found to be associated with higher levels of stress, depression, work absenteeism, intent to turnover, poorer physical and mental health, greater use of Canada's health care system and higher health care costs. Given the prevalence of overload and its myriad negative consequences, academics, practitioners and policy-makers alike would benefit from a deeper understanding of this important topic. This research is the first in-depth investigation of the phenomenon of overload, its causes, consequences and the actions that workers, employers and families can take to reduce it.

Research Objectives:

This study seeks to focus attention on the important topic of role overload. While most researchers agree that overload is an important concept above and beyond work-family conflict, there remains little theoretical or empirical evidence concerning the nature of overload, its causes, its outcomes and strategies that are effective in reducing the incidence of overload amongst employed Canadians and in mitigating its harmful impacts once it is experienced. This study aims to fill this gap by investigating role overload as it affects Canadians at work and in their family lives. The broad objective of this research program is to increase our understanding of the etiology of role overload and to identify mechanisms by which role overload can be reduced or prevented. This study focuses on role overload within Canada's health care sector – a decision that is consistent with data that show that health care providers are high risk with respect to work intensification and overload (Duxbury and Higgins, 2003, 2009). Our objectives are to: (1) increase our understanding of the etiology of role overload; and (2) identify effective strategies that can be used by health care organizations, health care workers and their families to reduce role overload and to cope with its potentially negative effects.

Specifically we seek answers to the following questions:

- What are the key antecedents of role overload in Canadian hospitals?
- What are the consequences of high levels of role overload to those working in Canadian hospitals and their employers?
- What strategies can health care workers and organizations employ to reduce the formation of role overload?
- What coping strategies can health care workers and organizations employ to mitigate the negative impacts of role overload on individual and organizational well-being?
- What impact do gender, job type and life cycle stage have on the etiology of role overload?

This research has resulted in a deeper theoretical understanding of the nature, causes, and consequences of role overload in general, and in the health care sector specifically. Our findings have allowed us to identify of a number of concrete practices and strategies that can be implemented by employers and employees to reduce the incidence and consequences of role overload.

It is our hope that this research will significantly increase the profile of role overload as a serious workplace health issue and will establish a strong basis for future research. It is also our hope that the results of this study will make it possible for interested stakeholders and policy makers to generate practical steps that can be taken by individuals, families, and employers to minimize role overload and its harmful consequences.

Structure of this report

This report is divided into 6 chapters. Following the introduction (Chapter 1), Chapter two gives the interested reader an overview of the relevant research that informed this study. Chapters three (focus groups), four (survey) and five (interviews) are each devoted to one of the three separate but inter-related research projects that were undertaken to help us address the research objectives noted above.

We began our work by completing a number of focus groups to help us understand what contributes to and alleviates role overload for various types of health care providers working in Canada's hospitals. Results from these focus groups (Chapter 3) informed the development of a survey, the administration and analysis of which was the basis of the second research project carried out as part of this initiative (Chapter 4). Following this we undertook an in-depth interview study designed to answer the research objectives posed above and better understand the survey findings (Chapter 6).

In each of these three chapters we begin by outlining the key objectives of this stage of the research and giving an overview of the research methodology employed. Key results are then summarized and discussed and relevant conclusions drawn. The findings from the three different data sets are integrated in the fifth and final chapter of the report and relevant conclusions with respect to each of the research questions are drawn. The report ends with a discussion of how

this research contributes to our understanding of workplace health and recommendations for future research in this area.

Chapter Two
Review of Relevant Literature

This literature review is divided into five sections. Key definitions are presented first. This is followed in section two by a discussion of the known antecedents of role overload. The third section outlines what is presently known about the consequences of role overload. The shortcomings of the extant research in this area are presented in section four. The literature review ends with a discussion of the theoretical framework that will guide the proposed research study.

2.1 What is role overload?

Our examination of role overload necessarily begins by defining the role overload construct. Although there is a lack of consensus on the precise definition of overload, the literature does provide a number of points that are critical to a complete definition of the concept. This section reviews the way that overload has been defined by others and ends with the definition that will be used in this study. There has been a wide variation in the way that role overload has been conceptualized and situated within the nomological network of the work-family interface. The term role overload has been used interchangeably with role strain (e.g., Goode, 1960; Guelzow, Bird, & Koball, 1991; Komarovsky, 1976; Marks & MacDermid, 1996), role stress (e.g., Jackson & Schuler, 1985), time-based strain (e.g., Bacharach, Bamberger & Conley, 1991; Greenhaus & Beutell, 1985) and role conflict (Coverman, 1989). This confusion has undoubtedly hampered the advancement of role overload as an important construct in the study of work and family and employee mental health.

First, unlike other forms of role conflict, such as role interference, which arise because of mutually incompatible role demands from two or more role senders (e.g., one's spouse, employer, children), role overload is related to the total time demands placed on an individual by his or her multiple roles (Khan, Wolfe, Quinn, Snoek & Rosenthal, 1964; Kopelman, Greenhaus & Connolly, 1983; Sieber, 1974). Thus, while the demands of the individual's various roles may be mutually compatible when considered in isolation, they are brought into conflict due to the perceived limits of one's time (Khan et al., 1964). In simple terms, role overload means feeling that you have too much to do and not enough time in which to do it.

Overload may be viewed as a sub-category of the broader construct of role strain, which refers to any difficulty that one experiences in fulfilling role obligations (Goode, 1960; Marks & MacDermid, 1996). Although role strain research in the 1980s (e.g., Barnett & Baruch, 1985; Kelly & Voydanoff, 1985; Voydanoff, 1980) included both role conflict and role overload, more recent work-family research has focused almost exclusively on role conflict in the form of work interference with family roles and family interference with work roles. Given the prevalence of role overload and the number of consequences it engenders, it is unfortunate that role overload has largely disappeared from the work-family literature. The few studies published in the past 15 years that have incorporated the concept of overload have focused specifically on overload within the separate domains of work (e.g., Bacharach et al., 1991; Brett & Stroh, 2003; Elloy &

Smith, 2003; Frone, Yardley & Markel, 1997) and family (e.g., Aryee, Luk, Leung & Lo, 1999; Frone et al., 1997) rather than overload in the entire role set. These variations of the overload concept relate to the scope of demands one faces within a given role rather than the aggregation of demands experienced within one's entire set of roles. Such domain-specific forms of overload are theorized to be antecedent to various forms of work-family conflict (Aryee et al, 1999; Frone et al., 1997).

Although domain-specific overload has been shown to be important in its own right, there is value in considering overload in the total role set as a separate construct. As previously noted, Khan et al. (1964), in their pioneering work on role theory, argued that overload within any single role is not a necessary precondition for overload in the total role set. Even when the demands of specific roles are not over-demanding when considered in isolation, the combination of multiple roles can lead to perceived overload in total. In concordance with the arguments put forward by Khan et al. (1964), we conceptualize role overload in terms of 'total role overload,' which refers to the culminating outcome of over-demand across one's total role set. We posit that work-role overload and family-role overload are antecedents of total overload.

The definitions of role overload in the literature reinforce our contention that one should not look at workload and work role overload in isolation. Rather, one must consider the worker in the context of his or her life to truly understand why he or she feels overloaded and how best to address this problem. Goode (1960) made this point when he observed that an employee is:

> "…likely to face a wide, distracting, and sometimes conflicting array of role obligations. If he conforms fully or adequately in one direction, fulfillment will be difficult in another. Even if he feels lonely, and would like to engage in additional role relationships, it is likely that he cannot fully discharge all the obligations he already faces. He cannot meet all the demands to the satisfaction of all the persons who are part of his total role network. Role strain – difficulty in meeting given role demands – is therefore normal. In general, the individual's total role obligations are over-demanding (p. 485)."

This view of role overload has not changed substantially over time. Sieber (1974) noted that role strain is comprised of two "overlapping problems" – role overload, which refers to "constraints imposed by time: as role obligations increase, sooner or later a time barrier is confronted that forces the actor to honor some roles at the expense of others" (p.567). Role conflict refers to "discrepant expectations, irrespective of time pressures" (p. 567). Bohen & Viveros-Long (1981) defined *overload of role obligations* as "when an individual has too many role statuses – such as parent, student, child, friend, spouse, worker and community leader – to meet the demands of each status to the satisfaction of all the role partners and the satisfaction of self" (p. 232).

In a key article published in 1985, Greenhaus & Beutell argued that time-based conflict arises because time spent on one role generally cannot be spent on activities within another role. They hypothesized that time-based conflict can take two forms: (1) time pressures associated with one role make it physically impossible to comply with the demands of another role (i.e., time and space are an issue); (2) pressures may also produce a preoccupation with one role even when the

person is physically attempting to meet the demands of another role. Bacharach et al. (1991) discussed Greenhaus & Betuell's (1985) distinction between time-based conflict and strain-based conflict and argued that role overload at work may be a good indicator of time-based conflict, as it refers to one's inability to fulfill one's work role requirement in a given period of time. They went on to define a construct that they called quantitative overload as "the conflict between organizational demands and the time allocated to the individual by the organization to complete those demands" (p. 44).

Building on the work of Greenhaus & Beutell (1985) and Bacharach et al. (1981), Elloy and Smith (2003) postulated the existence of two types of role overload: qualitative and quantitative. They noted that "qualitative overload refers to a situation where a task is too difficult to complete, while quantitative overload is experienced when there are too many tasks that need to be done. Most authors discuss overload in terms of the latter (p. 57)." Elloy & Smith (2003) also distinguished between domestic overload – where demands created by housekeeping tasks exceed the amount of time available to complete them, and work overload, where one does not have enough time to complete work tasks.

Finally, when reviewing the concept of role overload, it is important to acknowledge the work of Coverman (1989) who argued that "role conflict and role overload tend to be used interchangeably in the literature, when, in fact, they are distinct concepts. Coverman distinguished between the two constructs as follows. First, she observed that role conflict is a type of inter-role conflict that emerges when multiple roles create conflicting demands on an individual, such that he or she is unable to adequately fulfill one or both of the roles. Role overload, on the other hand, occurs when the conflicting demands of various roles are so great that they inhibit the individual's ability to fulfill the roles adequately. Thus, role overload is a type of role conflict that is specifically related to the total time and energy needed to fulfill role demands whereas role conflict refers to incompatible role requirements. Coverman hypothesizes that role overload may occur even when the role demands are *compatible*, simply because the individual does not have sufficient time and energy to fulfill them all: "a person may experience conflicting demands of multiple roles (role conflict) but, unless time pressure is an issue, he or she will not necessarily encounter role overload (p.968)."

In consideration of the points raised in the literature, we define total role overload as a time-based form of role conflict in which an individual perceives that the collective demands of his/her multiple roles exceed available time and energy resources, making the individual unable to adequately fulfill the requirements of his/her various roles to the satisfaction of self or others.

2.2 What is known about the antecedents of role overload?

Most research on the antecedents of role overload was done prior to 1990. As such, we know very little about the impact of downsizing, work intensification and work extension technologies (i.e., e-mail, laptop computers, mobile devices) on role overload. A number of authors have, however, linked overload to work demands, non-work demands, work involvement, family involvement and role quality. In early research on this topic, Marks (1977) noted that "strain, overload and role conflict tend to be greatest for those who are most involved in, and oriented to success at work (p.934)." A strong relationship between high work involvement and high work

conflict/overload has been observed by Greenhaus & Beutell (1985), Greenhaus and Kopelman (1981), Higgins, Duxbury and Irving (1992), Pearlin (1975), Pleck (1979), and Staines, Pleck, Shepard and O'Connor (1978). A number of explanations for the link between role involvement and role overload have been offered in the literature. Higgins et al. (1992) attributed it to the high positive association between role involvement and the number of hours spent in the role in question (i.e., work or family). Pleck (1979) argued that psychological involvement in a role acts as a sensitizer to interference effects, making the individual more aware of problems in that role. This increased awareness results, he suggested, in increased role conflict. Hall and Richter (1988) suggested that individuals who are highly involved with work, family or both have high work-home boundary permeability, such that the individual allows the demands of one domain to intrude into the other domain. Ridley's (1973) centrality of work theory suggests that those with high work involvement, who believe that work is the only legitimate claim on their time, have an increased potential of work-family conflict and role overload.

Barnett and Baruch (1985) argued that the key element indicating the potential for negative outcomes is not the number of roles, but the relative obligations and privileges associated with the role. Their study found that work role quality (i.e., the perception of more benefits than drawbacks related to working) was significantly negatively related to overload.

Greenhaus & Beutell (1985) noted a number of work-related sources of time-based conflict, including the number of hours worked, the number of hours commuting to work, frequency and amount of overtime, presence and irregularity of shift work, inflexibility of work schedule, work schedule control, Type-A behaviour and degree of work commitment. They also determined that the following were key family-related sources of time-based conflict: marriage; parenthood; having responsibility for child-rearing; having younger children rather than older children; number of children; having a spouse who is highly involved in his/her career; and, the number of hours worked outside of the home by the primary caregiver. Guelzow et al. (1991) offered a similar set of antecedents. They suggested that perceptions of role strain (including overload) are influenced by a number of environmental antecedents including the number of hours worked, flexibility of working hours, number of children and age of the youngest child.

Frone et al. (1997) found through structural equations modeling (SEM) that supervisor support was significantly and negatively related to work overload and family support was significantly and negatively related to parental overload. Contrary to their hypotheses, co-worker support was not related to work overload and spousal support was not related to parental overload. As hypothesized, there was a significant and positive relationship between family-to-work conflict and work overload and between work-to-family conflict and parental overload. Also as hypothesized, work overload was positively related to work-to-family conflict and parental overload was significantly positively related to family-to-work conflict.

2.3 Consequences of role overload

The importance of role overload to researchers and policy makers interested in employees' physical and mental well-being is evidenced by its numerous detrimental outcomes for individuals, organizations, and society at large. For instance, role overload has been linked to increased levels of anxiety, fatigue, burnout, depression and emotional and physiological stress

and to decreased satisfaction with family and work (Bacharach et al., 1991; Barnett & Baruch, 1985; Cooke & Rousseau, 1984; Coverman, 1989; Duxbury & Higgins, 2003; Duxbury and Higgins, 2005; Frone et al., 1997; Guelzow, Bird & Koball, 1991; Khan et al., 1964). Role overload has also been linked to higher rates of absenteeism on the job, lower levels of organizational commitment, increased thoughts of quitting, poorer physical and mental health, greater use of Canada's health care system and greater health care costs (Duxbury and Higgins, 2003; Higgins, Duxbury & Johnson, 2004). It has also been found to be significantly negatively related to work performance (Frone et al., 1997). Other studies have concluded that work-family overload leads to psychological distress as one's time and energy are exhausted by multiple role involvement which, in turn, leads to role strain and diminished psychological well-being (Barnett & Baruch, 1985; Goode, 1960; Coverman 1989). Frone et al. (1997) reasoned that overload represents a strain-based predictor, because having too much to do and too little time is likely to lead to emotional distress. Thus, being overloaded leads to preoccupation with unfinished tasks, as well as physical and psychological fatigue.

2.4 Relevance of a study on role overload

The extant literature concerning role overload suffers from two critical deficiencies. First, the wide variation in the way in which role overload has been conceptualized, as noted above, has undoubtedly hampered the advancement of role overload research within the broader field of work-family conflict. Second, while role overload has been theoretically and empirically linked to a wide range of antecedents and consequences, the research has been highly fragmented. Role overload has often been incorporated into models of related concepts, such as work-family conflict, but very few attempts have been made to generate a comprehensive theoretical model of role overload itself. We believe that providing role overload with a solid theoretical foundation will help to distinguish it from related constructs and will strengthen our understanding of its unique antecedents and consequences. Such an understanding should also help key stakeholders (i.e., employees, employers, governments) determine how to best help employees cope with the demands they face at work and outside of work.

2.4.1 Role Overload in the Health Care Sector

This study focuses on the health care sector. This sector is eminently suitable for a study on role overload, as dealing with the issue of workload and role overload is essential not only to the health and well-being of health professionals but also to effective retention strategies of this critical group. The 1990s was a decade of change in Canada's health care sector. However, this change was not necessarily positive or constructive. Political decisions to cut health care budgets resulted in restructuring that "had a short-term bottom-line focus that did not consider the longer-term consequences for health human resources" (Maxwell, 2002, p.103). Besides fiscal restraints, other environmental pressures such as an aging workforce, labour shortages, social change, complex governance, and rapid turnover in political leadership have affected the outcomes for health organizations and their employees (Lowe, 2003). Compared to other occupations, health professionals have the lowest level of trust in their employers; the lowest level of commitment to their employers; the lowest ratings of workplace communication; the least influence on workplace decisions, and the least supportive and healthy workplaces (Lowe, 2003). The "quality of work life among health care workers has deteriorated to the point where

it is impeding the capacity of the system to recruit and retain the staff needed to provide effective patient care (Maxwell, 2002, p.101)."

The Canadian Institute for Health Information (CIHI, 2002) reports that compared to other workers, Canadians in health occupations are more likely to miss work due to illness or disability, and they tend to be absent for more days. For instance, in 1999, nurses lost, on average, more than three weeks of work (15.4 days) due to illness or disability, compared to an average of 6.7 days for all Canadian workers (CIHI, 2001). A representative survey of 2,251 Canadian physicians found that 45.7 per cent were in an advanced phase of burnout; that is, feeling that they were ineffective, emotionally overrun and exhausted by their work, and showing clear signs of depersonalization in relationships (Canadian Medical Association, 2003).

Since the final report of the National Forum on Health (1997), which tabled recommendations for improving the health system and the health of Canadians, there have been various national and provincial reports and studies that have identified strategies for improving workplace conditions and the supply and retention of health workers. The Canadian Policy Research Network (CPRN) has been a leader in this area, releasing numerous reports outlining the importance of creating healthy workplaces, their link to productivity, and identifying various factors needed to create a healthy work environment (Lowe, 2003; Lowe, 2001; Duxbury & Higgins, 2001; CPRN, 2002). In addition, numerous provincial/territorial and national reports have emphasized the need to address the workloads and work environments in the health care sector in order to sustain a vibrant workforce (Advisory Committee on Health Human Resources (ACHHR), 2002; Canadian Nurses Association, 2001; Commission of the Future of Health Care in Canada, 2002; Premier's Advisory Council on Health, 2001; Standing Senate Committee on Social Affairs, Science and Technology, 2002).

2.5 Theoretical Model

On the basis of extant theoretical and empirical literature, we have devised a model of the antecedents and consequences of role overload, which we propose to test. The basic proposition of the theoretical model (shown in Figure 2.1) is that increased work role demands, non-work role demands, organizational demands and the greater number of life roles one has will lead to an increased perception of domain-specific overload, such as work-role overload (e.g., Bacharach et al., 1991; Cooke & Rousseau, 1984; Elloy & Smith, 2003; Frone et al., 1997) and family-role overload (Frone et al., 1997). Work-role overload and family-role overload are seen as contributing to total role overload (Cooke & Rousseau, 1984; Coverman, 1989; Frone et al., 1997; Greenhaus & Beutell, 1985; Kelly & Voydanoff, 1985). In addition, we posit that domain-specific demands affect total role overload directly. This hypothesis is consistent with Khan et al. (1964), who argued that overload within any single role is not a necessary precondition for overload in the total role set. Even when the demands of specific roles are not over-demanding when considered in isolation, the combination of multiple roles can lead to perceived overload in total. We use the term 'non-work' demands to denote all role activities occurring outside of the domain of work, including marital responsibilities, parental responsibilities, eldercare responsibilities, volunteer activities, participation in one's community and various leisure activities. We chose to include non-work demands in the model in lieu of 'family demands,' as

the former is more encompassing than the latter and is therefore more representative of the total role set.

As noted above, past research on role overload has linked it to a variety of negative individual, organizational and social outcomes (e.g., Duxbury and Higgins, 2001, 2003). Our model incorporates three indicators of physical and emotional distress (i.e., anxiety, stress, depression), three indicators of wellbeing (i.e., work interferes with family, family interferes with work and caregiver strain) and a number of key organizational outcomes which can be equated with organizational well-being (i.e., absenteeism, use of benefits, intent to quit, and commitment/engagement).

The model recognizes that different people with the same level of work and non-work demands (i.e., objective work and non-work demands) are likely to vary in the degree to which they perceive themselves to be overloaded. It also acknowledges that there are a number of factors that will impact the extent to which total role overload manifests itself at the individual, organizational or work-life levels. We therefore propose that the relationships between demands in the work and non-work domains and perceived total overload as well as the relationship between total overload and organizational, individual and work-life outcomes are moderated by a number of individual and organizational factors. Specifically, we propose that the supportiveness of the work context (Frone et al., 1997) as well as the organizational culture (Clark, 2001; Allan, 2001) will affect the degree of overload perceived by the individual. We therefore include a number of indicators of supportive work practices (i.e., perceived flexibility, supportive manager, perceived organizational support and organizational culture) that were developed in phase one of this research.

Coping refers to actions that people take, either alone or in conjunction with others, in order to avoid being harmed by stressors (McCubbin, 1979; Pearlin & Schooler, 1978). The vast coping literature distinguishes between two broad categories of coping behaviours: problem-focused coping, which is aimed at taking action or altering cognitions in order to affect the nature of the person-environment transaction; and emotion-focused coping, which is aimed at reactive regulation of one's emotions in the face of a stressful situation (Folkman & Lazarus, 1980; Lazarus & Folkman, 1984; Khan et al., 1964; Latack & Havlovic, 1992). The key distinction between these two types of coping is that problem-focused coping behavior involves an attempt to deliberately affect the pre-conditions of a stressor (in this case role overload) in order to obviate or mitigate the occurrence of that stressor, while emotion-focused coping represents an attempt to minimize the impacts of the stressor on one's well-being rather than affecting the occurrence of the stressor itself. Problem-focused coping can be considered active and pre-emptive and emotion-focused coping can be considered reactive (Latack and Havlovic, 1992).

Our model proposes that the relationship between domain-specific overload and total role overload will be moderated by the use of coping strategies. Furthermore, the relationship between total role overload and the outcomes in the model will be moderated by the use of coping strategies. We hypothesize that, given similar demands, individuals and organizations who successfully employ pre-emptive coping strategies (i.e., attitudinal, behavioural, programmatic and policy interventions that individuals and organizations put in place in order to mitigate the impacts of multiple role demands) will experience less role overload than those who do not employ such strategies (Guelzow et al., 1991). Finally, work by Karasek (1979)

emphasizes the importance of perceived control to an individual's ability to cope successfully with higher demands.

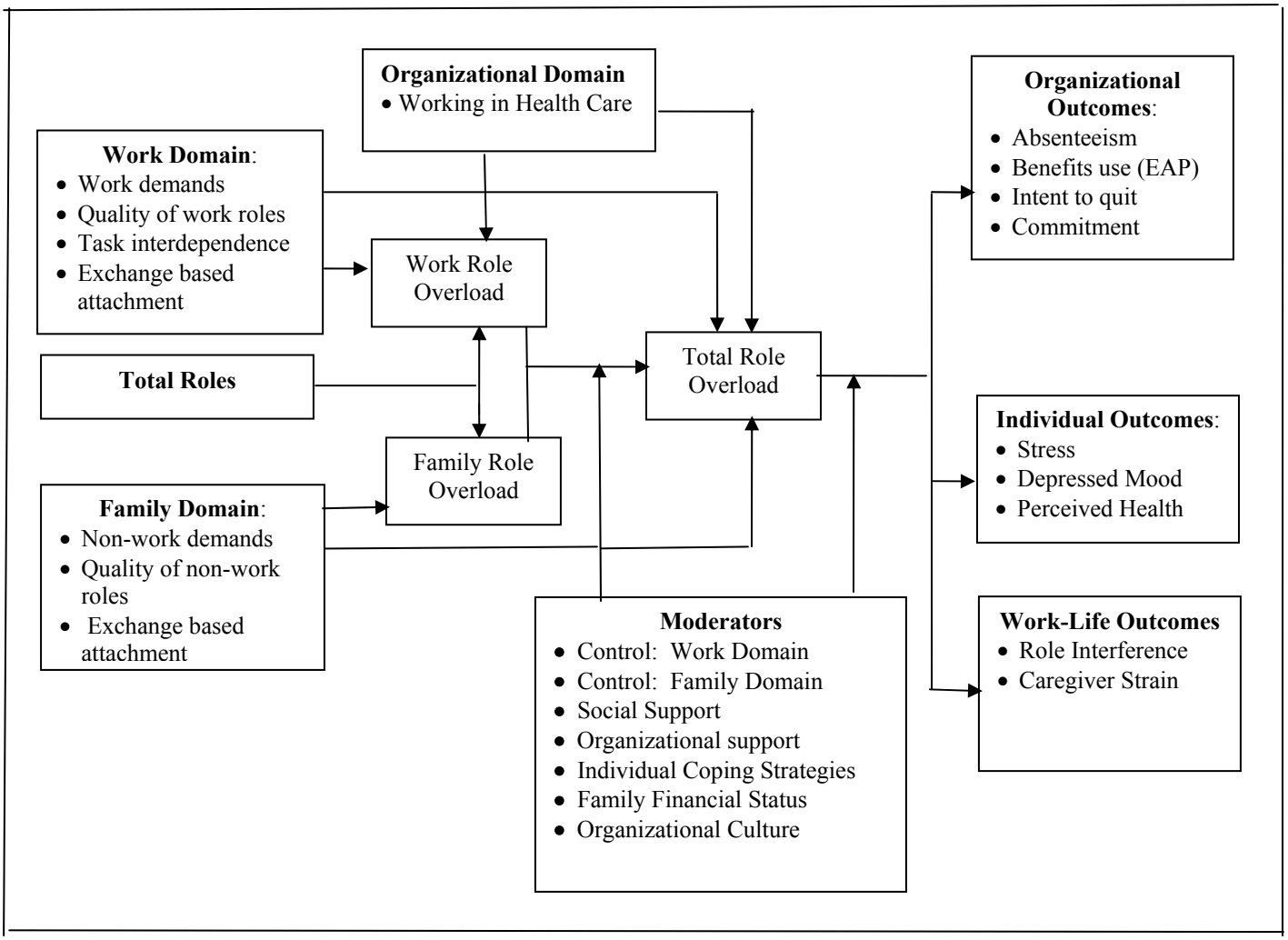


Figure 2.1: Theoretical Framework Guiding this Research

Chapter Three: Focus Groups

The first step of this research initiative involved six focus groups with employees of the four hospitals that participated in this study. The objective of the focus groups was threefold:

- to identify the key antecedents of work role overload in Canadian hospitals,
- to identify factors that employees in the health care sector have found to intensify and/or reduce role overload, and
- to examine the impact of job type on the antecedents of role overload.

Each hospital[1] hosted one of the focus groups (i.e. organized a room, provided refreshments) and was responsible for recruiting at least one employee to attend each of the six focus groups sessions. Separate focus groups were held for each of the following job groups: nurse, union-support staff, non-union support staff, management, physician and para-medical/allied heath. There were between 8 and 12 individuals in each focus group. The focus group sessions lasted between 3 and 4 hours each. Dr. Linda Duxbury and Dr. Linda Schweitzer facilitated and tape recorded all six sessions. A copy of the focus group script can be found in Appendix A. The questions asked were as follows.

1. What things about your job cause you to feel overwhelmed/overloaded?
2. What makes these feelings worse?
3. What alleviates these feelings? Specifically,
    a. What can your organization do to help you feel less overloaded?
    b. What can you personally do to reduce your feeling overloaded?

A summary of the participants' responses is shown below.

3.1 Question 1: What makes you feel overwhelmed/overloaded?

Twelve sources of role overload were mentioned in all six focus groups. These include:

1. Lack of Staff/Staff shortages
2. Counting Beds/Patients
3. Unpredictability of job
4. Work is endless and you are never "finished"
5. Wearing too many hats
6. The need to work in teams
7. Inability to get away/regroup

[1] One hospital had three sites, another hospital had two sites.

8. The demands for documentation exceed the time available
9. Communication inefficient/ineffective
10. Expectations of patients and their families
11. No time/allowances made for training/education
12. Lack of resources (other than human resources)

Details on each of these responses are given below.

Lack of Staff/Staff shortages

All respondents talked about how the lack of staff within their hospital had caused them to feel overwhelmed and overload. The following typify this antecedent:

> "There is just not enough staff to do the work. Even empty positions are not filled. In fact, there is a "policy of slow hiring here."
>
> "There are no replacements for sick leave or vacation leave. This means that I am always covering for someone – and having to do more than my job."
>
> "We have too high a reliance on part-time/casual staff. The part time staff is not well trained so they just cannot do all the work – it means that we have to do more."
>
> "We are so short of staff, you are often the only person who can do a particular job. The lack of overlap in skills/responsibilities means that you just never get a break – always running."
>
> "We are promised relief that never comes."
>
> "If I compare the situation right now to the one several years ago, there are the same number of beds and the same number of patients but fewer staff. This means that we have to work nights/weekends. It is so difficult to claim for overtime, I just often end up working for free. All work, no recognition – it just gets to you after a while."

Counting Beds/Patients

All respondents talked about how "counting beds" had increased the sense of urgency and overwork in the system. Specifically they noted a link between feeling overwhelmed and the following:

> "Resources are based on beds. But right now we have a situation where we have too many patients and not enough beds. We spend a lot of time caring for individuals who are not "officially" in the system, as least as far as the Government of Ontario sees it."
>
> "We are forced to "hurry" patients through system to free up beds. Unfortunately this means that many come back but this time they are sicker and take more of my time and energy."

> "A bed is not a bed. The patients we are treating today are sicker overall than those that we treated several years ago (otherwise, we send them home). Cases are more complex but all cases treated are counted as "1" bed, regardless of the complexity of the case."

Unpredictability of job

The unpredictability of the job was also mentioned as a source of role overload. People in all six focus groups noted that in their hospital the unexpected is *always* happening and that everyone's needs are always "immediate." They noted that the inability to plan ahead and the fact that they were always dealing with situations reactively was often crushing as was the constant interruptions and the need to be "on" 24/7.

Work is endless and never "finished"

According to the focus group participants, the fact that the work demands are endless, that work is NEVER finished is systemic within the health care field. They also noted that in their workplace a culture of never saying "no" was omnipresent and that you could not say no to work if you wanted to get ahead/remain employed.

Wearing too many hats

Employees, regardless of their job title, also talked about how "wearing too many hats" had stressed their ability to cope. Specifically they said that they had too many people giving them high priority work to do and that they were responsible for too many different things (i.e. disciplines). Other comments included the fact that people who worked at multiple sites were frustrated by the lack of recognition/allowance of the time that they needed to commute between various locations. This meant that they were often traveling during their personal time. The following quote typifies this source of role overload:

> "Each department/ discipline views you are "their" resource – they do not understand that you have other priorities, other things to do."

The Need to Work in Teams

The recent movement towards the use of multi-practice teams in health care seems to have increased employees sense of overwork. Specifically employees noted that working in a team increased the need to spend time coordinating, scheduling, communicating, constant "repeating and "rehashing of issues." They also noted that the lack of training on how to work in teams decreased their ability to work efficiently and increased their sense of frustration.

Inability to away/regroup

Respondents collectively noted that it was the inability to get away from their work that they found most distressing. In each focus group people talked about how vacation requests were denied, how time off in lieu of overtime is denied and how if they go away or get sick, work

piles up so much while they are gone that it is "just not worth taking a vacation." In a similar vein, people complained that there was no coverage for lunch or breaks:

> "this means that we often just cannot take them – there is just no way to get away from the work, no chance to regroup".

The demands for documentation exceed the time available to do it

Respondents all talked about how the demands for documentation had increased over the course of the last several years while the time available to work on documentation had decreased. This resulted in frustration and overload as:

> "The documentation has to be done – for due diligence, for professional standards, for administration – but there is no time in the day for it. I often end up doing it on my own time, and resenting it. I did not go into this profession to be a secretary."

Communication inefficient/ineffective

Many of the attendees agreed that the communication processes within their hospital were increasing their sense of being snowed under and besieged. They attributed communication problems to the following:

- the communications infrastructure is lacking -- "we just do not have the systems in place, and what is there is unreliable",
- e-mail and pagers mean that they are "always accessible/always responding to something."
- over-communication and communication overload -- "communication comes from everywhere – we get the same memo 10 times"; "I am being bombarded with messages – hard to know what is important and what is not important – so you have to pay attention to it all. Really frustrating."

Others talked about how the lack of transparency in the communications process had led them to feel harassed and pressured. In this view they talked about how they perceived that the communication process within their hospital was an oligopoly where:

- Communication was filtering on a "need to know" basis by senior management.
- Employees were discouraged from asking questions (this was viewed as disrespectful).
- Communications tended to go down, rather than up, the organizational hierarchy ("we are rarely asked for input"; "When we give input – it is ignored."

The poor communication within the hospital was associated with many of the other sources of overload noted above (i.e., we are reactive, we have too many priorities, we cannot say no).

Expectations of patients and their families

Focus group respondents also identified the patients and their families as a source of overload. They noted that patients and families were now more demanding, more informed and often very

frustrated by their interactions with the health care system. Respondents noted that both patients and families often took these frustrations out on front line staff, which increased their job stress and sense of being pressured.

No time/allowances made for training/education

Training and education also was a source of pressure for employees within the health care situation. Most talked about the fact that while hospitals and the profession required them to constantly take courses to keep their credentials up to date, no time was given for such training which meant that it often had to be taken on personal time. People also indicated that they were frustrated by their inability to participate in either onsite or offsite training and the lack of coaching/mentoring across experience levels.

Lack of resources

A lack of resources to do the work seems to be one of the major sources of overload within the health care system. Not only are people upset by the lack of staff, but they are also distressed by their inability to get the other resources that they need to do their job. In fact, the idea that people are being expected to "Do more with less time and fewer resources" was the most common sentiment expressed in all six focus groups. The following quotes show how this lack of resources is linked to being overloaded:

> "I constantly have to "fight" to get the equipment/supplies I need to do my job. This takes up my time and also increases conflict between me and my colleagues. If I get something, it means that someone else doesn't get it."

> "I have to be the advocate for my patients - to get them the resources that they need. I spend too much of my day begging and pleading for resources and not enough time practicing medicine."

3.1.1 Job specific sources of overload.

We now summarize the job specific sources of overload. While the majority of antecedents of role overload were mentioned in all six focus groups, we were able to identify several factors that were unique or more important to specific job groups. These challenges are mentioned below.

Nurses

The Nurses talked about how being viewed "as the lowest person on the totem pole" had increased their sense of being overloaded. Specifically, they felt that they (and their profession) were not treated with respect, were expected to take up "all the slack in the system," were not consulted on changes to patient care, and were always waiting for others to do their job before they could do theirs. The following typifies these frustrations:

"I am not permitted to take my vacation when my family has time off – but I have to take it eventually or lose it – so I end up at home alone in January while my husband is at work and the kids are in school."

"We can't afford to go away because we don't get enough notice so we would have to book at the last minute."

"I never get home on time – I spend the day waiting for others to tell me what needs to be done – and the instructions always arrive just when I am putting on my coat."

Union support

Those in union-support positions are uniquely frustrated by the limitations imposed by the technology that they work with on the job and how others treat the technology. They spoke passionately about how old/ineffective/inefficient equipment and/or systems had hindered their ability to do their work and how their colleagues lack of respect for and mistreatment of the equipment had made it more difficult for them to do their job.

Managers

After conducting the focus group with managers within the hospital system, we were left with the feeling that these jobs, by their very nature, are uniquely overwhelming. While managers experience all the frustrations noted earlier, they also experience five unique sources of pressure including:

What is my job?

"Nobody knows exactly what my job is (not even me) – I can't explain it."

"My job involves both operational and managerial duties – but the constant pressure from the operational side of things means I no time to be "there" for employees."

What authority do I have to get this work done? What are my responsibilities here?

"I am responsible for things I have no authority over!"

"There is a total lack of clarity here with respect to roles and responsibilities. Makes it hard to set priorities."

Will I be able to keep my job when the next cutbacks come?

I gave up the protection of a unionized job to become a manager because I thought I could make a difference. Now I am constantly worried that I will lose my job when the next cutbacks come.

The culture of management

> "I am made to feel that if I say no, I am not good enough/not dedicated enough."
>
> "If I take any time off, ever, I'll miss something critical – and be blamed because I did not know."
>
> "If I try to get help - I'll be seen as weak/needy."

Why this change? Will it work? How can I convince others to give it a chance?

> "I spend too much of my time selling and implementing new changes – there is no time to evaluate the change and quite honestly, find it hard to convince others that this is the right thing to do when I am not convinced myself – but I have no choice."

Who is there to support me?

> "I am so busy that I never see my employees – and they never see me so they think that I am not as busy as they are."
>
> "We offer support to our employees – but who can we go to for support?"

Non-union Support

This group expressed frustrations with the fact that they perceived that "no one wants my job – even me. There is no succession planning for people in my group though, so there is no way out."

Para-Medical/Allied Health

Focus group discussions suggested that this is the group that is most impacted by lack of resources, especially when they are working evening shifts. As one woman noted:

> "Sometimes after my shift, I go out to my car and have to take a nap because I cannot trust myself to drive home."

Physicians

The physicians also face a number of unique stressors, due they feel, to the fact that there are no substitutes for them in the system. They talked about how the fear of negative outcomes such as the death of a patient drove them to put in more hours that was healthy and to think about their work when they were at home.. They also were frustrated by the fact that they had to balance the needs of their own practice with the needs of the hospital ("all these meetings drive me crazy – they take time away from my practice and reduce my billable hours"; "I am often required to be

in two physically different places at exactly the same time") as well as manage the expectations of patients and their families. The following quote poignantly articulates this source of pressure:

> **"**I have many patients, but they have only one mother/father, etc."

3.2 Question 2: What makes your feelings of being overloaded worse?

The following eight conditions were mentioned in all six focus groups as factors that magnified the problems noted above:

1. Negative work environment.
2. Uneven workload.
3. No time for or recognition of personal commitments.
4. No pride in a job well done.
5. Lack of respect.
6. Feedback is only negative.
7. Frequent changes.
8. Limitations in the technology.

Details on each are given below.

Negative work environment

The following were given by respondents in all groups as examples of how the negative work environment made their work demands more overwhelming:

> "The morale is low and my colleagues are unhappy and unwilling to help out."

> "The constant harassment and abuse, by patients, families, management, government, the press is exhausting."

> "The burnout of coworkers affects us all – how can you ask them to do anything when you know they are barely hanging on."

> "There is a lack of support – from staff and management - they just do not chip in when they know we need help – very frustrating."

Uneven workload

Those in the focus groups mentioned that workloads were uneven and that the balance of work fell on those who cared – circumstances which increased the overload for these committed people. The following quotes typify these types of comments.

> "The attitude that "someone else will do it" is common. I do care, so it makes it harder for me."

"The new generation looks for "balance", so we take up slack."

"Some people say "no", so others end up doing all of the extra work."

No time for or recognition of personal commitments

Focus group participants talked about how the culture of health care (work OR family, not work and family) had made them less effective both at work and at home. They talked about how when they were at work they felt guilty about their inattention to their family life but when they were at home they felt guilty about the work they had left undone. Many said that this set of conditions had resulted in problems at home and meant that they resented their work and their employer.

No pride in a job well done

Respondents talked about how the circumstances of work (e.g., job is never done, no resources/time to do it properly) had meant that they often did not feel any sense of accomplishment in what they did. This lack of intrinsic rewards was de-motivating.

Lack of respect

The focus group sessions left us with the impression that a lack of respect for others is a systemic problem within health care. People talked about a lack of respect for other professions, between management and staff, between those that were perceived to be higher on the "totem pole" and those who were at the bottom of the hierarchy. Not surprisingly, they linked this lack of respect to an inability to work effectively on teams.

Feedback is only negative

This theme ("training is done by pointing out mistakes, not focusing on learning"; "there is no appreciation for a job well done in this hospital, only complaints and requests for more"; "our culture is one of uninformed criticism") is highly inter-linked with the fact that people do not feel a sense of pride in their work. It suggests that people are more likely to feel a sense of overload when their efforts are not recognized.

Frequent changes

Everyone talked about how the constant state of change within the health care sector (e.g., changes in management, systems, procedures, staff and priorities) was overwhelming. They also talked about how these changes had made it much more difficult for them to get their work done.

Limitations of technology

The health care sector has becoming increasingly dependent on technology. Respondents talked about how failure of the technology due to breakdowns and incompatibility issues increased their sense of being overwhelmed.

3.2.2 Job specific concerns

While the majority of the factors cited as making role overload worse were mentioned in all six focus groups, we were able to identify several factors that were unique or more important to specific job groups. These challenges are mentioned below.

Nurses

The nurses identified three things that they felt increased their sense of overload that were not mentioned by the other groups: not feeling safe (physically) from patients/families, the fact that they did not have access to a quiet workspace were they could focus on what they had to get done ("we have to work in the middle of the fray and are constantly interrupted") and the fact that they have absolutely no flexibility in their schedules. This last category received the most comments including:

> "At Christmas, we have to cover for other professions who have closed their offices for Christmas parties – we can never even get a coffee, let alone have a party."
>
> "Rotations are sometimes "inhumane" – we are asked for our preferences, but they are always ignored."
>
> "I can never plan ahead in my personal life. I feel pressured to make "side deals" – exchange shifts, etc."

Managers

Consistent with their comments with respect to role overload, this group said that the culture of hours and their overwhelming workloads had made the situation worse for them.

Para-medical/Allied Health

Respondents in this group mentioned two unique but highly interrelated factors in response to this question. First, they noted that in their interactions with others, everyone thought that their request should be the allied health professional's number one priority. Second, they were frustrated by the fact that they were often being asked to do just one more thing.

Physicians

Those in the physician group had several unique complaints. First, they noted that the fact that the doctors in the private clinics were taking the "easy" patients, meant that physicians working in the hospital were left with the more complex cases – cases that were not adequately resourced by the government. Second, they noted that the Government of Ontario's wait-time reduction initiatives often meant that other patients waited longer. These patients and their families in turn took their frustration out on their physician. Third, physicians complained about apathy in the health care system and the fact that the system tended to isolate physicians.

"We are not machines – we want to get to know our patients and build relationships. But, they just expect us to just operate – never get to know our patients."

3.3 Question 3: What alleviates your feelings of overload?

3.3.1 What makes it better?: Personal Strategies

Respondents indentified three personal strategies that they had found helped them cope with overload:

1. Make sure that you have some downtime.
2. Have positive interactions with colleagues.
3. Set life priorities, not just work priorities.

No strategies that were unique to any given job group were noted.

Downtime

With respect to downtime, respondents said that they had found the following strategies to be helpful:

- Just leave work at work.
- Make sure you have some time for physical activity.
- Make sure you take at least one short break during the day – "no one is going to give it to you, take it."
- Make sure you take time for think – "sitting back and reflecting – put things into perspective."
- Make sure that you take your lunch – "it's important."

Positive interactions with colleagues

Respondents felt that it was important to make time to have positive interactions with their colleagues at work to offset the stressful conditions under which they often interacted. Specifically they recommended that people try and have fun, celebrate successes, engage in activities to build team spirit, create support groups at work, and engage is social activities with colleagues outside of work. All in all, they felt that it was important to "bring fun back to work."

Setting life priorities, not just work priorities

Those employees who had set boundaries between their work and family and had deliberately decided to put their family first found it helped their sense of overload. These individuals recommended that their colleagues "recognize that they can't do it all and say "no"; and, "be with their family when they are at home – not physically home but mentally at work."

3.3.2 What makes it better?: Organizational Strategies

Respondents indentified 9 things that they would like their hospital to do to help them cope with overload.

1. Provide adequate support.
2. Respect us and recognize what we do.
3. Reward us adequately for what we do.
4. Allow us some time to regroup and socialize with our colleagues.
5. Improve the culture.
6. Improve leadership.
7. Improve communication.
8. Fix/improve the infrastructure.
9. Give us more resources.

The following explanations will provide hospitals with a better appreciation of what their staff think will help them cope more effectively with role overload. Virtually all of these suggestions were given regardless of job group. Unique changes (those given by nurses and managers) are mentioned where appropriate in the discussion below.

Provide adequate support

The participants gave us the following examples of the types of support they felt would help them cope more effectively with role overload:

- Reduce reliance on casual and part time staff.
- Provide replacements for sickness, holidays, etc.
- Provide "floaters" so people have time for lunch, breaks.
- Provide us with administrative help.
- Give us "cross training" so that we are not constantly waiting for others.

Nurses asked the hospital to schedule other professions to work 24/7 and either provide beds on-service or provide overflow areas. Managers asked the hospital to provide more support to the management group.

Respect us and recognize what we do

As noted earlier, recognition is seen to be problematic by those working in the hospital environment. Solutions offered here (just say "thank you"; just say "good job") are not costly, but are likely to make a difference. Other suggestions are: take the time to celebrate a success, recognize people with a positive attitude and recognize that people have a life outside work and adjust expectations.

Reward us adequately for what we do

Respondents noted a number of intrinsic and extrinsic rewards that they felt would help them cope with the overload they faced including:

- Make it easier for us to get paid for our overtime.
- Give people bonuses for good work.
- Give performers educational/development opportunities.
- Pay for physical activities such as gym memberships.
- Pay for our parking.

Nurses asked for an improved mentorship and coaching program.

Give us time to regroup

By regroup, participants meant having time for their breaks and for lunch as well as time to associate with their colleagues both socially as well as with regards to work (i.e., give us time to plan/talk about work related problems and solutions).

Managers asked the hospital to slow down the rate of change.

Improve the culture

As noted earlier, the culture within the hospital is seen to exacerbate role overload. With respect to cultural improvements, respondents encouraged the hospital to focus on making the environment more open and respectful, to address negativity, harassment and abuse, to encourage learning and build team spirit.

Improve leadership

Two specific suggestions were given here. First, respondents wanted managers to "walk the talk." Second participations were concerned with how leaders were selected and trained. They described the idea manager as one who was engaged, hard-working, transparent, committed to making things better, leads by example, gives staff opportunities to influence decisions, listens, has a sense of unity in organization, empowers and gives respect, has a sense of humor and good social skills. They noted how such a leader made a tremendous difference but felt that the attributes that they listed were not the ones that hospitals focused on in the succession planning process.

Improve communication

Given the number of negative comments on communication within the hospital it was not surprising to see that requests to improve communication were numerous in the second half of the focus group. Specifically, respondents wanted the hospital to:

- Listen to the employees: How are things done/What is important to them.

- Give us timely, honest information.
- Provide feedback mechanisms.
- Develop protocols for the use of e-mail etc..
- Improve communication processes – reduce duplication, improve access, etc..
- Provide training for and resources to conflict resolution.
- Clarify roles and responsibilities.

Fix/improve the infrastructure

In this regard, people wanted to see improved communication processes and compatible, current technology.

Give us more resources

Again, not surprisingly, people passionately felt that more staff and equipment and increased training would help them cope with role overload.

3.4 Conclusions

There are a number of related themes apparent in the focus group data.

What contributes to overload in the health care system?

- *A lack of resources*: not enough staff, a lack of equipment, not everyone pulling their weight.

- *Unrealistic expectations*: the move towards counting beds rather than looking at the diagnosis, the demands for documentation, the frustration of families and patients, no time for training and education, no time for or recognition of personal commitments, too many priorities/too little time, and wearing too many hats.

- *The nature of the work itself*: it is endless, employees are never "finished", hard to get away to regroup, unpredictable.

- *A lack of reward and recognition*: no sense of accomplishment, no sense of pride in the work, focus on negative rather than positive, negative work environment, employees frustrated with both extrinsic and intrinsic rewards.

- *The organization culture:* change is continuous, saying no is career limiting and personally unacceptable, work or family not work and family, focus on what is done wrong, not what is done right.

- *Communication:* unidirectional (down not up), inefficient, ineffective, too much transmission and not enough "receivers at the top."

Suggestions on how to address overload and initiatives that employees have found to work map onto these same factors:

- *Resources and expectations*: To fix role overload hospitals and governments need to either add more resources or reduce the number of priorities. They also need to fix/improve the infrastructure and make sure that the needed technology is available and reliable. Employees have to look after themselves – they need to make that they have some downtime, set life priorities (not just work priorities) and say no.

- *The nature of the work itself*: The findings from the focus group suggest that overload would be decreased if employees had more time to interact, socialize and share information with their colleagues and if they had some time to regroup. This needs to be built into the work day.

- *Reward and recognition*: Employees want to be respected and rewarded for the work they do – they want to be thanked for a good job and want things such as training and development to be linked to performance.

- *The organization culture:* It is doubtful that hospitals will be able to address issues associated with overload if they do not change the culture of this organization. Employees see a strong link between the culture of the hospital and the behaviour of leaders and managers.

- *Communication:* Improving communication is likely to reduce the incidence of high levels of role overload. Specifically, hospitals need to reduce duplication and implement upward feedback systems.

3.5 Next Steps

The focus group data helped to develop two measures to be included in the survey used in the second phase of this research. The first measure allows us to examine the key predictors of role overload which are unique to the health care sector. This measure is reproduced in Table 3.1 and was used to quantify the construct entitled "Organizational Domain" in Figure 2.1.

The second measure looks more specifically at the organizational culture within Canadian hospitals. This measure is reproduced in Table 3.2 and quantifies the construct entitled "Organizational Culture" which is depicted in Figure 2.1 as a key moderator of the relationship between domain specific overload and total overload and as a moderator of the relationship between total overload and key outcomes.

Table 3.1: Predictors of role overload

The following questions are designed to provide us with an indication of the extent to which various stressors are sources of overload for you. We are interested in determining the prevalence of these stressors within your work environment and the impact they have on your ability to do your job. For each item please indicate the frequency with which the condition described is a source of overload for you.

	Rarely		Some-times		Very Often
Not enough staff to do the work required…….	1	2	3	4	5
Not enough staff coverage to allow people to take breaks during work hours (i.e. lunch, coffee)……..	1	2	3	4	5
High reliance on part-time/causal staff ……	1	2	3	4	5
The cases I deal with are more complex than in the past and require greater effort ……	1	2	3	4	5
Culture makes it unacceptable to say no to more work ……...	1	2	3	4	5
Culture makes it difficult to leave when your shift is over……...	1	2	3	4	5
Culture makes it difficult to seek help from others when overloaded (those who do are seen as weak or needy)…….....	1	2	3	4	5
Working at multiple sites……..	1	2	3	4	5
Working for multiple units……...	1	2	3	4	5
Too many priorities teamed with an inability to say no……...	1	2	3	4	5
Responsibility for too many different things/disciplines……..	1	2	3	4	5
Requirement to work on teams…….	1	2	3	4	5
Ineffective communication often means do not know what to do……	1	2	3	4	5
No opportunity to give feedback means work is not done effectively	1	2	3	4	5
Managing expectations of patients and their families……..	1	2	3	4	5
No time/allowances made for training/education…….	1	2	3	4	5
Lack of resources (equipment/supplies) to do the work……...	1	2	3	4	5
Conflict with colleagues over resources……...	1	2	3	4	5
Not consulted on workplace changes……	1	2	3	4	5
Old/ineffective/inefficient equipment/systems…….	1	2	3	4	5
Lack of sound succession plan……..	1	2	3	4	5
Inability to control or manage change……..	1	2	3	4	5
Too many changes to procedures, structures, work……..	1	2	3	4	5
Government policies with respect to wait time……	1	2	3	4	5

Table 3.2: Organizational Culture

The following questions ask about the unwritten rules (i.e. norms) at your current place of work which can influence what you do. Please indicate to what extent you agree or disagree with the following statements about your hospital?

	Strongly Disagree		**Neither Agree or Disagree**		**Strongly Agree**
There is a lack of respect in this organization for other professions…….	1	2	3	4	5
Morale in this organization is low…….	1	2	3	4	5
Management and staff do not trust each other……...	1	2	3	4	5
Workloads are uneven – the balance of work falls on those who care…..	1	2	3	4	5
There is no recognition given to the fact that employees have personal commitments outside of work……...	1	2	3	4	5
People who leave on time/do not take extra shifts are made to feel guilty	1	2	3	4	5
In this organization mistakes are seen as an opportunity to learn…….	1	2	3	4	5
This organization promotes an environment that is supportive of employees' needs……...	1	2	3	4	5
In this organization we celebrate success……..	1	2	3	4	5
People in this organization have a positive attitude……...	1	2	3	4	5
Sufficient time is given for training and development…….	1	2	3	4	5
Time is available so that people can associate with their colleagues at work……...	1	2	3	4	5
There is good ongoing communication between different areas……...	1	2	3	4	5
There is a lot of bickering over who should do what……	1	2	3	4	5
People work as a team……...	1	2	3	4	5
My opinion really counts……...	1	2	3	4	5
Employees have access to the information they need to get their job done well……	1	2	3	4	5
We have the human resources necessary to manage the workload……...	1	2	3	4	5
People are truly appreciated for the contribution they make…….	1	2	3	4	5
The focus is on making sure that the workplace is a physically safe and secure…….	1	2	3	4	5
We have leaders who are expert at running the health care system……..	1	2	3	4	5
We have leaders who are appropriately accessible to employees…….	1	2	3	4	5
We have a clear sense of direction and a vision for the future……..	1	2	3	4	5
The people in charge make decisions that are consistent with the hospital's values…….	1	2	3	4	5

The validity, reliability and factor structure of these measures is discussed in Chapter 4. As will be established later in this report, these measures provide a valuable tool for health care organizations who are interested in identifying the key predictors of overload within their organization.

Chapter Four
Key Findings From The Employee Survey

The second step of this research initiative involved surveying a sample of employees working for the four Ottawa hospitals that participated in this study. The survey was designed to test the model repeated here in Figure 4.1.

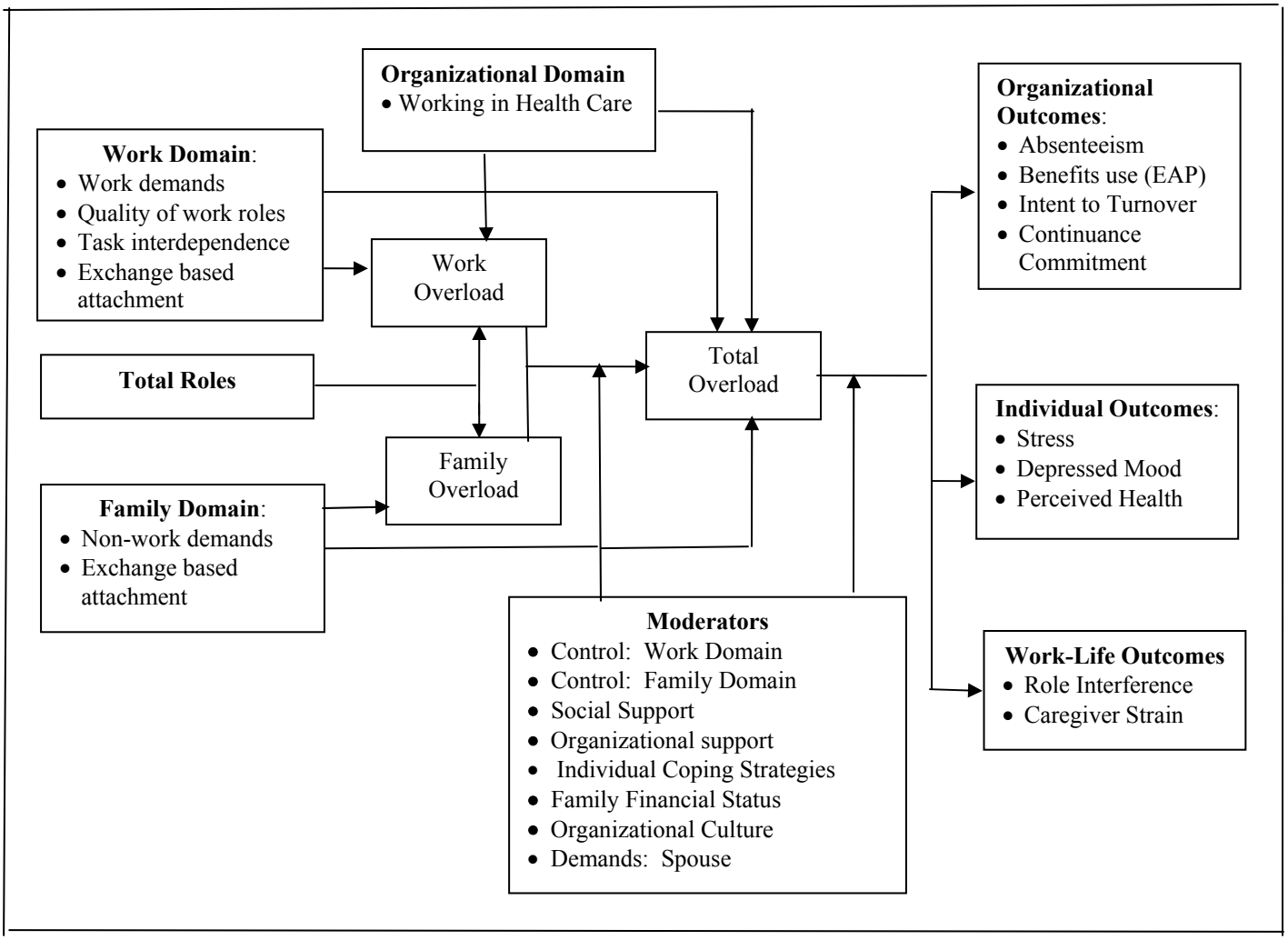


Figure 4.1: Theoretical Framework Guiding this Research

Specifically, this stage of the research was designed to allow us to:

- Quantify the work demands, the non-work demands, the organizational demands and the total role demands of Canadian health care workers.

- Quantify the levels of work overload, family overload, and total overload experienced by Canadian health care workers.

- Examine the health of Canadian hospitals (i.e., organizational outcomes in Figure 4.1).
- Examine the physical and mental health of Canadian health care workers.
- Examine the work-life balance of Canadian health care workers.
- Identify the key predictors of work overload, family overload and total overload within Canadian hospitals.
- Identify the relationship between total overload and key organizational, individual and work-life indicators.
- Identify key moderators of the relationships between work overload and total overload and between family overload and total overload.
- Identify key moderators of the relationship between total overload and total absenteeism, perceived stress, and work interferes with family.

This chapter is divided into 11 sections. The methodology is presented first. Included in this section is a discussion of the measures used to operationalize the various constructs in our theoretical framework, how the survey was administered, and how the data were analyzed. Section two provides the reader with a description of the demographics of the survey sample. The third section is devoted to the antecedents in our model: the work, non-work and organizational domains of the respondents as well as their total life roles. Section four presents the overload data - work overload, family overload and total overload. Section five looks at outcomes – organizational, individual and work-life. In section six we look at the various moderators included in our model. Section seven presents analysis on the key predictors of work overload, family overload and total overload within Canadian hospitals. The relationship between total overload and key organizational, individual and work-life outcomes are examined in section eight. Sections 9 and 10 are devoted to an exploration of the factors that moderate and mediate the key relationships within our model. Moderation is examined in Section 9 while mediation is covered in Section 10. The last section of the chapter outlines the key conclusions from this stage of the research.

1. Methodology

The methodology section is divided into three parts. The survey itself is presented first. This is followed by a discussion of how the survey was administered. The third part of this section outlines the analysis that was undertaken in this stage of the research.

1.1 The survey

The survey can be found in Appendix B as can a list of relevant references. Question numbers for each of the measures described below are given in brackets beside the name of the construct. Wherever possible we used established measures which have demonstrated acceptable reliability and validity in past research to quantify the constructs in our research model. Unless noted, construct scores were calculated as the summed average of the scores given to the individual items making up the measure. Items bolded in Appendix B were reverse coded before being summed. In all cases, high scores reflect higher levels of the construct.

Antecedents: *objective work demands* (Q4) were measured by asking respondents to indicate the total number of hours they spend per week in work related activities including the time spent on work brought home at night and on the weekend. *Objective non-work demands* (Q4) were quantified by asking respondents the number of hours per week they spend in parenting, caring for elderly dependents, home chores and yard work, volunteer activities and community work and leisure activities. *Quality of work role* (Q 11, 12, 13 and 14) was assessed using the Kind of Work Subscale of the Index of Organizational Reactions (IOR) developed by Dunham and Smith (1979). *Task interdependence* (A18) was quantified using the measure developed by Dean and Schnell, (1991). *Work Exchange Commitment* (Q19, items 1 to 5), or the extent to which one feels attached to work because they are valued and rewarded for their performance at work, was measured using the scale developed by Balfour and Wechsler (1996). A measure of *Family Exchange Commitment* (Q19, items 6 to 8), defined as the extent to which one feels committed to or attached to their family because they feel valued and rewarded by their performance at home was created by the researchers to mirror the work exchange measure. *Total Life Roles* (Q1) was measured using a scale developed by the authors. Total life roles are calculated as the total number of roles occupied by the respondent. The measure of overload arising from the *Organizational Domain* (Q21) was developed by the authors as described in Chapter Three.

Overload: *Work-overload* (Q3) was measured using the 12-item scale developed by Caplan et al. (1980). *Family- overload* (Q6) was measured using an 11-item scale developed by the authors who modified Caplan et al.'s (1980) work overload scale and Bohen and Viveros Long's (1981) total overload scale to apply to the family domain. *Total overload* (Q34) was quantified using the five-item scale developed by Bohen and Viveros-Long (1981).

Organizational Outcomes: The organizational consequences of total overload examined in this study include continuance commitment, intent to turnover, absenteeism, and use of organizational benefits. *Continuance commitment* was measured using the six item scale developed by Hrebeniak and Alutto (1972). *Intent to turnover* (Q15) was measured using a single item measure developed by Duxbury and Higgins (2001). *Absenteeism* (Q25) was assessed using a 6 item measure developed by Duxbury and Higgins (2001). Duxbury and Higgins' original 4 item measure was supplemented with two additional items as suggested from the focus group: How many days have you taken off in the past six months to avoid issues at work (abusive colleagues, difficult boss, difficult work environment) and because a personal leave day/vacation day was not granted. We also included in our analysis a measure of *presenteeism* (A26)*:* how often in the past six months have you gone to work when you were physically unwell. Two calculations of absenteeism/presenteeism are reported using these

questions: the per cent of the sample absent due to ill health, childcare, eldercare, emotional or physical fatigue, because leave not granted and to avoid issues at work, and the mean number of days absent due to each of these factors. *Benefit use* was assessed by asking respondents if, in the past six months, they had purchased prescription medicine for their own use (Q23) and used the organization's EAP services (Q24).

Individual Outcomes: The individual consequences of total overload include depressed mood, perceived stress and physical health. *Depressed mood* (Q28) was measured by the scale developed by Moos et al. (1988). *Perceived stress* (Q27) was measured using Cohen, Kamarck & Mermelstein's (1983) Perceived Stress Scale. *Physical Health* (Q29) was measured using the five item scale developed by Walters et al (1996). Stress, depressed mood and physical health are all calculated as the summed average of the scale items.

Work-Life Outcomes: The work-life consequences of total overload include role interference and caregiver stain. *Role interference* (Q30) (work to family and family to work interference) was assessed using the measures developed by Gutek et al. (1991). *Caregiver strain* (Q32) was quantified using the Caregiver Strain Index developed by Robinson (1983).

Individual Level Moderators: Individual level moderators are those that are enacted by the individual employee. One individual level moderator was included in the model: coping strategies. *Coping* (Q9) was assessed using measures developed by Havlovic and Keenan (1991) and Higgins et al. (2008). Havlovic and Keenan's (1991) scale quantifies the extent to which employees use six strategies to cope with overload: avoidance/resignation, positive thinking, direct action, help-seeking, and alcohol/prescription drug use. The two scales taken from Higgins et al.'s (2008) coping measure assess the extent to which people cope by putting their family first (3 items) and reducing sleep (1 item).

Non-Work Level Moderators: Non-work moderators are those that stem from the employees family or community. Three non-work level moderators were included in the model: social support, the objective demands faced by the employee's partner/spouse, and family control. The measure of *social support* (Q10) comes from three sources: Broadhead et al., 1988; Zimet et al., 1988 ; Walters et al., 1996). Subscales measuring three types of social support are used in this analysis: support from family, support from friends, and support from colleagues at work. The measure used to assess *Objective demands of partner* (Q8) is identical to that used to assess the objective work and family demands of the respondent (i.e., hours per week in work related activities, parenting, home chores and yard work). *Control over home life* (Q7) was measured using the index developed by Walters et al. (1996).

Work Level Moderators: Work moderators are those that originate from the organization. Five work level moderators were included in the model: control over work, perceived flexibility, Perceived Organizational Support (POS), supportive management, and organizational culture. *Control over work* (Q5) was measured using the Control over Work Environment measure developed by Dwyer and Ganster (1991). The scale covers a wide variety of work domains, three of which are relevant to this study: control over the pace of work, control over task scheduling, and control over the work environment. *Perceived Organizational Support* (Q20) was measured using the POS index developed by Eisenberger et al. (1986). To provide

comparability with the 2001 National Work, Family and Lifestyle study, we will use the measures of *perceived flexibility* (Q17) and s*upportive management* (Q22) developed by Duxbury and Higgins (2001). These measures have been found to have high validity and reliability. The development of the measure of *Organizational Culture* (Q33) used in this study was described in Chapter Three.

1.2 Administration of the Survey

Four hospitals in the Ottawa area (12,000 employees in total) agreed to participate in this research initiative. The survey was administered in two ways: electronically and paper. Prior to conducting the survey we undertook a pilot test on a sample of 5-10 workers in each hospital. Pilot testing is critical as it allows us to identify potential problems with survey questions. It also allows us to test whether the respondents can answer the survey electronically from work or home (for the Web based survey) and that there are no organizational IT issues that might interfere with the survey administration (e.g., firewalls, incompatible web browsers, etc.). Once we were satisfied that the web survey tool was workable and that problematic items were removed or rectified we administered the survey.

Paper surveys were in a package that included a letter from the researcher, a letter from the CEO and a return envelope. All documentation associated with the administration of the survey is provided in Appendix B.

In total 1,396 employees responded to the survey. This sample size is sufficient for statistical analysis. It should also be noted that the sample distribution by job type and life cycle stage is excellent. Consistent with the demographics of the sector, 84% of the sample was female. Thus, gender and job type were highly confounded. Accordingly, only two between-group comparisons will be provided in this report. The first is job type which was operationally defined as: physician, clinical staff/nursing, Allied Health: Professional, Allied Health: Technical, Management and Support Staff (a group that is equally distributed between unionized support and non-union support). The second is life cycle stage operationally defined as no dependents, childcare only, sandwich group – both childcare and eldercare – and eldercare only group. In the discussion, only statistically significant differences are noted.

1.3 Data Analysis

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

- Low (scores of 1 and 2 on the question).
- Neutral (score of 3).
- High (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 the report on how the categorization was done.

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. We also recoded these mean scores into three categories: low, medium, and high. When we discuss these variables, we note how this categorization was done.

Most of the survey items are part of an established scale. For example, we have scales measuring stress, work-family conflict, and role demands, 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 recoded 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 was used we make a note in the report on how the categorization was done.

For each scale we report a Cronbach's alpha. This is an assessment of the internal consistency of a scale. Scores above .7 are considered good. If a scale is internally consistent it means that the respondents are consistent in how they answer the questions in the scale. For example, if someone had high levels of stress they should score high on all the individual items in the stress scale. If they did not, the scale would not be internally consistent and we would conclude that it doesn't measure stress appropriately.

Factor Analysis: Factor analysis (technically it is principal components analysis) is a technique that researchers use to discover the underlying dimensions of a scale. For example, a scale measuring an organization's culture may have sub-dimensions such as "supportive management" and "supportive policies" as examples. To uncover these sub-dimensions we use a technique known as principal components analysis (more commonly referred to as factor analysis). Principal components analysis identifies questions that respondents are answering in a similar fashion. In other words, it identifies questions that are highly inter-correlated. Since scales are supposed to have the property of being highly inter-correlated this technique identifies sub-scales in the overall scale. As an example, question 21 on our survey asks 24 questions about various stressors in the environment. Factor analysis of this scale revealed 5 sub-scales. They were: (1) Ineffective Change Management Processes (10 questions); (2) Culture of Health Care Organizations (5 questions); (3) Complexity of Work (3 questions); (4) Understaffing (3 questions); and (5) Working at Multiple Sites (2 questions). One question in this scale about government policies was not part of any sub-scale.

Testing the Overall Model. The overall model shown in Figure 4.1 was tested using 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 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 our all of our analyses. Information on this package can be found at http://www.smartpls.de.

Testing for Mediation. Mediation occurs when a variable intervenes between two other variables. For example, in our model, work-overload mediates the relationships between work demands and total overload. Similarly, family-overload mediates the relationship between non-work demands and total overload. Historically, researchers have used the Baron and Kenney procedure to test mediating effects. However, in recent years Sobel's method has been shown to be superior (Preacher and Hays, 2004).

Sobel's method is intuitively appealing. If M is hypothesized to mediate the relationship between X and Y, Sobel's method tests whether the indirect path between X and Y through M is significant while including the path from X to Y. Sobel calculators can be found on many websites and only require that the user enter the T-values obtained from the path from X to M and the path from M to Y in a model that also includes a direct X to Y path.

Testing for Moderation.: Moderation is very different from mediation. Moderation is concerned with the strength of a relationship between variables. For example, suppose you were looking at the relationship between teacher effectiveness and student performance. Let's now look at the

relationship for two levels of students: really smart and average. There is a good chance that the intelligence of the students will moderate the relationship between teacher effectiveness and student performance. For really bright individuals, the quality of the instruction may not matter as they can figure out the concepts themselves. For the rest of the students, a really good teacher may help. Thus, the relationship between teacher effectiveness and performance would be stronger for the average students and weaker for the really bright students.

Testing for moderation has historically been a tedious process. The process required that the analyst centre 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).

2. Description of the Sample

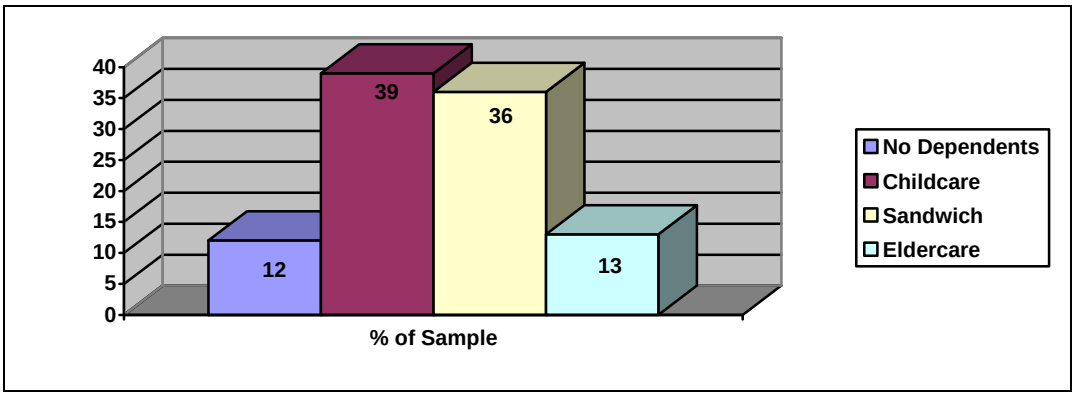
2.1 Respondents

Just under 1400 people (n = 1396) completed the survey. The majority of the respondents (84%) were female. Virtually all were married (77%) with children (74%). Eleven per cent had children under the age of three living at home and another 9% had children between the ages of 4 and 5. One in four (23%) were parents of adolescents (i.e., children age 6 to 11), 41% were parents of teens (12 to 18) while 50% had children over 18 years of age.

While the majority of the respondents (45%) live in families where money is not an issue, one in five say that in their families money is tight, and 35% indicate that while they can live comfortably on their families financial resources they do not have money for extras.

As can be seen by examining the data in Figure 4.1, virtually all of the respondents have heavy demands at home as well as work. Only 12% of the sample has no dependent care with 39% spending time each week in childcare, 36% spending time each week in both childcare and eldercare (i.e., in the sandwich group) and 13% spending time each week in eldercare only.

Figure 4.1: Distribution by life cycle stage

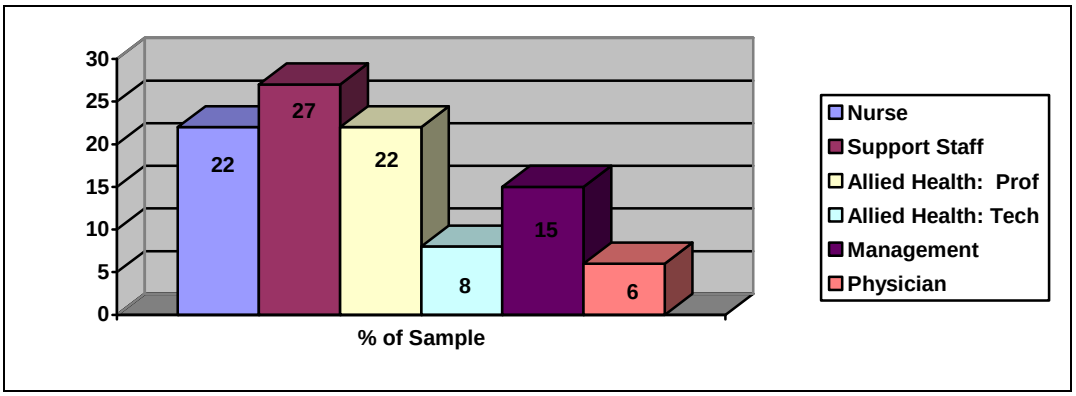


2.2 Characteristics of Work

A number of questions were asked to give us a better idea of the work done by our respondents. We asked them how long they had worked for their current organization, how long they had held their current job, and their employment status. We also asked about their primary job/classification, what hospital they worked for, what union they belonged to, if they worked shifts or not, what their shift arrangement looked like, whether or not they supervised the work of others and if they had more than one job for pay. The work characteristics for the total sample are described below.

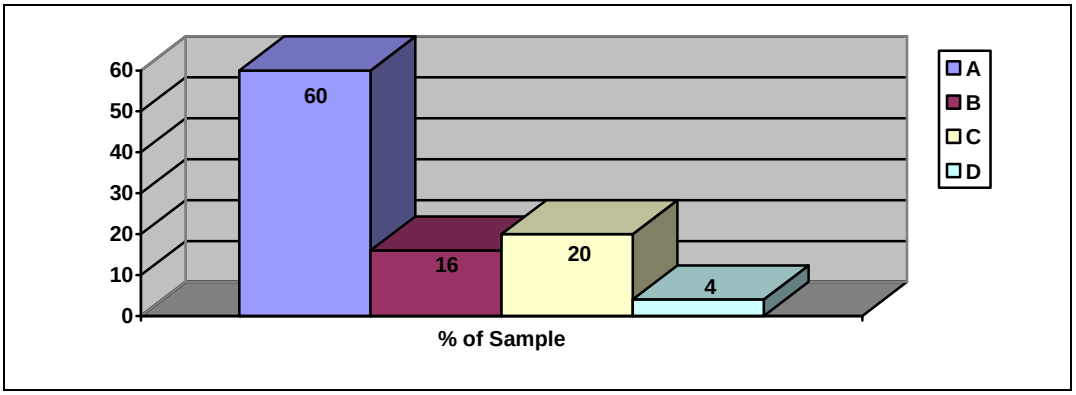
The sample is well distributed with respect to job type. The support staff group is a category that combines non-union support (13%) and union support (14%).

Figure 4.2: Distribution by Job Type



The majority of employees worked at Hospital A – the largest in the city. Responses were obtained from all five of Hospital A's work sites. Approximately one in five respondents worked at two of the smaller hospitals in the city. Only 4% came from the 4th hospital in the study.

Figure 4.3: Distribution by Hospital



The majority (80%) of the respondents worked full time. The rest worked part-time (16%) or were casual workers (4%). Almost one in five (16%) indicated that they had more than one job for pay.

While the majority of respondents do not carry a pager (60% have no pager) and do not work on call (72% are never on call), a substantive number do. For example, individuals with pagers are paged an average of 5.3 times per month and almost one in five of the respondents (16%) are required to work on call four or more times per month. The other 12% of the sample are required to work on call 1 to 3 times per month.

The majority of the respondents have worked for their current employer and held their current job for a significant period of time. Just under half (48%) have worked for their current organization for 11+ years. Another 35% have worked for their current organization for 4 to 10 years. Only 17% have worked for their organizational for 3 years or less. Similarly, 57% have held their present job for 5 or more years. One in three (31%) have held their current job for 2 to 4 years while 12% have worked in their current job for 1 year or less. These data support the following conclusions. First, these individuals have worked in the system for a significant period of time and, as such, their opinions on the issues being explored in this study are likely to be well informed.

Approximately 17% of respondents left the question on which union they belonged to blank! This was the highest non-response in the survey. For those that did respond, 20% did not belong to a union, 10% were members of CUPE, 33% were members of OPSEU, and, 21% were members of ONA.

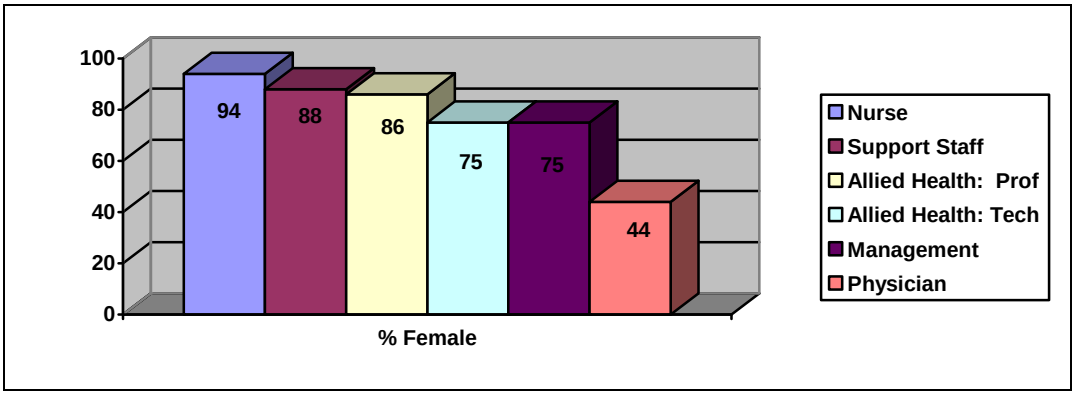
One in three respondents (31%) work shifts while the rest worked straight days (62%), straight evenings (2%) or straight nights (2%). Shift workers tended to work day/evening (16%), day/night (10%) or rotating (5%) shifts.

Fifty-six per cent of the respondents indicated that they do not supervise the work of others: 19% supervised 1 to 8 individuals while 24% supervised 9 or more.

2.3 Impact of job type

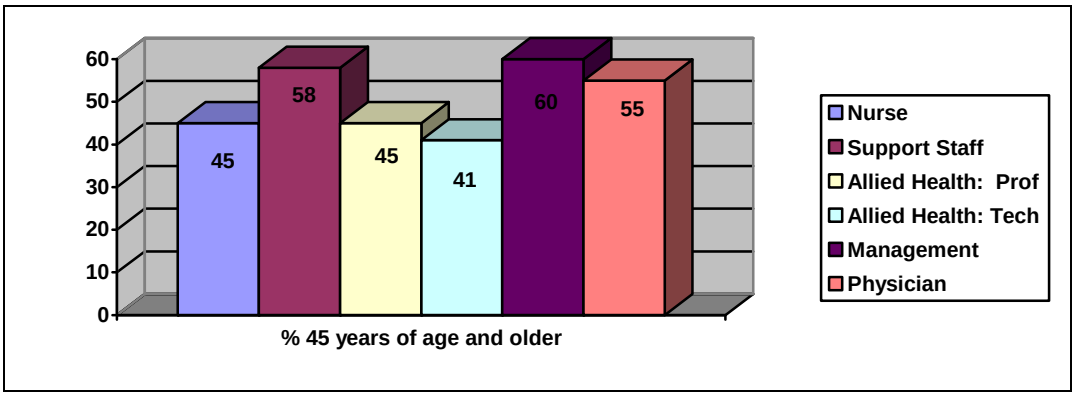
As noted earlier, the sample is well distributed with respect to job type. As can be seen in Figures 4.4 to 4.6, gender, age and family's financial status are all strongly associated with job type. With respect to gender (Figure 4.4), only one group, physicians has a substantive number of males (56% of physicians are male). The majority of respondents in each of the other groups are female.

Figure 4.4: Job Type by Gender (% Female)



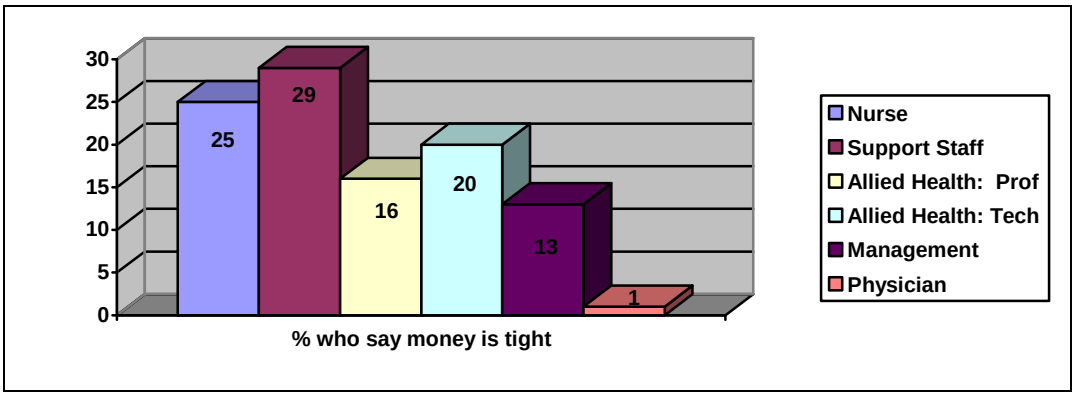
As shown in Figure 4.4, job type is also strongly associated with age. Virtually none of the physicians and managers in the sample were under the age of 30 (i.e., Gen Y) as compared to 15% of those in the Nurse, Allied Health: Professional and Allied Health: Technical groups. On the other hand, more than half of the managers, support staff and physicians in the sample were over 45 years of age (i.e., Baby Boomers). This suggests that recruitment, retention, knowledge transfer and succession planning of physicians and managers are likely to be a significant issue within the hospital environment. It also suggests that generational conflict may be an issue with the nursing and allied health groups and between these two groups and those in the physician/management groups.

Figure 4.5: Job Type by Age (% 45 and older)



Those in the physician group are more likely to be married (93%) and live in families where money is not an issue. While job type is not associated with parental status it is associated with the respondent's financial situation as shown in Figure 4.3. Support staff and nurses are more likely to live in a family where money is tight; managers (49%), Allied Health: Professionals (52%) and physicians (85%) are more likely to live in a family where money is not an issue.

Figure 4.6: Job Type by Family's Financial Situation
% who say money is tight in their family

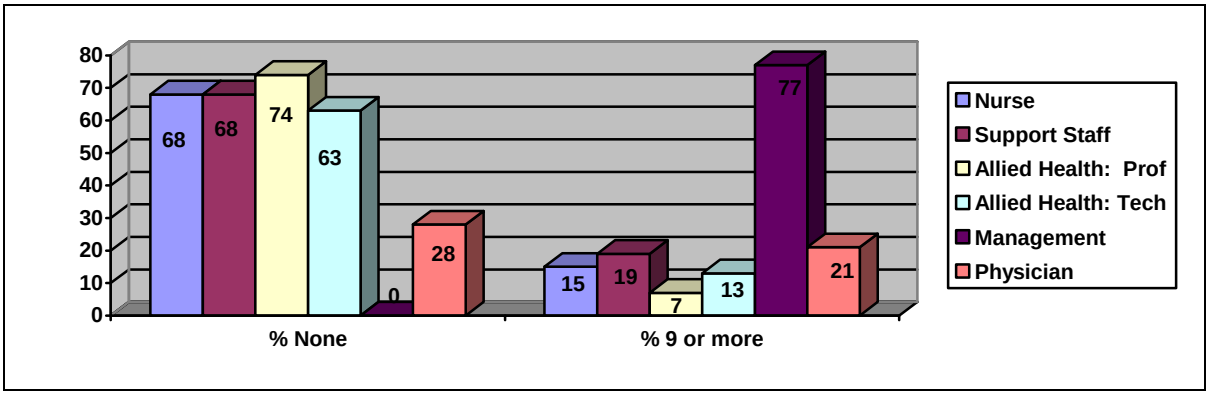


Six of the characteristic of work factors examined in this study are strongly associated with work. With respect to union status, those in the management and physician groups were more likely to either not answer this question or say that they did not belong to a union. The majority (83%) of the nurses/clinical staff were part of ONA. The rest belonged to CUPE. Virtually all of the Allied Health (professional and technical) belonged to OPSEU. One in four of those in the support staff group left this question blank. The rest were either not part of the union (25%), belonged to CUPE (27%), OPSEU (16%) or ONA (7%).

In terms of the data on shift work, virtually none (3%) of the managers worked shifts. Only one in five of those in the support staff, Allied Health: Professional and physician groups worked shifts. In contrast, 70% of the nurses/clinical staff and 61% of Allied Health: Technical worked shifts.

Supervisory status is as shown in Figure 4.7. It is interesting to note that people outside the management group have significant supervisory responsibilities. While virtually all (77%) of those in the management group supervise nine or more people, a substantive number of those in the physician (21%) and support staff (19%) groups also have a high number of direct reports.

Figure 4.7: Job Type by Supervisory Status



Job type is also linked with the likelihood that an individual will have to carry a pager (see Figure 4.8) as well as the requirement to work on call (See Figure 4.9). Two job categories are more likely to have to carry a pager and be required to work on call 4+ times per month: physicians and managers. Allied Health: Professionals are more likely than other respondents to have to carry a pager at work while Allied Health: Technical are more likely to have to work on call 4+ times per month.

Figure 4.8: Have a Pager by Job Type

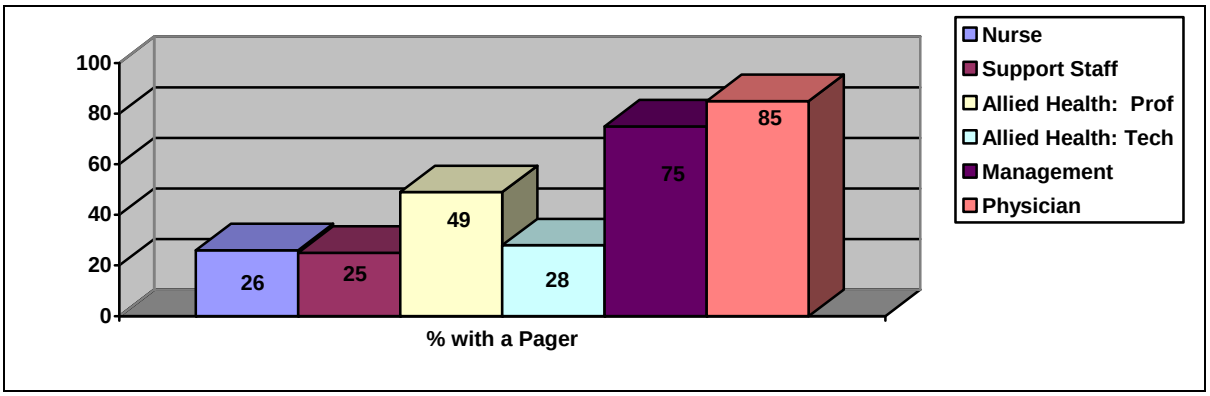
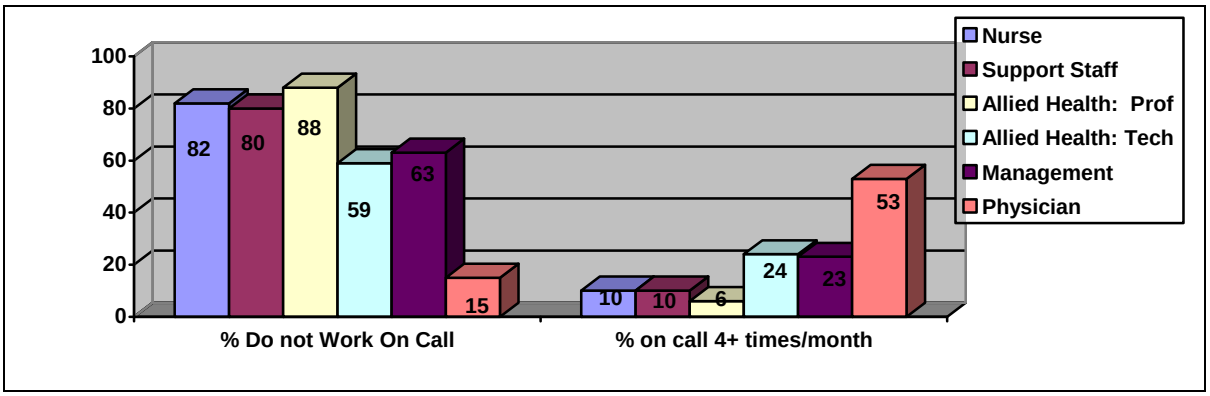


Figure 4.9: Have to Work on Call by Job Type



Finally, job type is linked to the likelihood that a respondent has spent five or more years in their current job. Those with longer tenure include Physicians, and Allied Health: Technical, three quarters of whom have been in their current job for 5+ years. In contrast only 44% of those in the Management group and 55% of those in the other three groups have been in their job this long.

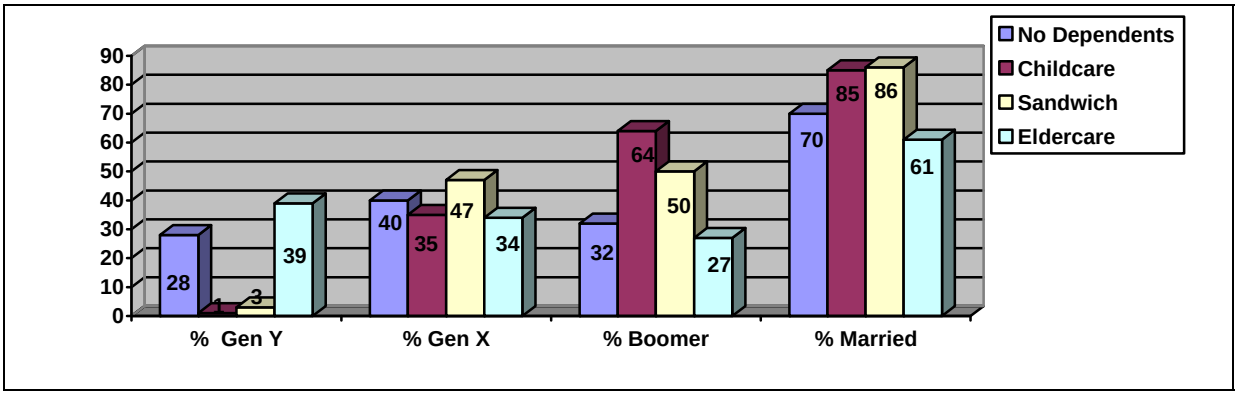
The data show, that with a few exceptions, job type is not really associated with organizational tenure, the likelihood of working part time (managers are the only group that does not have about 1 in 5 working part-time), and the likelihood of having more than one job for pay (one in three physicians hold more than one job versus 15% of those in the other job groups).

2.4 Impact of life-cycle stage

Personal demographics vary with life cycle stage. Ten per cent of those in the no dependent care group are empty nesters as are 2% of those in the eldercare only group. The number of children is essentially the same for those in the childcare and sandwich groups: 20% have one child, 50% have two children, 20% have three children and 10% have 4 or more children.

Not surprisingly, life cycle stage is strongly associated with age and marital status (See Figure 4.10). While being in the non dependent and eldercare groups is not strongly associated with age, respondents in both these groups are less likely to be married (one in three of those with eldercare and 25% of those with no dependent care are single). The childcare only group is dominated by married individuals who are either Baby Boomers (64% of the childcare group) or Gen X (35% of the childcare group). Those in the Sandwich group are married individuals in the Gen X and Baby Boomer groups. Finally, it is important to note that approximately one in four of those in the Childcare Only (23%) and the Sandwich (22%) groups say that "money is tight" in their families. Over half of those in the no dependents (52%) and the eldercare only (51%) groups, on the other hand, say that money is not an issue in their family.

Figure 4.10: Life Cycle Stage by Age and Marital Status



While life cycle stage is not associated with job type, union membership, the likelihood of having one or more job, the need to carry a pager, the requirement to work on call, and full time/part time status, it is associated with likelihood of working shifts (50% of those in the eldercare group work shifts versus 30% of those in the other life-cycle stages), supervisory responsibilities, years in organization and years in current job. All three of these job characteristics have the same relationship with life cycle stage. Those who supervise 9 or more people are more likely to have children (33% in childcare only group and 30% in the sandwich group). By comparison, 67% of those in the eldercare group and 61% in the no dependent group have no direct reports. These findings are consistent with the fact that employees with children are more likely to have spent 11+ years working for the present hospital (55% in the childcare only group and 52% in the sandwich group are in the 11+ years group versus 33% in the no dependents group and 27% in the eldercare only group) and 5+ years working in their current job (61% in the childcare only group and 59% in the sandwich group are in the 5+ years group versus 45% in the no dependents and eldercare only groups).

3. Antecedents

This part of the report is divided into six sections. Section one looks at the work domain of the respondents, section two the non work domain, section three the total life roles and section four the organizational domain. Sections five and six look at the impact of job type and life cycle stage on the antecedents in our model.

3.1 Work Domain

Objective work demands, those that can be linked to observable phenomena, were measured by asking respondents to indicate the total number of hours they spend per week in work related activities including the time spent on work brought home at night and on the weekend. The average number of hours per week worked by the full time employees in the sample was 37.8 hours per week (part timers worked an average of 22 hours per week).

Quality of work role is a measure of excellence and looks at the extent to which people view their job as having desirable characteristics (Heery & Noon, 2001). We used four questions from the Kind of Work Index of the IOR to quantify Quality of Work Role:

- How often when you finish your day's work do you feel you've accomplished something worthwhile?
- How often does the kind of work you do influence your overall attitude towards your job?
- Approximately what per cent of the things that you do on your job do you enjoy?
- Approximately what per cent of the work you do stirs up real enthusiasm on your part?

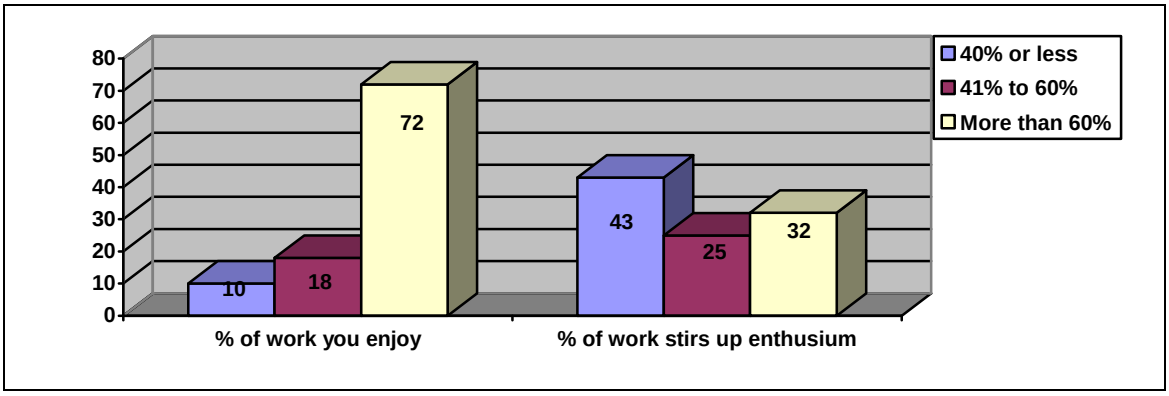
Two thirds of the respondents say that they always (9%) or almost always (55%) feel that they have accomplished something worthwhile at the end of the work. While one in four feel that way about half the time, 10% say that they rarely feel this way.

Eighty per cent of the sample say that the kind of work that they do has a favourable influence on their attitudes towards their job. Only 5% said it has an unfavourable influence.

Findings with respect to enjoyment of work and the link between type of work and the respondents' level of enthusiasm are given in Figure 4.11. While the vast majority of the respondents (72%) say that enjoy more than 60% of the kinds of things they do on their job, almost half (43%) say that less than half of what they do stirs up real enthusiasm on their part (the highest quality criteria). Nevertheless, these data support the idea that the vast majority of respondents have high quality jobs that provide them a sense of accomplishment and enjoyment. One in three appear to have very high quality jobs (i.e., jobs that stir up real enthusiasm on their part).

Task interdependence in this research is defined as the extent to which individuals are dependent on others to accomplish their work goals. The data are unequivocal – health care providers working in a hospital setting have very high levels of task interdependence (60% high). Only 5% have low levels of task interdependence. In other words, it is very hard for health care providers to work independently to get the job done.

Figure 4.11: Quality of work role



Work Exchange Commitment refers to the extent to which an employee reciprocates their employer's efforts to make them feel appreciated and rewarded for their work accomplishments with loyalty and an emotional attachment. Only 27% of the sample report high levels of work exchange commitment, a similar per cent to those that report low commitment (28%). Almost half (44%) of the sample report moderate levels of exchange commitment, indicating that the hospitals in the sample need to do more to recognize their employee's accomplishments at work.

3.2 Non-work Domain

Objective non-work demands, those that can be linked to observable phenomena, were quantified by asking respondents the number of hours per week they spend in parenting, caring for elderly dependents, home chores and yard work, volunteer activities and community work and leisure activities.

Everyone in the sample spends time each week in home chores and yard work (an average of 12.2 hours per week), commuting to work (an average of 7.7 hours per week) and in leisure activities (an average of 13.5 hours). Three-quarters of the sample spend time each week in childcare (18.9 hours per week for the total sample, 26.5 hours for the parents subsample), half spend time each week in eldercare (2.5 hours per week for the total sample, 6.0 hours for the elderly dependents subsample) and 66% spend time each week in volunteer activities/community work (2.7 hours per week for the total sample, 4.4 hours for the volunteer subsample). Total hours per week devoted to non-work activities for the total sample was calculated to be 57.5 hours which leads us to conclude that employees in the health care sector face very significant demands at home – a finding which is likely a function of the fact that the health care sector is female dominated.

Just over two thirds of the sample (68%) report high levels of Family Exchange Commitment. In other words, they are emotionally attached to their family because their spouse and children appreciate, value and reward them for what they do at home. It is important to note that employees are 2.5 times more likely to feel rewarded and valued for what they do at home than for what they do at work – a factor that is likely to exacerbate work-life conflict and stress.

3.3 Total Roles

Most individuals hold a variety of roles, which may change as they move through their career and life cycles. Our review of the literature suggested that an understanding of an individual's total role set would help us predict total overload. Total Life Roles was measured using a scale developed by the authors. The scale has two parts. Part one has a list of roles and asks the respondent if they spend time each month in this role. In the second part of this scale we ask individuals the levels of demands that the role places on them in a typical month. The construct Total Life Roles was calculated as the total number of roles occupied by the respondent.

Table 4.1 summarizes the key findings with respect to total roles. Included in this table is the per cent of the sample engaging in the role as well as the per cent who say that this role requires a moderate/great deal of time/energy as well as the per cent who say that this role requires a great deal of time energy. The data in the table are presented is descending order using the per cent with the role who say that it requires a great deal of energy as the sort category.

Table 4.1: Total Roles

Role	% with Role	% saying role requires "Moderate /High" energy	% with role who say it requires "High" energy
Parent of a dependent child	56	50	61
Employee	100	79	58
Supervisor/Manager	54	37	41
Home maintainer	97	67	29
Caregiver: person with disability	12	6	25
Spouse/partner	80	63	21
Student	20	14	20
Employed: Second job	19	10	20
Divorced: co-parent	12	8	16
Co-worker	100	43	16
Caregiver: elderly/infirm parents	40	15	10
Volunteer: Community or church	40	13	7
Parent of an adult child	33	15	6
Close Friend	93	27	3
Member: Sports team, social club	45	10	2
Sibling	79	9	2
Hobbyist	57	10	1
Grandparent	18	5	1

The data show that three roles are problematic in that they require a moderate to high amount of time and energy from the role holder: parent of a dependent child, employee and supervisor/manager. Other roles that are challenging include home maintenance, caring for a person with a disability, spouse/partner, student, moonlighting, and co-parenting with your former spouse. All but one of these roles is outside the work domain. Roles that are less problematic include elder caregiver (likely to only be a problem when the dependent is in the end

stages of life), volunteer worker, parent of an adult child, close friend, member of a sports team, sibling, hobbyist and grandparent. It should be noted that participation in many of the roles in this third group can be considered voluntary.

We also calculated a respondent's Total Life Roles by summing the number of roles that they indicated that they participated in that required some energy. The majority of the respondents (51%) hold 4 to 6 roles. One in four (26%) have 1 to 3 roles while 23% participate in 7 or more roles.

3.4 Organizational Domain

The measure quantifying the sources of overload arising from the organizational domain was developed by the authors as described in Chapter Three. As a first step in our analysis of these questions we performed factor analysis on the 24 items in this measure. The results from this analysis are summarized in Table 4.2. All scales have acceptable reliability as indicated by Cronbach's alpha.

Approximately 40% of the sample indicated that they often experience two of the organizational predictors of overload: understaffing and increased complexity of the work. One in four respondents, on the other hand, reported that they rarely had to cope with these two factors.

One in three found the culture of health care problematic, the same proportion of the sample who indicated that the culture was never an issue for them.

While the majority of respondents indicated that the government policies with respect to wait time (50% low) and ineffective change management practices (38% low) were not sources of overload for them, one in four had problems in both of these areas.

Finally, only 15% of the respondents said that working at multiple sites/in multiple units had contributed to greater levels of overload for them. By comparison, 60% said that this was not an issue for them.

Table 4.2: Predictors of Overload: Organizational Domain

Factor and items	Cronbach α	% Often
Ineffective Change Management Practices	.88	25%
Not consulted on workplace changes		
Old/ineffective/inefficient equipment/systems		
Lack of sound succession plan		
Inability to control/manage change		
Too many changes to procedures, structures, work		
Ineffective communication means you don't know what to do		
No opportunity to give feedback means work not done effectively		
No time/allowances made for training/education		
Lack of resources (equipment, supplies) to do the work		
Conflict with colleagues over resources		
Culture of Health Care Organizations	.86	32%
Culture makes it unacceptable to say no to more work		
Culture makes it difficult to leave when your shift is over		
Culture makes it difficult to seek help from others		
Too many priorities teamed with an inability to say no		
Responsibility for too many different things/disciplines		
Understaffing	.72	42%
Not enough staff to do the work required		
Not enough staff coverage to allow people to take a break during work hours		
High reliance on part-time/casual staff		
Multiple Work Sites	.63	15%
Working at multiple work sites		
Working for multiple work units		
Complexity of the work	.60	41%
The cases I deal with are more complex than in the past and require greater effort		
Requirement to work on teams		
Managing expectations of patients and their families		
Government policies	--	26%
Government policies with respect to wait time		

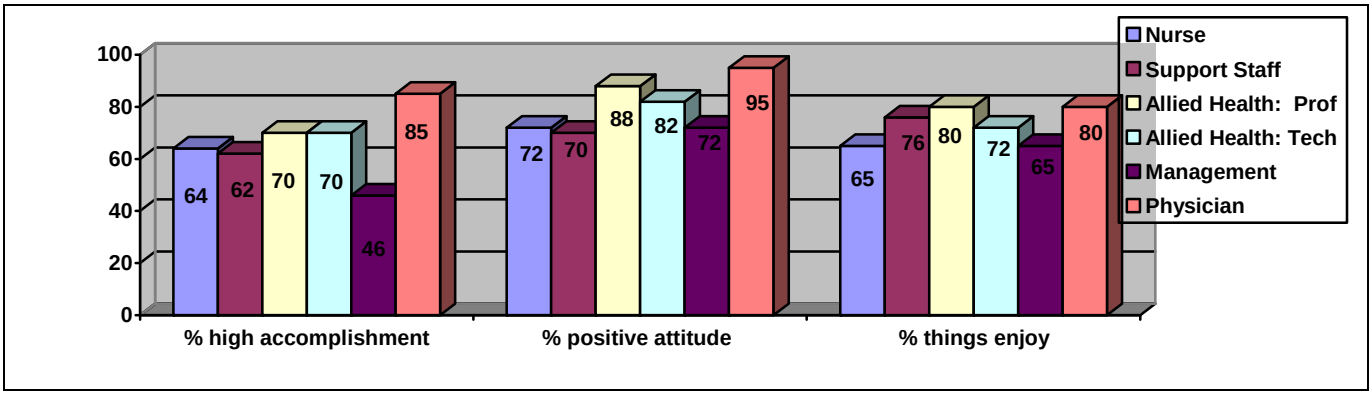
3.5 Impact of Job Type on Antecedents

Job type is strongly associated with all four of the work domain antecedents examined in this study. Those in the physician (54.5 hours per week) and management groups (46.0 hours per week) have heavier objective work demands than those in the five other types of jobs.

Data on job quality are given in Figure 4.12. Physicians, and those in Allied Health (both professional and technical positions) give their jobs higher quality ratings while those in Management, nursing and support positions tend to view their jobs as being lower in quality. The

data point, in particular, to issues with respect to the role of management within a health care setting in terms of lower job quality.

Figure 4.12: Job Type by Job Quality



% who almost always feel a sense of accomplishment at the end of the day, % who say kind of work they do has a positive influence on their overall attitude towards their job, % of things they do on the job that they enjoy.

Task interdependence is also strongly associated with job type. Two groups are highly interdependent on others in terms of work performance: nurses (75% high) and management (70% high). Doctors, on the other hand, have very low task interdependence (42% high).

In terms of work exchange commitment, the data indicate that no one, regardless of their job, feels adequately recognized or valued for their work within the hospital. Two groups do, however, report higher levels of work exchange commitment: physicians (33% high) and management (40% high). This reinforces our perception that this is an issue that needs to be addressed by health care organizations.

Job type is not strongly associated with the non-work variables included in our analysis. Not is it strongly associated with Total Roles. That being said, it is interesting (but not surprising) to note that Doctors are less likely to spend time in home chores and yard work. Doctors also report significantly higher levels of family exchange commitment (75% high). It is also interesting to note that respondents in the Management group have more roles than those in the other job groups (35% have 7 or more roles).

Job type is not associated with the incidence of two of the six organizational predictors of overload. It is, however, significantly associated with the incidence of the other four. Doctors and managers are significantly more likely than those in other jobs to say that the culture of health care (40% of doctors and 52% of managers experience these challenges often) and the need to work at multiple sites (22% of doctors and 33% of managers experience these challenges often) is a serious source of overload for them. Nurses (52% often) and Allied Health: Technical (54% often), on the other hand, are more likely to experience stressors that are attributable to understaffing. Finally, an increase in the complexity of cases is more often a problem for doctors (51%), Nurses (50%), Management (50%), and Allied Health-Professional (44%).

3.6 Impact of Life Cycle Stage on Antecedents

Life cycle stage is not associated with work exchange commitment and objective work demands. It is, however, associated with perceptions of job quality as well as task interdependence. In all cases, those in the childcare only and sandwich groups report substantially higher levels of job quality (i.e., sense of accomplishment, positive attitude towards their work, per cent of their job they enjoy and that they are enthusiastic about) than those in the no dependent and eldercare only groups. Those in the eldercare only and no dependent groups also report substantially higher levels of task interdependence (66% high) than those in the childcare and sandwich groups (65% high). These findings may reflect the fact that employees with heavier demands at home who do not enjoy their work are more likely to selectively exit the workforce.

Life cycle stage is not associated with family exchange commitment and time per week in home chores and yard work, leisure and community work. Not surprisingly, it is associated with time per week in childcare and eldercare. Those in the sandwich group have heavier demands (27 hours per week in childcare and 4 hours per week in eldercare) than those in the childcare only (22 hours per week in childcare) and eldercare (3 hours per week in eldercare) groups. The Total Role data paint a similar picture. Those in the eldercare and no dependents groups have fewer roles (39% of those in the non-dependent group and 42% of those in the eldercare group spent time in 1 to 3 roles) while those in the childcare and sandwich groups spent time in more roles (29% of those in the childcare group and 27% of those in the sandwich group report 7 or more roles).

With one exception, life cycle stage is not associated with predictors of overload from the organizational domain. Employees in the eldercare group are more likely to say that demands associated with understaffing are often a problem for them (52% often).

4. Overload

The main objective of this research initiative is to increase our understanding of the etiology of overload and to identify mechanisms by which overload can be reduced or prevented. Three types of overload are examined in this study:

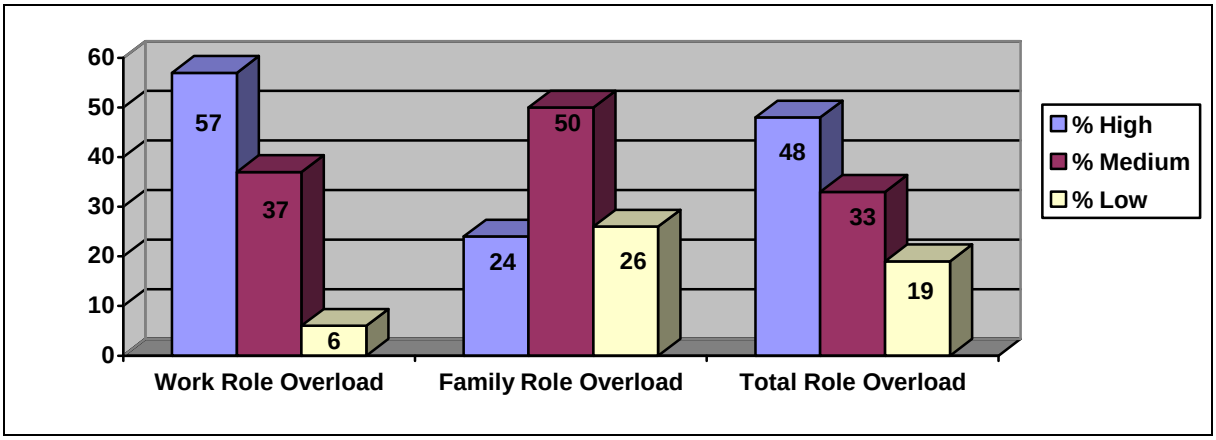
- Work Overload: This form of overload occurs when job demands exceed an individual's ability to deal with them (i.e., require more time and energy than is available).
- Family Overload: This form of overload occurs when the felt obligations of fulfilling family role demands (i.e., parent, spouse) exceed an individual's ability to deal with them (i.e., require more time and energy than is available).
- Total Overload: This form of overload occurs when the total demands on time and energy associated with the prescribed activities of multiple roles are too great to perform the roles adequately or comfortably.

This section presents data on the overload of the respondents. Findings obtained with the total sample are presented first. This is followed by an examination of the impact of job type and life-cycle stage on the three types of overload.

4.1 Work Family and Total Overload: Total Sample

Data on overload for the total sample are given in Figure 4.13. Overall these findings indicate that high levels of work overload and total overload are problematic for a majority of those working in Canada's hospitals. The fact that the hospital workers in our sample are twice as likely to report high levels of work overload (57% high) as report high levels of family overload (24% high) suggests that work demands are more likely to overwhelm employees than are family demands. The fact that fewer of the respondents report high levels of total overload (48% high) as report high levels of overload, support our contention that some employees cope better with domain specific overload (i.e., overload from the work and family domains) than others.

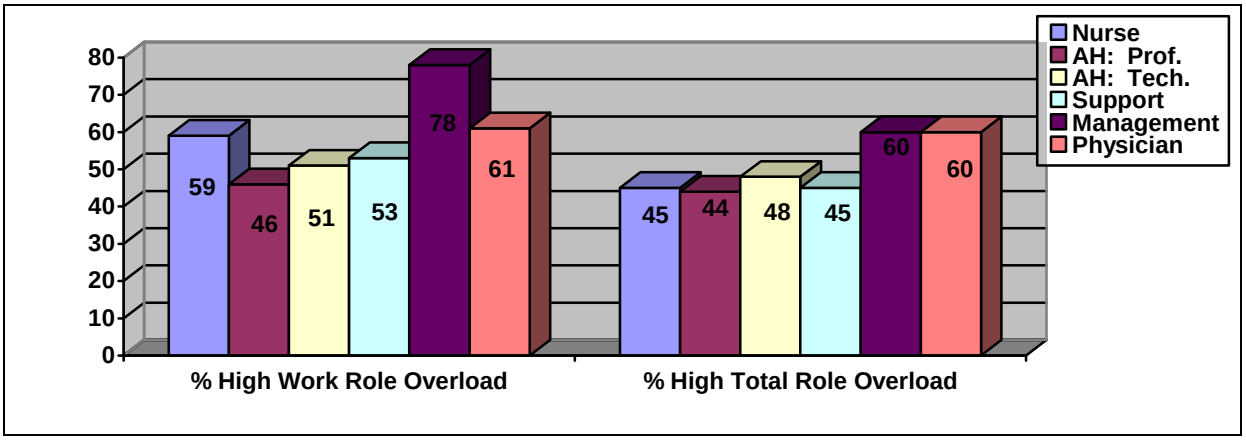
Figure 4.13: Overload: Total Sample



4.2 Impact of Job Type

Job type is not associated with the incidence of family overload. It is, however associated with the incidence of high levels of both work overload and total overload (see Figure 4.14).

Figure 4.14: Impact of Job Type on Overload



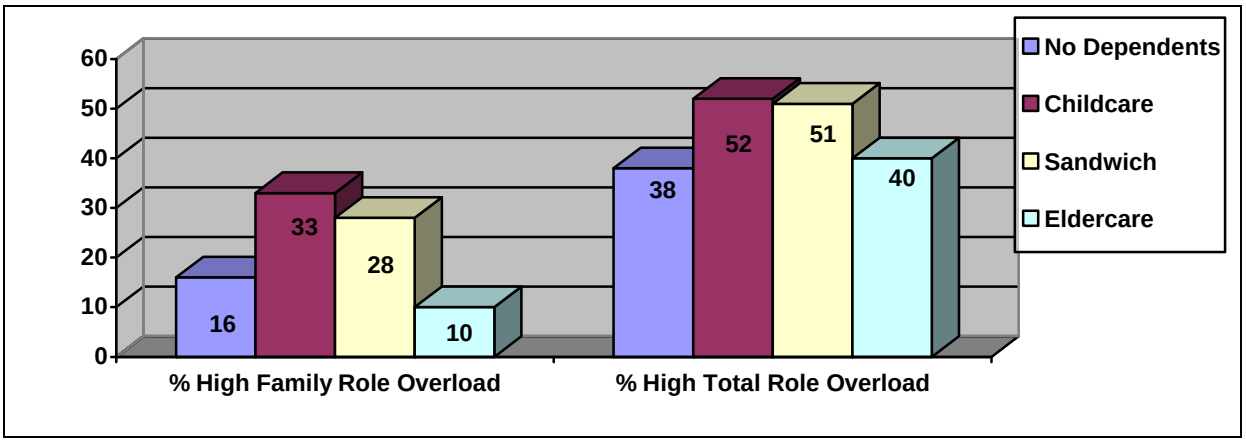
Three groups are more likely to report high work overload: nurses/clinical staff, physicians and managers. Worthy of note is the fact that more than three quarters of those in the management

group report high levels of work overload. Two of these groups also are more likely to report high levels of total overload: physicians and management. These data suggest that nurses and those in the management group are more able to cope with work overload than are those in the physician group.

4.3 Impact of Life Cycle Stage

Life cycle stage is not associated with the incidence of work overload. Life cycle stage is, however associated with the incidence of high levels of both work overload and total overload as shown on Figure 4.15. The data on both family overload and total overload paint a similar and not unexpected picture: employees with children in the home are more likely to report high levels of both family overload and total overload. Those without children (no dependent care, eldercare only), on the other hand, report lower levels of both forms of overload.

Figure 4.15: Impact of Life Cycle Stage on Overload



5. Outcomes

This research looks at the relationship between work, family and total overload and three categories of outcomes: organizational outcomes, individual outcomes, and work-life conflict. This section of the chapter is divided into 5 parts. We review data pertaining to the organizational outcomes first. This is followed in parts two and three by an examination of data relating to individual and work-life outcomes. The impact of job type and life cycle stage on these outcomes is discussed in parts four and five.

5.1 Organizational Outcomes

The organizational consequences of total overload examined in this study include continuance commitment, intent to turnover, absenteeism, and use of organizational benefits.

Continuance commitment refers to an awareness of the costs associated with leaving ones current employer. These costs may financial (leave for higher pay) and non-financial (leave for greater respect, to work with people who are friendlier, more control over work hours, more freedom to be creative) (Meyer & Allen 1991; Hrebeniak and Alutto , 1972). People who are

satisfied with their current work situation and loyal to their employer are unlikely to seek work elsewhere (low scores on our measure of continuance commitment) whereas employees who are dissatisfied with their current work environment are less likely to be loyal and more likely to be persuaded to move (high scores on our measure).

The data from this study indicate that 47% of the respondents to this survey are unlikely to leave their current employer while 27% indicated that they are likely to leave. Examination of the items making up this measure indicates that the respondents are unlikely to leave for higher pay (only 22% said they were likely to leave for an increase in pay). They are, however, more likely to say they would leave for more control over their work hours (40% likely) and for more respect (40% high).

Intent to turnover measures how likely an individual is to "move across the organizational boundary" by leaving their organization to work elsewhere. Turnover is costly for organizations who incur a number of costs associated with the replacement of those who leave. Higher scores on our measure of turnover reflect greater intent to turnover.

A plurality of the respondents (43%) said that they rarely thought of leaving their current organization and another 31% thought of leaving on a monthly basis – in other words, three quarters of the respondents can be considered to have low intent to turnover. The other 24% however, have high intent to turnover: 12% are thinking of leaving on a daily basis, and 14% are thinking of leaving several times a week or daily.

Three measures of absenteeism are given in Table 4.3 below: the per cent of the total sample absent due to various reasons, the mean number of days absent per year for the total sample, and the mean number of days absent per year for those who missed work due to the different causes.

Table 4.3: Absenteeism: Total Sample

Absenteeism due to:	**% Absent**	**Mean days/year: Total Sample**	**Mean days/year: Those Absent Only**
Health Problems	54	6.6	12.2
Childcare	22	1.2	4.8
Eldercare	11	0.6	6.4
Physical or emotional fatigue	31	2.6	8.8
Personal/vacation day off not granted	5	0.2	3.2
Avoidance of issues at work	7	0.2	4.0
All Causes (Total Absenteeism)	64	8.4	13.1
Presenteeism due to:	**% who**	**Mean times/year**	
Came to work when physically unwell	71	6.2	

Two thirds of the sample have missed worked in the past six months. The most common causes of absenteeism are health problems, physical or emotional fatigue (i.e., "a mental health day") and childcare. While relatively few employees miss work because of eldercare, because a personal/vacation day was not granted or because they are avoiding issues at work, those who do

take time off for these reasons miss a substantive number of days of work a year (6.4 days due to eldercare, 3.2 days because time off not granted, and 4 days because of issues at work).

Total days absence for the total sample is 8.4 days per year. If we look only at the group that has been away from work (i.e., the absent subsample), however, we get a very different picture (13 days absence a year). Absence due to emotional and physical fatigue, in particular, seems to be a problem in this sector. Respondents in the absent due to emotional fatigue subsample missed almost 9 days of work a year. These data suggest that approximately one in three hospital workers are at risk for burnout.

It is interesting to note that almost three-quarters of the sample indicated that they frequently (i.e., 6 times per year on average) came into work when they were unwell. The likelihood of coming in to work when unwell is not associated with either job type or life-cycle stage. While consistent with the culture (see focus group findings and the discussion on culture later on in this chapter) such actions are problematic in that they facilitate the spread of illness to co-workers and patients and are likely to hurt productivity (people do not work at peak efficiency when they are sick).

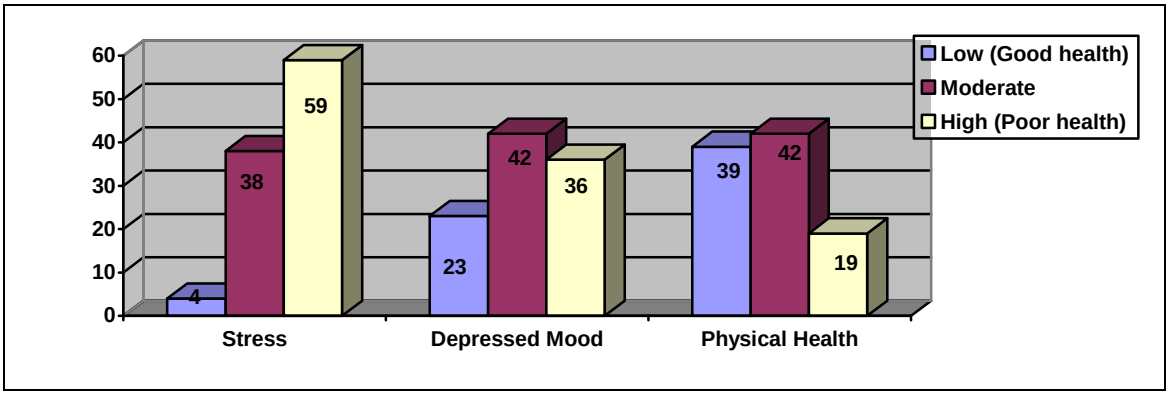
We explored the use of two benefits in this study: purchasing prescription medicine and the organization's EAP services. Just over half of the respondents (55%) have purchased prescription medicine for their personal use in the last six months and 11% have used EAP services. Since the organization pays for both of these benefits, linking their use due to the incidence of overload allows us to link overload to the organization's bottom line.

5.2 Individual Outcomes

The individual consequences of total overload examined in this study include depressed mood, perceived stress and physical health. The Perceived Stress scale used in this study (the PSS) was designed to assess appraisals of the extent to which one's current life situation is unpredictable, uncontrollable and burdensome. Higher scores on this measure indicate greater levels of perceived stress. Depressed Mood was measured using a scale developed by Moos et al. (1988). These authors defined depressed mood (DM) as a state characterized by low affect and energy, and persistent feelings of helplessness and hopelessness. Higher scores indicate higher levels of depressive symptomatology. Population norms are used to interpret the scores. Perceived Physical Health was quantified using as scale developed by Walters et al. (1996) which asks respondents to indicate how often they suffer from headaches or migraines, back pain, and suffer from insomnia. Higher scores reflect poorer physical health.

Data on the mental (stress, depressed mood) and physical health of the sample are provided in Figure 4.16. These data are worrisome as they indicate that a significant per cent of the health care workers in Canadian hospitals are in poor mental health (i.e., 59% report high levels of stress and 36% report high levels of depressed mood) and one in five are in poor physical health. It should be noted that the levels of stress and depressed mood observed in this sample are substantively higher than in other sectors (see Duxbury and Higgins, 2009).

Figure 4.16: Physical and Mental Health: Total Sample



Work-Life Outcomes

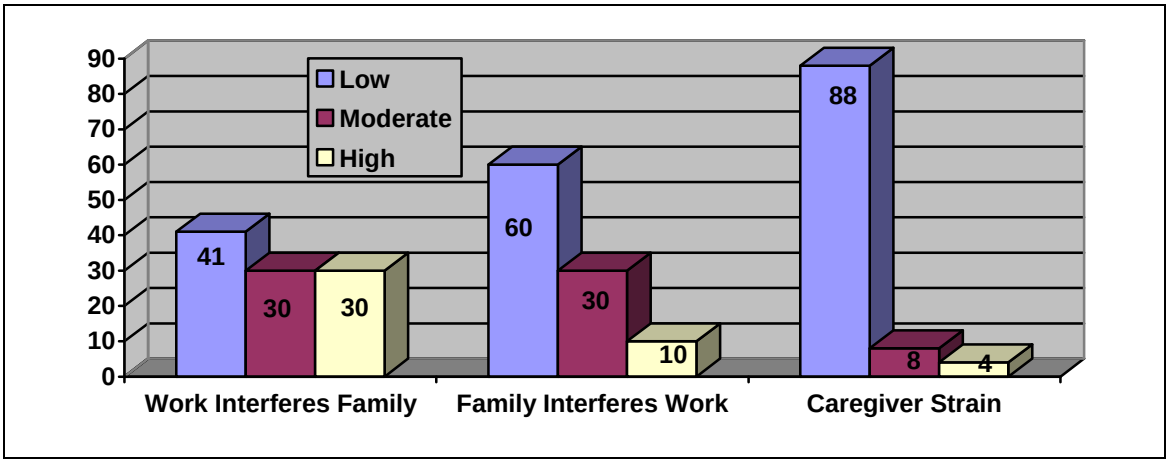
Three measures of work-life balance were included in this study: work interferes with family, family interferes with work, and caregiver strain. Role interference occurs when incompatible demands make it difficult, if not impossible, for an employee to perform all their roles well. Role interference is conceptualized as having two distinct facets:

- **Work Interferes with Family:** This type of role interference occurs when work demands and responsibilities make it more difficult to fulfil family role responsibilities.
- **Family Interferes with Work:** This type of role interference occurs when family demands and responsibilities make it more difficult to fulfil work role responsibilities.

The term "caregiver" refers to anyone who provides assistance to someone else who needs it (i.e., disabled or elderly dependent, disabled children). Caregiver strain is a multi-dimensional construct which 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 (Robinson, 1983). Consistent with past practices, in this study caregiver strain was used to measure strain and burden associated with eldercare only.

Data describing the work-life balance of those in our sample are provided in Figure 4.17. Only one form of work-life conflict appears to be problematic for our respondents: work interferes with family. One in three report high levels of work interferes with family (i.e., that their responsibilities at work interfere with their ability to meet role demands at home) – three times the number that report that their family responsibilities interfere with their work. Virtually no one reports high levels of caregiver strain due to eldercare. While the findings with respect to work interferes with family and family interferes with work are similar to those reported by Duxbury and Higgins (2009) in their National Work-Life Balance study, caregiver strain appears to be lower in this sector.

Figure 4.17: Work-Life Balance: Total Sample



5.3 Impact of Job Type

There were no differences in continuance commitment, intent to turnover, gone to work when unwell (it's the culture!), absenteeism due to childcare and eldercare, use of EAP and the purchase of prescription drugs associated with the type of job held by the individual. Nor was job type associated with two of the three measures of work-life conflict examined in this study: family interferes with work and caregiver strain. Job type is, however, strongly associated with absenteeism, mental health, physical health and work interferes with family. These differences are articulated below.

Those in the Physician and Management groups are less likely to be absent from work than those in other job groups (40% of physicians and 46% of management have missed work in the last six months compared to just over two-thirds of those in the other groups). This difference can be attributed to the fact that those in the Physician and Management groups were substantially less likely than other employees to miss work due to health problems, emotional and physical fatigue, and because they were not allowed a personal day off work.

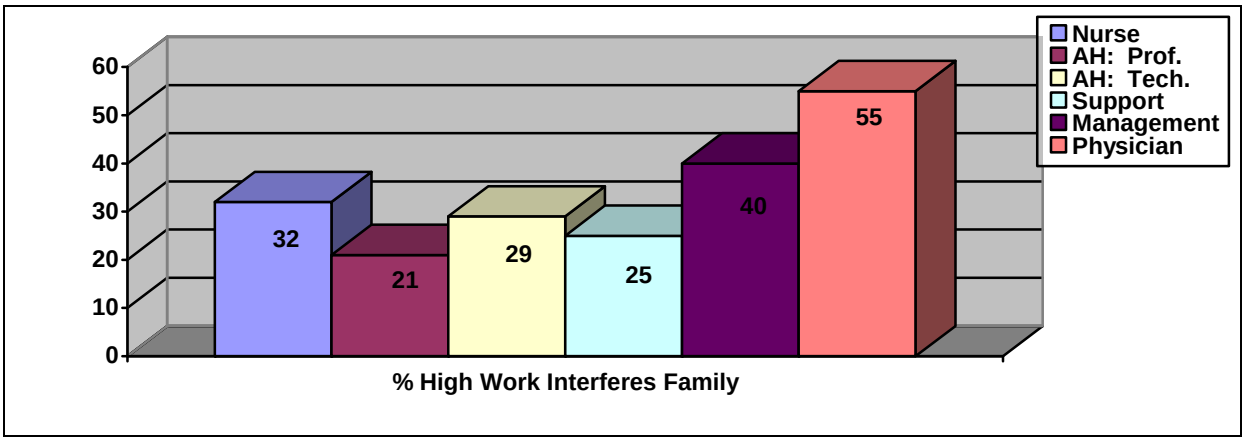
One in ten of the respondents in two groups, nursing/clinical staff and Allied Health: Technical were absent from work because they wanted to avoid issues at work including a difficult boss, abusive colleagues and a difficult work environment. Virtually no one in the other job groups missed work for this reason.

Stress and depressed mood are both associated with job type. Those in the physician group were significantly less likely to report high levels of stress (50% high) while those in management reported the highest levels in the sample (65% high). Those in the Allied Health: Technical group reported the highest levels of depressed mood (44% high) while physicians reported the lowest levels (16% high). Those in the nurse/clinical staff group were in poorer physical health (26% poor) while those in the physician group were in better physical health (7% poor).

As shown in Figure 4.18, job type is also strongly associated with work interferes with family. Two groups report high levels of work interfering with family: physicians (55% high) and

management (40% high). Those in the Allied Health: Professional and support groups, on the other hand, report lower levels of this form of work life conflict.

Figure 4.18: Impact of Job Type on Work Interferes with Family



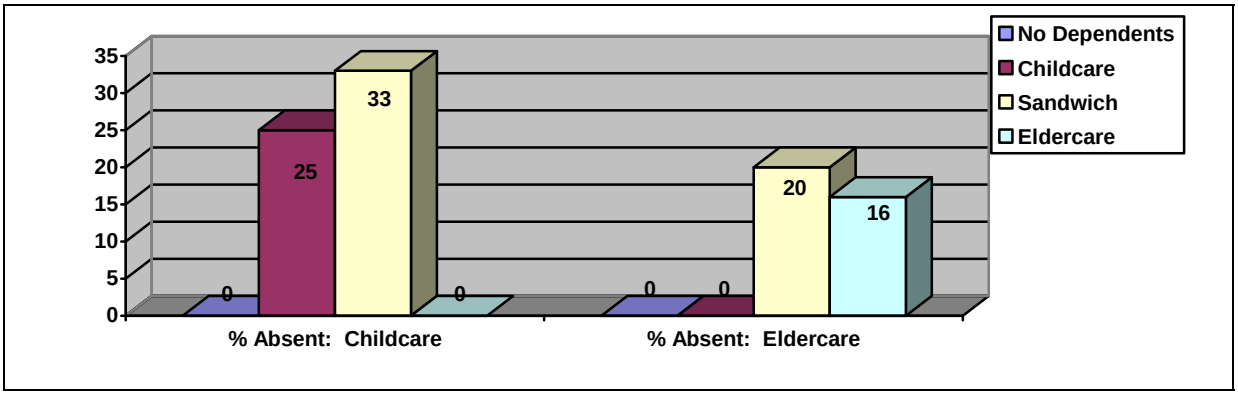
5.4 Life cycle stage

With one exception (those in the eldercare group were more likely to say they would leave the organization) life cycle stage not associated with continuance commitment, intent to turnover, the likelihood of going to work when unwell (it is the culture), use of EAP and the purchase of prescription drugs.

Not surprisingly, life cycle stage was associated with two of the six causes of absenteeism examined in this study: absenteeism due to childcare and absenteeism due to eldercare. These relationships are shown in Figure 4.19. As expected, those with children at home were more likely to miss work due to problems with their children while those with eldercare (sandwich and eldercare groups) were more likely to miss work due to eldercare concerns.

Surprisingly, life cycle stage was not associated with either physical or mental health – suggesting that issues affecting the health of health care workers comes from the work environment rather than what is going on at home. This finding is also likely partly due to the fact that most of the respondents are women (gender has been found to be a very strong predictor of physical and mental health). It is also interesting to note that life-cycle stage was not associated with work interferes with family or caregiver strain. This is not unexpected as the work interferes with family is more about ones circumstances at work than at home while those with eldercare in this sample have lower demands at home suggesting that the dependent they care for is in relatively good health. Those in the childcare and sandwich groups are, however, twice as likely as those in the no dependents and eldercare groups to report high levels of family interferes with work (15% versus 7% high). That being said, it should be noted that even those in the sample with dependent care give priority to work over family.

Figure 4.19: Absence due to Childcare and Eldercare by Life Cycle Stage



6. Moderators

Three groups of possible moderators were explored in this study (see Figure 4.1): those operating at the level of the individual, those operating at the level of the family or community, and those working at the level of the organization. Moderators in each of these groups are presented in the section below. Part one describes how individuals cope with overload. Part two examines possible moderators at the family/societal level. Organization factors that may moderate the relationships in our theoretical framework are explored in part three. The last two parts of this section look differences in these moderators associated with job type (part four) and life-cycle stage (part five).

6.1 Individual Level Moderators

Individual level moderators are those that are enacted by the individual employee. Only one individual level moderator was included in the model: coping strategies. We examined how often our respondents used each of the following strategies to respond to "feelings that they had too much to do in their daily life and too little time to do it."

- *Avoidance/Resignation:* Employees who use this strategy cope by separating themselves physically (i.e., I avoid being in this situation if I can, separate myself as much as possible from the people who created the situation) and emotionally (i.e., try not to get concerned about it) from the situation that is contributing to their feeling overwhelmed.

- *Positive Thinking:* Individuals who use this strategy cope by putting a positive face on things and seeing the situation as an opportunity rather than a problem (i.e., Think of ways to use this situation to show what I can do; Try to see this situation as an opportunity to learn and develop new skills).

- *Direct Action*: People who cope by using direct action try and deal with the situation that is causing the stress and overload (i.e., Devote more time and energy to meeting the demands of my various roles; Try to be more efficient and productive with my time; Try to be very organized so that I can keep on top of things).

- *Help-Seeking*: This coping strategy involves seeking affirmation as well as emotional and instrument support from significant others (i.e., Seek advice from people in my life about how to do what is expected of me; Request help from people in my life who have the power to do something for me; Talk with people in my life about the situation).

- *Alcohol/Prescription Drug Use*: Employees who use this strategy focus their efforts at reducing the emotional and physical impacts of stress by drinking (i.e., Drink a moderate amount (i.e., 2 drinks) of liquor, beer or wine; Drink more than a moderate amount of liquor, beer or wine) or taking prescription or over the counter medication.

- *Put family first*: Individuals who use this strategy cope by putting psychological boundaries around their work role and reducing the amount of time and energy devoted to work (i.e., Modify my work schedule (i.e., reduce the amount of time I spend at work, work different hours); Limit my job involvement so that I will have more time for my family; Leave work related problems at work when I leave).

- *Get by on less sleep than I would like:* These individuals cope by cutting back on sleep in the belief that this will give them more hours in the day to cope with all that they have to do.

Use of the various coping strategies is given in Table 4.4. How do those who work in Canada's hospitals cope with overload? They take direct action (63%) and they get by on less sleep (51%). One in three seek help from others and try and view the situation positively. One in five attempt to separate themselves emotionally or physically from the situation. While very few individuals seek to cope by putting their family first or drinking/using prescription medicine, it should be noted that 5% use these strategies often and another 18% use them occasionally.

Table 4.4: Use of Individual Coping Strategies: Total Sample

Coping Strategy	% who use		
	Rarely	Occasionally	Often
Direct action	3	34	63
Get less sleep	20	29	51
Help seeking	14	53	33
Positive thinking	20	49	31
Avoidance	19	60	21
Family first	49	36	15
Alcohol/Drugs	77	18	5

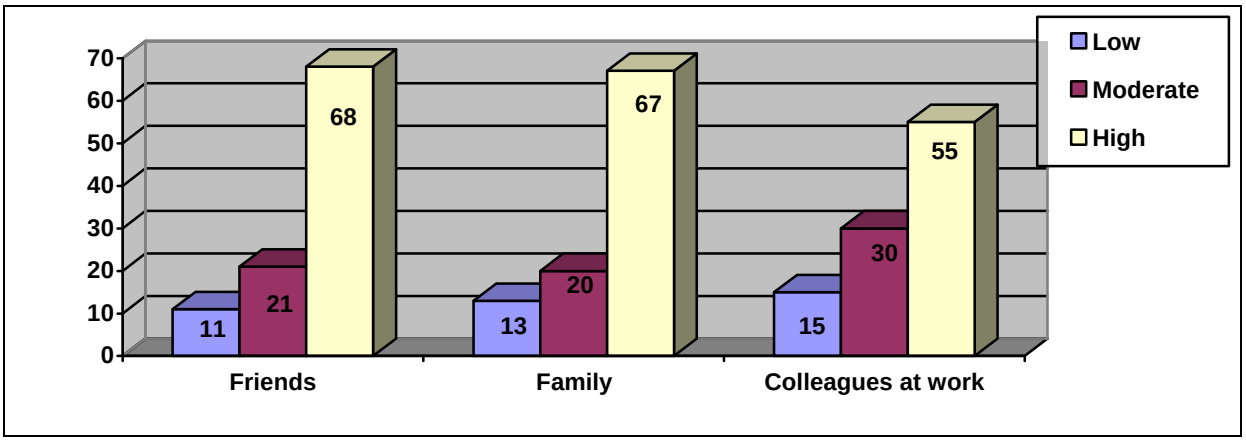
6.2 Non-Work Moderators

Three non-work moderators (i.e., those that stem from the employees' family or community) were included in the model: social support, support from partner/spouse, and perceived control over home life.

Social support is the physical and emotional comfort given to us by our family, friends, and co-workers. The use of the various forms of social support by the individuals in this sample is

shown in Figure 4.20. Two thirds of the respondents seek support from friends and family. Just over half seek support from colleagues at work.

Figure 4.20: Social Support: Total Sample



Objective support from one's spouse/partner was quantified by asking respondents how many hours per week their spouse spent in paid employment, childcare and home chores. The vast majority of the married individuals are in dual income families where family responsibilities are shared. Just over ninety (94%) of the sample indicated that their partner is employed outside the home and devotes approximately 38.6 hours at week to employment activities. Three quarters said that their spouse spends time each week parenting and half said that their spouse helped with home chores and yard work. These partners spent approximately 14 hours per week in activities associated with parenting and 11 hours per week in home chores and childcare.

Perceived control is defined "as the belief that one has the ability to make a difference in the course or the consequences of some event or experience"[2] There is a vast literature linking perceived control with an increased ability to deal with stressors. Examination of the data associated with the first of the measures of perceived control included in this study, perceived control over home life, indicates that 54% of respondents have high levels of perceived control over their family life, 41% have moderate levels and 5% have low levels.

6.3 Organizational Moderators

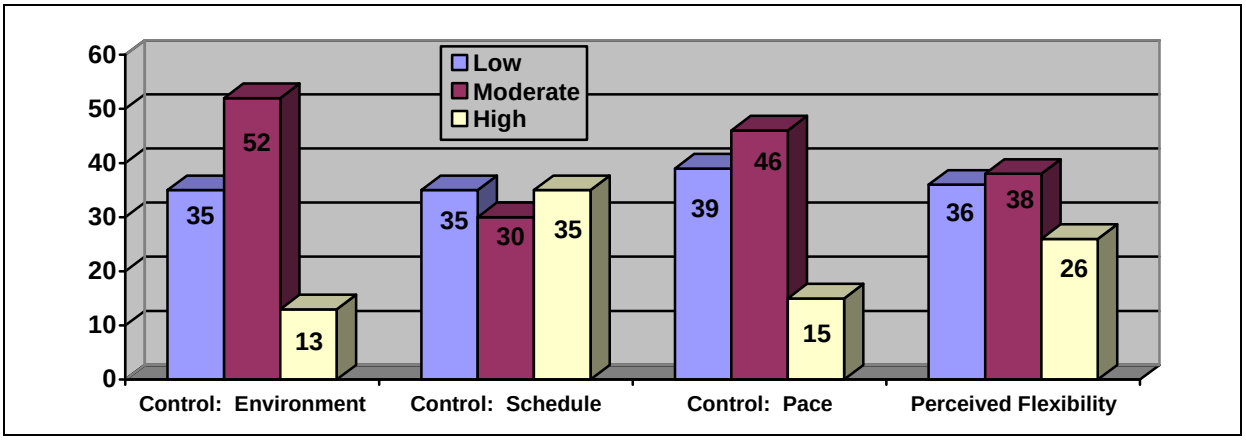
Five organizational factors that might moderate the relationship between overload and outcomes were included in this study: control over work, perceived flexibility, perceived organizational support (POS), supportive management, and organizational culture.

The second measure of perceived control included in our analysis pertains to control over work. This measure has three subscales measuring: (1) control over the work environment (i.e., control over physical work environment, sources of information needed to do the job, policies and procedures in your work unit, how your work is evaluated), (2) control over scheduling (i.e.,

[2] HTTP://WWW.PSYCHOLOGYMATTERS.ORG/GLOSSARY.HTML#P

control over scheduling and duration of your work breaks, when you take your vacation or days off), and (3) control over the pace of work (i.e., control over how quickly or slowly you work, how many times you are interrupted at work). The sample distribution with respect to these three forms of control is given in Figure 4.21.

Figure 4.21: Perceived Control over Work: Total Sample



Several observations can be made by looking at this figure. First, very few people have high levels of control over either their work environment or their pace of work. Just over one in three have low levels of control over both of these dimensions of work. Second, perceived control over work schedule is highly variable with approximately equal numbers saying they have high control, moderate control and low control. As will be discussed later in the report, perceptions of the control over work schedules is strongly associated with job type.

The amount of flexibility an employee perceives that they have to vary their work hours and their work location is the third form of perceived control examined in this study. The measure of perceived flexibility used in this analysis examines how much control employees feel that they have over their work day (i.e., interrupt their work day for personal reasons and then return to work, arrange work schedule to meet personal/family commitments, vary when they come in to work, take paid day off when a child is sick). Findings with respect to perceived flexibility are shown in Figure 4:21. Not surprisingly, findings with respect to perceived flexibility are very similar to those obtained for control over the work schedule. Only one in four respondents perceive that they have control over their work day – substantively fewer than the number who feel that they have very low levels of control (36%). Examination of the items that make up this measure give us a better understanding of these results. First, half of the hospital employees indicated that it is very difficult for them to take a paid day off work when their child or an elderly dependent is sick/needs then. Half also said that they found it very difficult to interrupt their work day to deal with a personal/family reason and then return to work. This lack of flexibility is consistent with the higher levels of absenteeism noted earlier. Control over when people come to work and when they leave is however, slightly higher (40% say that it is easy for them to vary when they come in and leave).

Perceived organizational support (POS) is defined by Eisenberger et al. (1986) as a global belief that employees form concerning how much they are valued by their organization. This belief is

based on an individual's experience with respect to organizational policies and procedures and their interactions with others in the organization. Research by Eisenberger and his colleagues has found that employees who feel valued and supported by their organization are more likely to reciprocate by turning in higher levels of performance. Unfortunately the data from this survey shows that POS within the hospitals is very low. Only 24% of the sample report high POS while 33% report low.

Our research has determined that people do not work for an organization – they work for the manager that they report to. The extent to which the respondents perceived that the individual they reported to was supportive (i.e., assisted their efforts to get their job done effectively given their personal circumstances) or non-supportive was assessed using two behaviourally based measures that were developed and tested by Duxbury and Higgins over a fifteen year period. These measures have been found to be highly predictive of the individual's experiences at work and their attitudes towards the organization (Duxbury and Higgins, 2009).

The data indicate that fewer than half (45%) of the respondents view their manager as supportive, 21% rate their manager as non-supportive and 34% view their manager as "mixed" – supportive in some ways, non-supportive in others. Unfortunately, our previous work shows that employees respond in essentially the same fashion to mixed managers as they do to non-supportive managers.

The measure of Organizational Culture was developed by the authors as described in Chapter Three. As a first step in our analysis we performed a factor analysis on the 24 items in this measure. The results from this analysis are summarized in Table 4.5 below. All scales have acceptable reliability based on Cronbach's alpha. The respondents' views of the organizational culture are shown in Figure 4.22.

Figure 4.22: View of the Organizational Culture: Total Sample

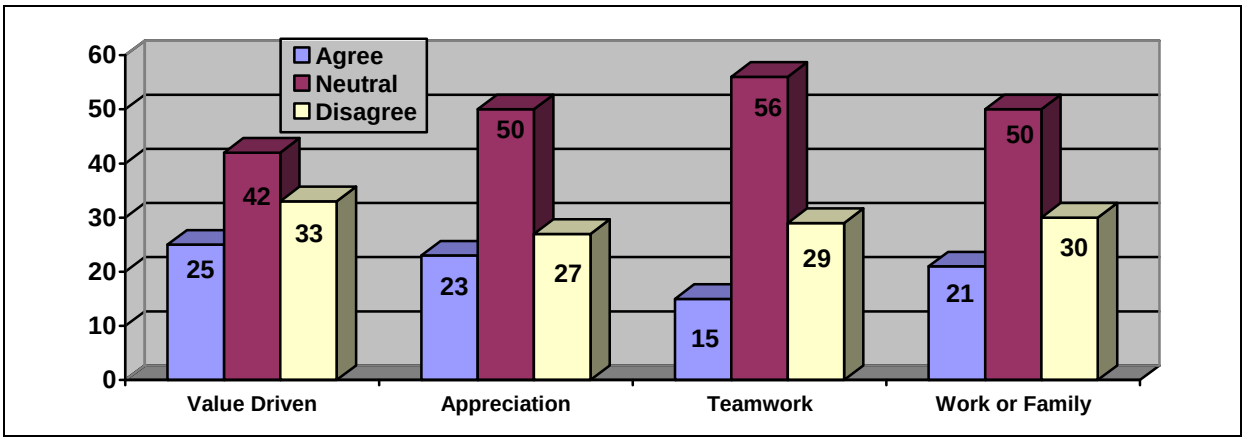


Table 4.5: Organizational Culture

Factor and items	Cronbach α
Cohesive, values driven culture	.89
We have leaders who are expert at running the health care system	
We have leaders who are appropriately accessible to employees	
We have a clear sense of direction and vision for the future	
The people in charge make decisions consistent with the hospital's values	
There is a lot of respect in this organization for other professions (R)	
Morale in this organization is low (R)	
Management and staff do not trust each other (R)	
Culture of appreciation and respect	.88
In this organization, mistakes are seen as an opportunity to learn	
The organization promotes and environment that is supportive of employees' needs	
In this organization we celebrate success	
People in this organization have a positive attitude	
Sufficient time is given for training and development	
My opinion really counts	
Employees have access to the information they need to get their jobs done well	
People are truly appreciated for the effort they make	
The focus is on making sure that they workplace is physically safe and secure	
Culture of teamwork	.69
Workloads are uneven – the balance of work falls on those who care (R)	
There is good on-going communication between areas	
There is a lot of bickering over who does what (R)	
People here work as a team	
Culture of work or family	.71
There is no recognition given to the fact that employees have personal commitments outside of work	
People who leave on time or do not take extra shifts are made to feel guilty	

Note: (R) means the item is reverse coded.

How do respondents see the culture within their organization? An examination of the items that load on each of the factors indicate that in the majority of cases respondents agree that some aspects of each of these cultures are present in their organization while others are not – hence the fact that approximately half the respondents score in the mid range on each of the four dimensions of culture examined. That being said, it is important to note that in all cases less than one in four of the respondents agree that the culture has the positive attributes associated with a values driven, cohesive culture, a culture of appreciation and respect, and a culture of team work, while approximately 30% disagree that these cultures exist in their place of work. On a more positive note, only one in five agree that the culture is one that forces a choice between work and family while one in three disagrees.

Also of interest is the fact that more than half of the sample *agree* with the following statements with respect to the culture of their organization:

- There is no recognition given to the fact that employees have personal commitments outside of work (63% agree).
- Workloads are uneven – the balance of work falls on those who care (58% agree).
- Morale in this organization is low (52% agree).
- Management and staff do not trust each other (50% agree).

Also of note is the fact that approximately half of the sample *disagree* with the following statements with respect to the culture of their organization:

- We have the human resources necessary to manage the workload (63% disagree).
- Sufficient time is given for training and development (51% disagree).
- There is good on-going communication between different areas (51% disagree).
- Time is available so that people can associate with colleagues at work (46% disagree).

6.4 Impact of Job Type

Virtually all of the potential moderators examined in this study are strongly associated with job type. Key findings in this area are summarized below.

The data indicate that job type is a fairly good predictor of how one copes with overload. More specifically:

- Those in the Allied Health: Technical group are more likely to cope by using avoidance (30%) and using alcohol/drugs (30% use occasionally or often) and less likely to cope by taking direct action (55%), seeking help from others (22%) and by seeking support from colleagues at work (45%).
- Those in the Management group are more likely to cope by using Positive Thinking (40%), help seeking (40%), taking direct action (66%). and by using alcohol/drugs (27% use occasionally or often).
- Nurses and clinical staff are more likely to cope by using alcohol/drugs (25% use occasionally or often) and less likely to cope by seeking support from their families (60%).
- Physicians are more likely to cope by taking direct action (68%) and by seeking social support from their families (75%) and their work colleagues (66%).

Also worthy of note is the finding that, with the one exception noted above (physicians), job type is not associated with the likelihood of coping by taking direct action (all do it), getting by on less sleep (all do this), or putting their family first (very few do this, regardless of job type).

Perceptions of perceived control over home life is relatively high and in only one case (Physicians) did fewer than half the sample feel that they did not have control over their family life (42% of physicians reported high levels of control over their home life).

Perceptions of perceived control over work are strongly associated with job type (see Figure 4.23a and 4.23b). Specifically those in the Nurses/clinical staff and Allied Health: Technical groups perceive that they have very little control over:

- their work environment (only 8% of the respondents in both these groups have high levels of control, while almost half have very little control),
- their work schedule (60% report low control, only 18% have high control), and,
- the pace of the work (half report low levels of control, only 10% have high control).

Those in management positions are more likely to perceive that they have control over their work environment (27% report high control while only 13% report low control), but even here the number with higher levels of control is small. Management are also more likely to feel that they have high levels of control over their work schedule (53% high, 7% low).

Doctors (58%), Allied Health: Professionals (57%) and Management (60%) were more likely to perceive that they had a moderate level of control over their work environment while Allied Health: Professionals were more likely to feel that they had control over the pace of their work (25% high).

Figure 4.23a: Impact of Job Type on Perceived Control over Work: % with "Low" Control

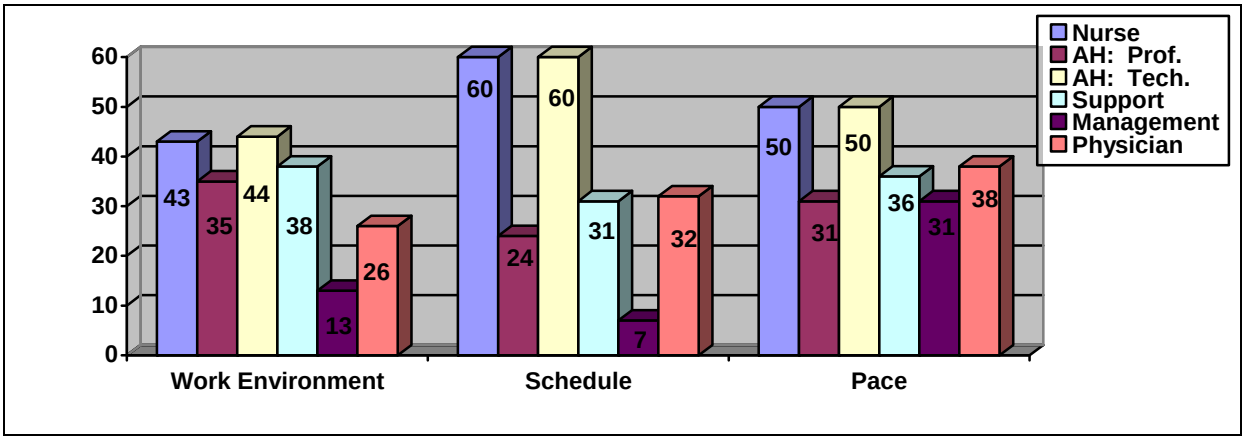
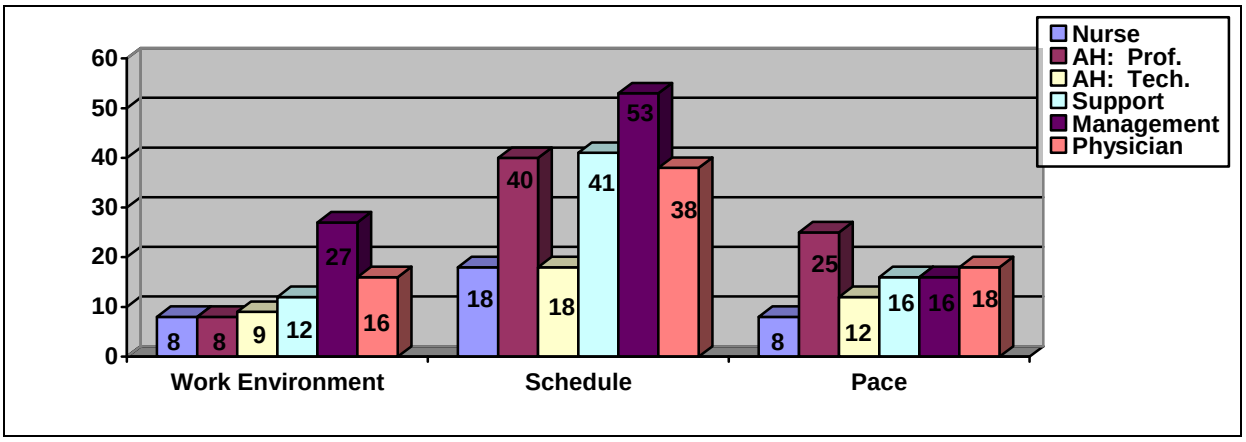


Figure 4.23b: Impact of Job Type on Perceived Control over Work: % with "High Control"

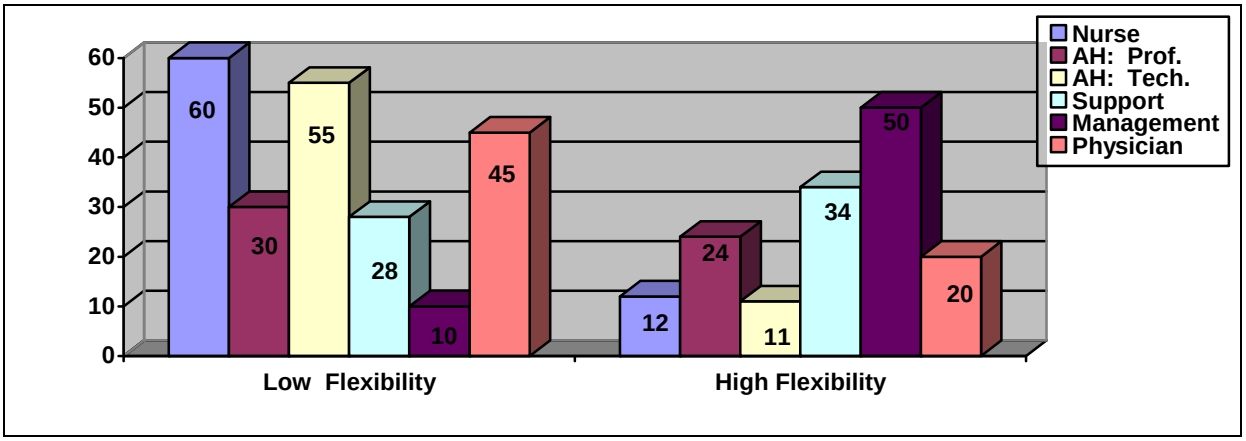


Perceived flexibility (Figure 4.24), perceived organizational support, and management support (Figure 4.25) are also strongly associated with job type as follows:

- Nurses (60% low), Allied Health: Technical staff (55% low) and Physicians (45% low) are more likely to report lower levels of perceived flexibility while Management (50% high) and those in support positions (34% high) are more likely to report higher levels.
- Nurses/clinical staff (40% low), Allied Health: Technical staff (41% low) and support staff (40% low) are more likely to report lower levels of POS while Physicians (40% high) and Management (40% high) are more likely to report higher levels.
- Management (61% view their manager as supportive, 9% view their manager as non-supportive) are more likely to report higher levels of management support while those in the Allied Health: Technical group (only 27% rated their manager as supportive while 32% rated them as non-supportive) are more likely to report lower levels of management support

Figure 4.24: Impact of Job Type on Perceived Flexibility

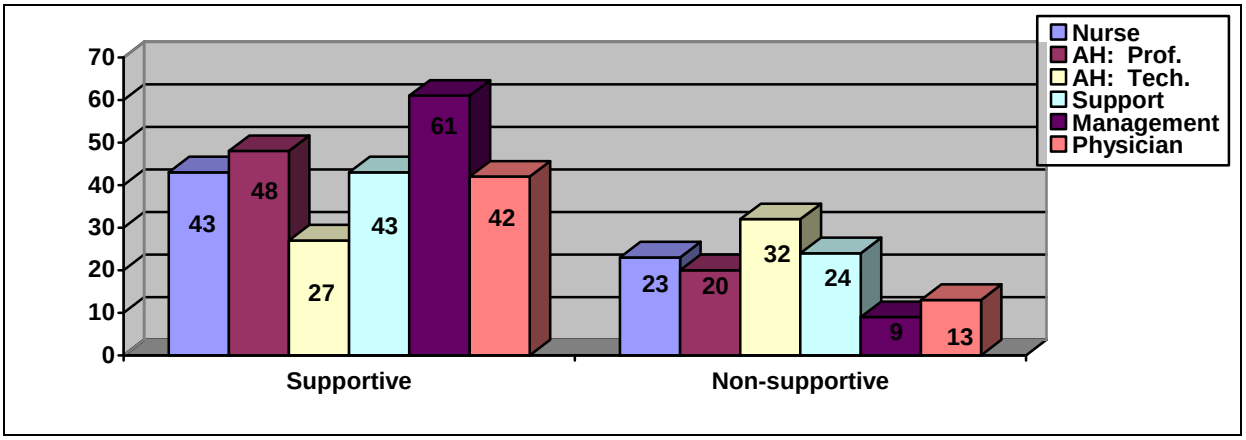
Note: Figure only shows data for % with high and % with low flexibility. Moderate not shown.



Finally, it is interesting to note that physicians are more likely to report to a mixed "supportive" manager – a finding that is likely due to the fact that many physicians have been trained to and prefer to treat patients not manage their colleagues.

Figure 4.25: Impact of Job Type on Management Support

Note: Figure only shows data for % with supportive and % with non-supportive. Mixed not shown.



The view of the organization's culture is also strongly associated with job type. One group stands out as having a different view of the culture than the rest of the workforce: management. They are more likely to perceive that the culture is cohesive and values driven (45% agree, only 15% disagree) and is based on appreciation and respect (40% agree, only 12% disagree). Managers were also more likely to be sitting on the fence with respect to the culture of teamwork (65% neither agreed nor disagreed). This is unfortunate as senior leadership needs to drive any efforts to change the culture within the organization but many in this group may not see the need for change.

Three groups were more likely to disagree that the organizational culture in their hospital emphasized and supported teams: nurses/clinical staff (36% disagree), Allied Health: Technical staff (35% disagree) and Support staff (35% disagree). These same three groups were also more likely to disagree that the culture was one of appreciation and respect: 33% of nurses/clinical staff disagree, 31% of Allied Health: Technical staff disagree and 33% of support staff disagree.

Two other findings with respect to culture are worthy of note. First, none of the job groups perceived that their organization had a culture of team work - an unfortunate finding given the movement towards team based care. Second, those in the Allied Health: Technical group had the most negative view of the culture within their hospital: only 16% agreed that it was one that was value driven, only 12% agreed that it was one of appreciation and respect and only 15% said it was one of teamwork. Also of note is the fact that this group has the highest level of agreement that the culture is one of work or family (one in three agreed).

6.5 Life-cycle Stage

There is very little association between life cycle stage and the potential moderators examined in this study. With one exception (putting family first) life cycle stage is not associated with the use of the various coping strategies examined in this report. Nor is it associated with control over work, seeking social support from colleagues, or perceived flexibility. Life cycle stage is, however, associated with:

- Coping by putting family first: Respondents with children (20% of the childcare group and 22% of the sandwich group) are more likely to cope by putting their family first.
- Seeking support from family and friends: Three quarters of the respondents in life-cycle stages without children (no dependent and eldercare group) seek support from family and friends as compared to 66% of those with children (childcare and sandwich groups).
- Support from spouse: The partners of respondents with children (childcare and sandwich groups) spend more time each week in childcare (18 hours) and home chores (16 hours) than partners of respondents in life-cycle stages without children.
- Perceived control over family life: 77% of those with no dependents and 68% of those in the eldercare group reported high levels of control in this domain as compared to 48% of those in the childcare and sandwich groups.
- Management support: Employees with childcare are more likely to find their manager supportive (47% of those in the childcare group and 50% of those in the sandwich group rate their manager as supportive) than are employees in the no dependent (40% supportive) and eldercare (38% supportive) groups.

7: Prediction of Overload

This section presents our findings with respect to the key predictors of work overload (part one), family overload (part two) and total overload (part three). Three statistical techniques were used to identify key associations with overload: correlation (continuous variables), chi-squared analysis (dichotomous variables) and PLS. The first two techniques identify the variables that are significantly associated with overload ($r > .15$). The third technique identifies those variables with predictive power.

In statistics an association is any relationship between two measured quantities that renders them statistically related. Appendix C includes a complete list of all variables that are associated with work, family and total overload.

7.1 Work Overload

Correlation analysis identified a number of associations between work overload and the potential predictors included in the model. A complete set of the statistically significant correlates of work overload is provided in Appendix C. Key correlates are given below in Table 4.5.

Table 4.5: Key Correlations: Work Overload

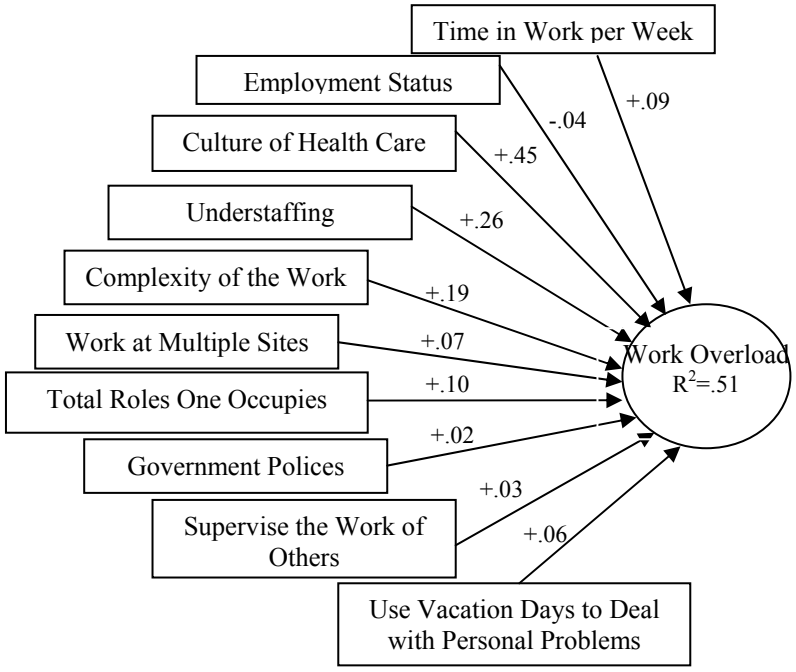
Possible Predictor	r
Culture of health care	.50
Ineffective change management practices	.35
Complexity of work	.29
Understaffing	.29
Task interdependence	.24
Working at multiple work sites	.21
Government policies	.21
Hours in work per week	.17
Hours in leisure per week	-.17
Number of employees supervise	.17

Chi square analysis identifies two other potential predictors of work overload:

- Supervisory status: Three quarters of those who supervise more than 9 employees report higher levels of work overload as compared to 45% of those with no direct reports.
- Employment status: 60% of those who work full time report high overload as compared to 45% of those who work part time and 42% of those who are casual workers.

The key findings from the PLS analysis in terms of prediction of work overload are given in Figure 4.26.

Figure 4:26: Key predictors of Work Overload (PLS Model)



The next question concerns what we know about the prediction of work overload from this analysis?

First, the ten predictors of overload shown above explain 51% of the variation in work overload. Second, higher levels of work overload are strongly associated with:

- Working in an environment that subscribes to the culture of health care: the more the employee believes that they cannot say no to more work, that they have too many priorities, that it is hard to get help, and that it is hard to leave when one's shift is over, the more likely they are to experience work overload.
- Working in an area that is understaffed.
- The increased complexity of the cases facing many health care providers.
- Higher levels of task interdependence (i.e., cannot complete work independently),
- Having to work at multiple sites or for multiple units.
- The occupancy of a greater number of roles.
- The number of hours one spends in work per week.
- Having to supervise the work of others (the more direct reports one has, the higher the work overload they are likely to experience).
- Government policies designed to reduce wait times.
- A decrease in the amount of time one has to spend in leisure.
- Working full time (rather than part time or on a casual basis).

Third, the strength of the paths suggests that the most important predictors of work overload are the culture of healthcare, understaffing, and the increased complexity of work. All these measures were developed from the focus group sessions with staff and should prove useful to health care organizations who wish to diagnose their work environment. Fourth, work overload has very little to do with an employee's situation at home. Total roles are the only non-work predictor of work overload. Finally, it is important to note that the actual hours in work per week is not the most important predictor of work overload: in fact, actual hours of work have the sixth strongest path in the set of significant predictors of work overload.

7.2 Family Overload

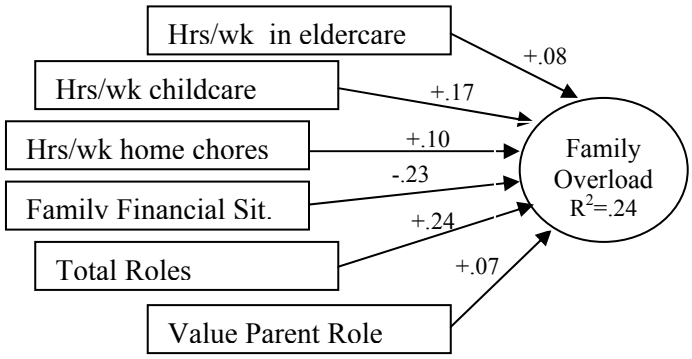
Correlation analysis identified a number of associations between family overload and the potential predictors included in the model. Chi square analysis did not identify any other potential predictors of family overload. A complete set of statistically significant correlates of family overload is provided in Appendix C. Key correlates are given below in Table 4.6.

Table 4.6: Key Correlations: Family Overload

Possible Predictor	r
Family Financial Status	-.30
Total Roles	.30
Hours in leisure per week	-.26
Hours in parenting per week	.27
Spouse: hours in parenting per week	.21
Spouse: hours per week in home chores	.20
Ineffective change management practices	.17
Parental Role Value	.16
Culture of health care	.16
Hours in home chores per week	.16
Hours in eldercare per week	.13

The key findings from the PLS analysis in terms of prediction of family overload are given in Figure 4.27.

Figure 4.27: Key Predictors of Family Overload (PLS Model)



So, what do we know about the prediction of family overload from these analysis? First, we are not as able to predict family overload as work overload. That being said, six variables were able to explain 24% of the variation in family overload. Second, higher levels of family overload are strongly associated with:

- Total Roles: the more roles one has, the higher the family overload.
- The families' financial situation is an important predictor of family overload: the lower the family income, the higher the family overload. This finding is likely due to the fact that people who live in families where money is tight are less able to purchase supports for family tasks (i.e., childcare, home cleaning, eating out).
- Hours per week in childcare, home chores and eldercare: the more time one spends in childcare, home chores and eldercare the higher the family overload.
- The more value an employee places on their role as a parent, the more likely they are to experience higher levels of family overload.

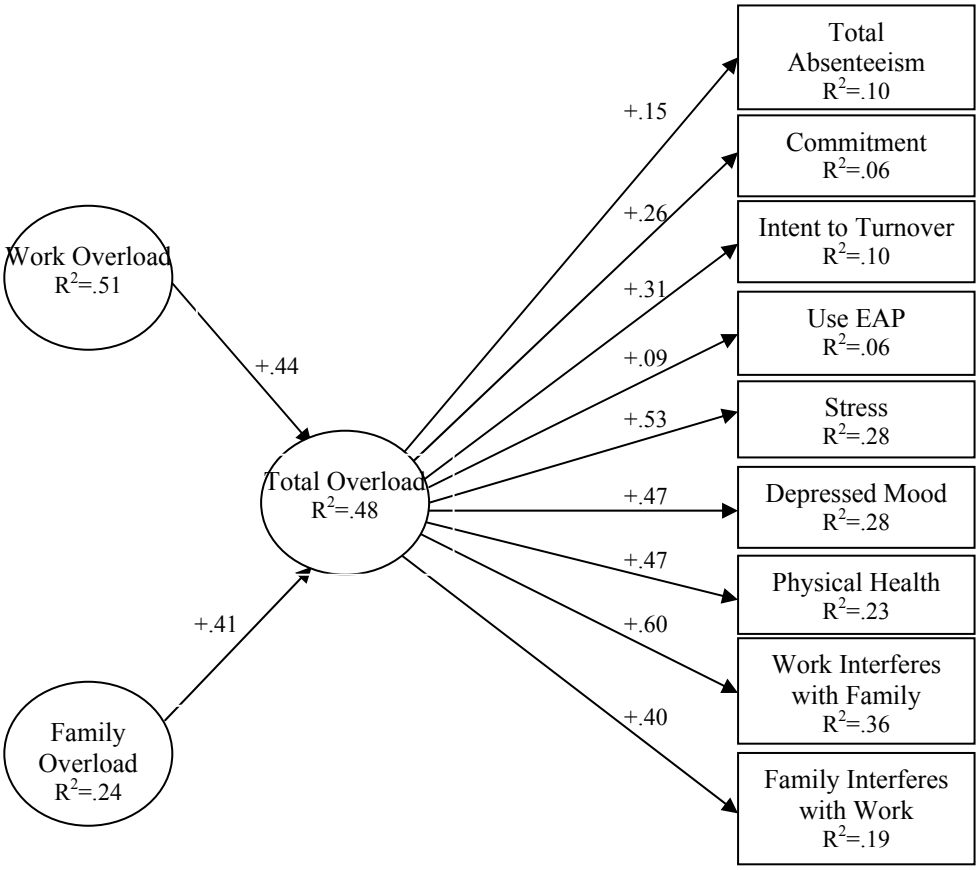
- Spouse hours in childcare and home chores.
- Working in an environment that subscribes to the culture of health care (i.e., cannot say no, cannot get away from work on time).

Third, the strength of the paths suggests that the three most important predictors of family overload are the total number of roles occupied by an individual, the families' financial situation, and the time spent per week in parenting. Fourth, time spent in family roles (i.e., childcare, eldercare, home chores) is an important predictor of family overload. Fifth, there are two predictors in common between work and family overload: total roles and the "culture of health care." Finally, it is important to note the important link between the amount of time per week in childcare and family overload. This helps us identify the key "at risk" group for this form of overload.

7.3 Total Overload

Our theoretical framework includes only two predictors of total overload: work overload and family overload (See Figure 4.28). Theoretically the predictors of each of these constructs are not considered as separate predictors of total overload.

Figure 4.28: Predictors and Outcomes of Total Overload (PLS Model)



The question is what do we know about the prediction of total overload from this analysis? First, we are able to predict 48% of the variation in total overload if we know how overloaded an individual is at work and at home. Second, the path coefficients suggest that both family overload (path .41) and work overload (path .44) are important predictors of total overload. Finally, the more overloaded an individual is at work and/or at home, the more likely they are to be overloaded overall.

8. Relationship between Total Overload and Key Outcomes

This section examines the relationship between total overload and organizational (part one), individual (part two), and work-life (part three) outcomes. As was the case in the previous section, we look at three different sets of analysis in this discussion: correlation, chi-squared, and PLS. The PLS model being referred to in this part of the report is shown in Figure 4.28. The correlations are listed in Table 4.7.

Table 4.7: Correlations: Total Overload and Outcomes

Organizational Outcomes	**r**
Intent to Turnover	.30
Continuance Commitment	.24
Total Absenteeism	.16
Use EAP	.16
Individual Outcomes	
Stress	.51
Depressed Mood	.48
Perceived Physical Health	.47
Work Life Outcomes	
Work interferes with family	.60
Family interferes with work	.45
Caregiver strain	.14

8.1 Relationship between Total Overload and Organizational Outcomes

Correlation analysis indicates that total overload has a significant positive association with intent to turnover, continuance commitment, total absenteeism and the use of EAP. Total overload is also positively correlated with absence due to physical health problems (r = .16) and absence due to childcare problems (r = .14). The association between taking prescription drugs and overload was not significant.

The data indicate that the higher the total overload the more likely the employee is to be absent from work, to use the organization's EAP services and to think of leaving the organization and the less likely they are to be loyal to the organization. The PLS model shows significant positive paths between total overload and total absenteeism (+.15), continuance commitment (+.26), intent to turnover (+.31) and the use of EAP (+.09). Furthermore, total overload, on its own, is able to predict 10% of the variation in turnover, 10% of the variation in total absenteeism and 6% of the variation in the use of EAP. These findings imply that higher levels of overload can cause

challenges with respect to recruitment, retention and the organization's bottom line (i.e., costs associated with absenteeism and benefits).

8.2 Relationship between Total Overload and Individual Outcomes

The analysis shows that the higher the total overload experienced by an employee, the poorer their physical and mental health. Correlation analysis found that total overload has a significant positive association with perceived stress, depressed mood and perceived physical health. The PLS model shows significant positive paths between total overload and perceived stress (+.53), Depressed mood (+.47) and Perceived Physical Health (+.23). The strength of these associations is reflected in the fact that total overload, on its own, is able to predict 28% of the variation in perceived stress, 28% of the variation in perceived stress and 23% of the variation in perceived physical health.

8.3 Relationship between Total Overload and Work-Life Outcomes

The data from this research initiative indicate that the higher the total overload experienced by an employee, the higher the conflict between work and family. Correlation analysis determined that total overload has a significant positive association with work interferes with family, family interferes with work, and to a much lesser extent caregiver strain. The PLS model shows significant positive paths between total overload and work interferes with family (+.60) and family interferes with work (+.40). Total overload is not a significant predictor of caregiver strain. The strength of these associations can be appreciated by considering that total overload, on its own, is able to predict 36% of the variation in work interferes with family and 19% of the variation in family interferes with work.

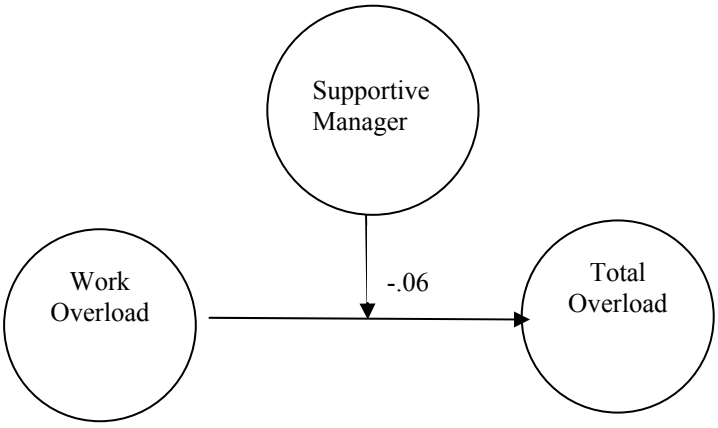
9. Moderation of the Relationships in the Model

A moderator variable is a variable that affects the direction and/or strength of the relationship between dependent and independent variables. Before testing for moderation we performed chi-square analysis to determine the relationship between the three forms of overload and the potential moderators in our model. This analysis is included, for interested readers, in Appendix C. The next step of our analysis involved checking to see if any of these variables moderated the relationships between work overload and total overload and between family overload and total overload. With one exception, none of the variables included in our study moderated the relationship between domain specific (i.e., work, family) overload and total overload. This relationship is discussed in part one of this section. This is followed by a discussion of the moderators of the relationship between total overload and the individual (part two), work-life (part three) an organizational (part four) outcomes included in this study.

9.1 Moderation: Domain Specific Overload to Total Overload

As shown in Figure 4.27, management support moderates the relationship between work overload and total overload. The presence of a supportive manager reduces the negative effect of work overload on total overload ($p < .05$).

Figure 4.27: Moderation: The path between Work Overload and Total Overload

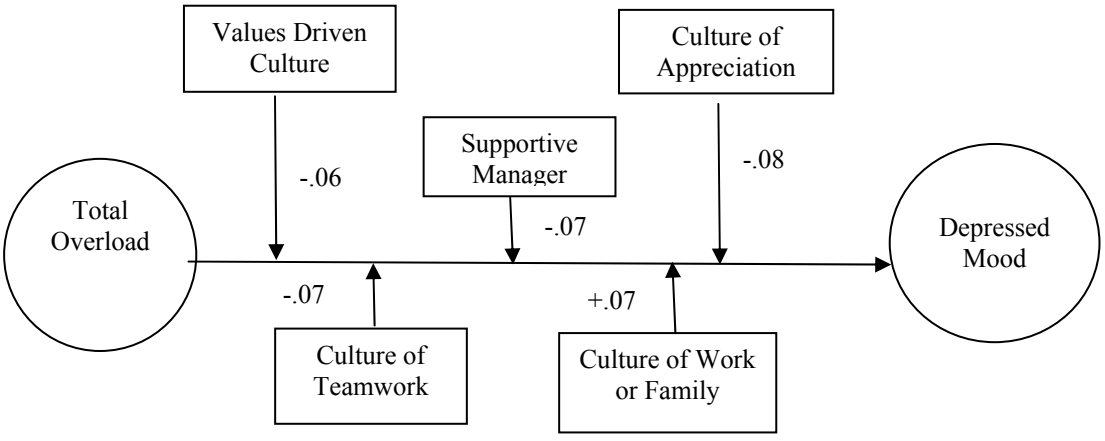


9.2 Moderation between Total Overload and Outcomes

In step three we checked for moderation between total overload and all the outcomes included in the model. In this case a number of significant moderators ($p < .05$).were identified.

All four of the measures of culture developed in this research and supportive management were found to moderate the relationship between total overload and Depressed Mood (see Figure 4.28). More specifically, a culture of appreciation, a cohesive, value driven culture, a culture of teamwork and working for a supportive manager all weaken the negative relationship between total overload and depressed mood. A culture of work or family, on the other hand, increases the negative effects of overload on depression.

Figure 4.28: Moderation: Total Overload and Individual Outcomes

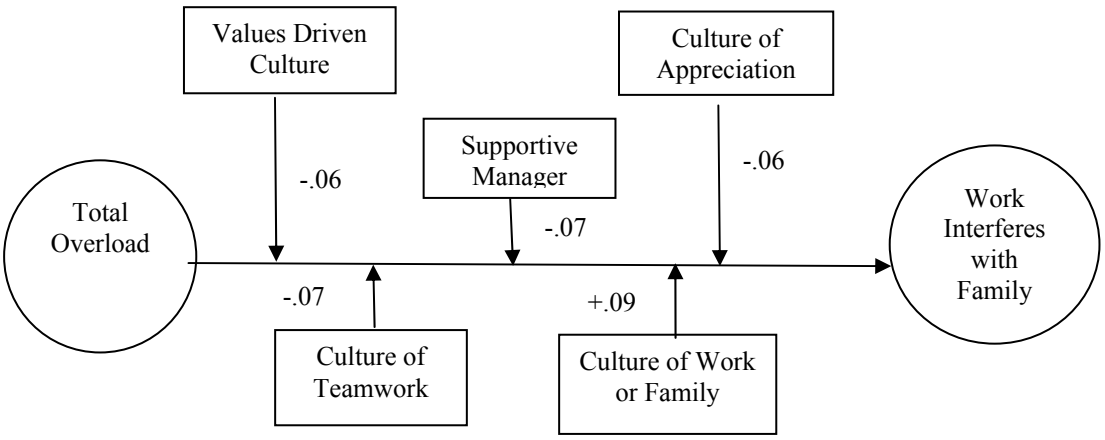


All four of the measures of culture developed in this research and supportive management were found to moderate the relationship between total overload and work interferes with family (see Figure 4.27). These relationships are virtually identical to those observed with respect to

depression. More specifically, a culture of appreciation, a cohesive, value driven culture, a culture of teamwork and working for a supportive manager all weaken the negative relationship between total overload and work interferes with family. A culture of work or family, on the other hand, increases the negative effects of overload on this form of work life conflict.

These findings indicate that health care organizations who wish to reduce the connection between high levels of total overload and poorer employee mental health, and increased work life conflict, need to focus their attention on cultural change and increasing levels of management support.

Figure 4.29: Moderation: Total Overload and Work-Life Outcomes



Our analysis identified six moderators of the relationships between total overload and many of the organizational outcomes included in our model (see Figure 4.30). More specifically the analysis determined that:

- A culture of work or family moderates the relationship between total overload and most of the organizational outcomes examined in this study. In particular it increases the negative effects of total overload on Total Absenteeism, the likelihood an individual will go to work when unwell, and intent to turnover.

- A culture of appreciation weakens the negative relationship between total overload and total absenteeism and between total overload and intent to turnover.

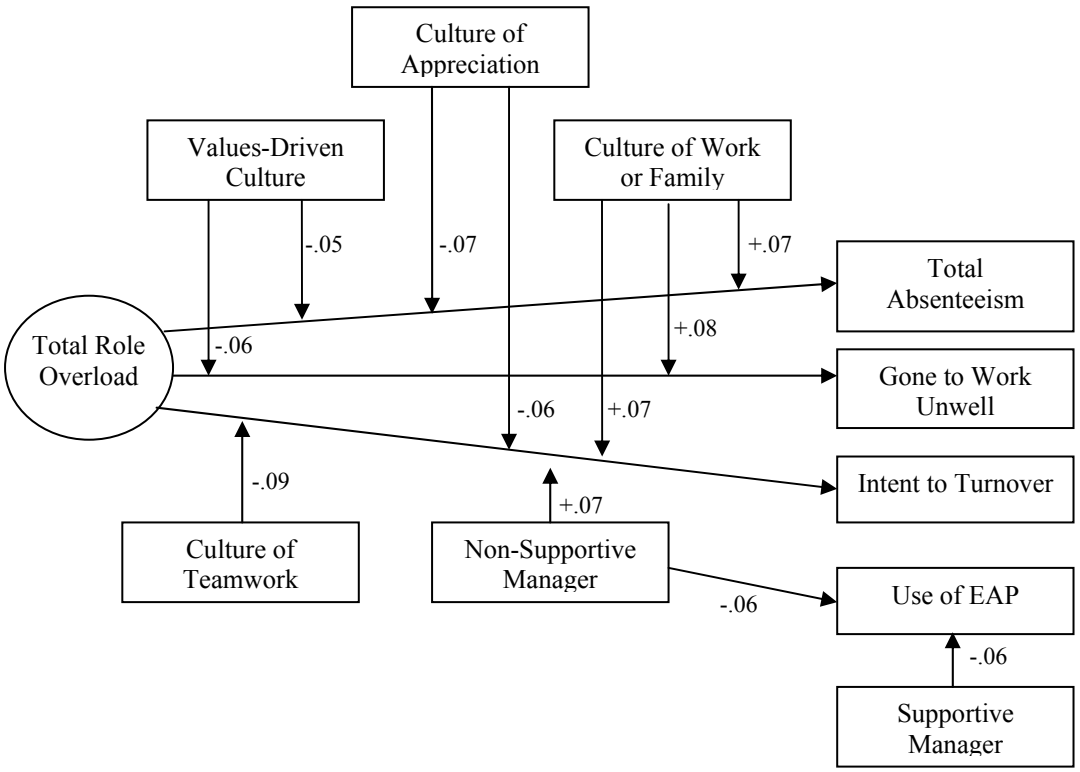
- A cohesive, values culture reduces the negative effect of total overload on two of the organizational outcomes included in our model. More specifically it reduces the negative relationships between total overload and total absenteeism and total overload and the likelihood an employee will go to work when they are unwell.

- A culture of teamwork reduces the negative impact of total overload on intent to turnover.
- The presence of non-supportive management moderates the relationship between total overload and intent to turnover and the relationship between total overload and the use of

EAP such that there is an increase in intent to turnover and a decline in the use of EAP in the presence of non-supportive management.

- The presence of a supportive manager also moderates the relationship between total overload and the use of EAP such that there is an increase in the use of EAP in the presence of a supportive manager.

Figure 4.30: Moderation: Total Overload and Organizational Outcomes



10. Mediation

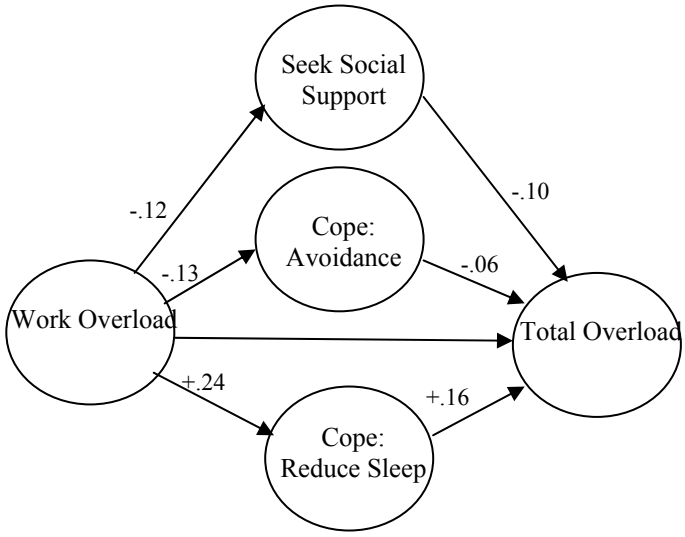
In statistics, a mediation model is one that seeks to identify and explain the mechanism that underlies an observed relationship between an independent variable and a dependent variable via the inclusion of a third explanatory variable, known as a mediator variable. Rather than hypothesizing a direct causal relationship between the independent variable and the dependent variable, a mediational model hypothesizes that the independent variable causes the mediator variable, which in turn causes the dependent variable. The mediator variable, then, serves to clarify the nature of the relationship between the independent and dependent variables.

This section of the report discusses our findings with respect to mediation of the relationship between work overload and total overload (part one) and the relationship between total overload and the outcomes included in this analysis (part two). We could not find any cases of mediation in the relationship between family overload and total overload.

10.1 Mediation of the Relationship between work overload and total overload

Three coping strategies were found to mediate the relationship between work overload and total overload: seeking social support, coping by using avoidance strategies, and coping by reducing sleep. These relationships are shown below in Figure 4.31 and discussed below.

Figure 4.31: Mediation of the Relationship between Work Overload and Total Overload



Social support was found to mediate the relationship between work overload and total overload. Examination of the path coefficients indicate that the higher the level of work overload the less likely the individual is to be able to have the time to seek social support. This is unfortunate as total overload increases as social support declines. It is also interesting to note that the path coefficients (not shown) indicate that support from friends and family is more important at driving the mediation than is support from work colleagues.

Coping through the use of avoidance was also found to mediate the relationship between work overload and total overload. Individuals who use this strategy seek to avoid the situation or the people that are contributing to their stress and to try not to get concerned. A look at the path coefficient indicates that the higher the work overload the less likely the individual is to be able to cope by avoiding the situation. Unfortunately, this inability to separate themselves physically and emotionally from the source of work overload (i.e., lower use of avoidance) leads to increased levels of total overload. This would suggest that confronting the source of overload and continual exposure to the situation that is causing the overload to occur increases ones sense of being overload. Employees who can, in fact, separate themselves (physically and mentally) from the situation causing the work overload appear to be better off.

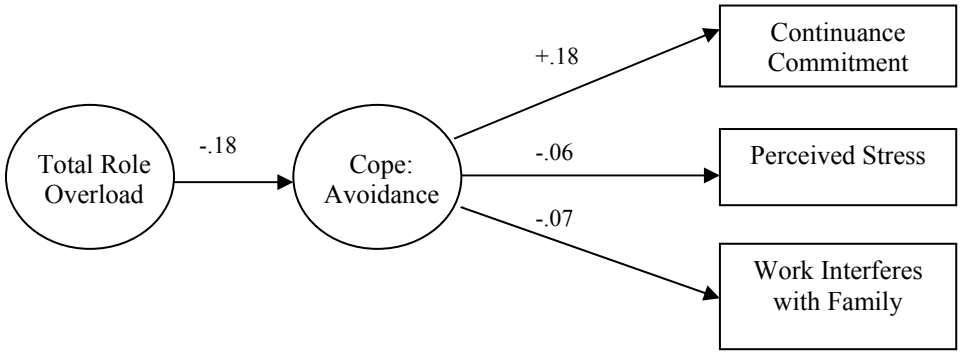
Coping by reducing one's sleep was found to mediate the relationship between work overload and total overload. Examination of the path coefficients indicate that people who are exposed to higher levels of work overload are more likely to try and cope by cutting back on their sleep. The more they cut back on sleep, however, the more likely they are to report higher levels of total overload.

10.2 Mediation of the Relationship between Total Role Overload and the Outcomes

Five of the coping strategies included in this study, coping through avoidance, by putting family first, through the use of Alcohol/taking prescription medicine, by reducing sleep and by seeking social support mediated many of the relationships between total overload and the outcomes examined in this study. Details on each of these mediating relationships are provided below.

Coping through the use of Avoidance was found to mediate the relationship between total role overload and commitment, perceived stress and work interferes with family. These relationships are presented in Figure 4.32.

Figure 4.32: Mediation of the Relationship between Total Overload and Outcomes: Coping Through Avoidance

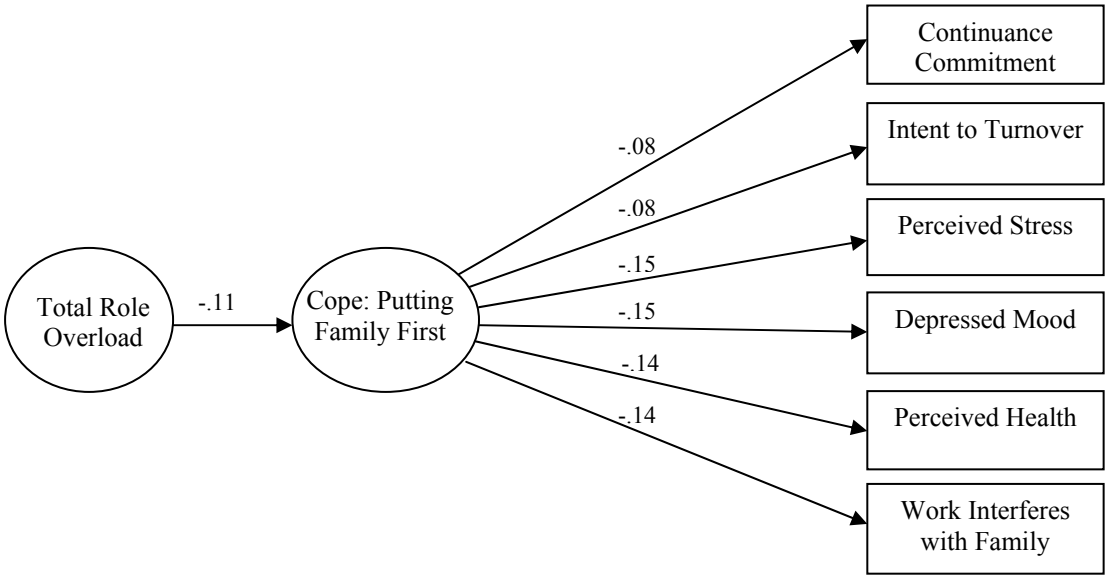


Examination of the path coefficients paints the following picture. The higher the total overload experienced by the employee, the less likely they are to cope by avoidance (probably because the situation is so overwhelming that it is hard for them to separate themselves from it emotionally). The less likely the employee is to cope by avoidance the more likely they are to be thinking of leaving the organization, the higher their levels of perceived stress and the greater the interference they experience between work and family, probably because they take the "problem" home with them.

Coping by putting family first was found to mediate the relationship between total role overload and commitment, intent to turnover, perceived stress, depression, work interferes with family and perceived health. These relationships are presented in Figure 4.33. In all cases the relationship is the same. The path between total overload and coping by putting family first was significant and negative (i.e., higher total overload, lower use of strategy) as was the path between putting family first and commitment, intent to turnover, perceived stress, depression, work interferes with family, and perceived health. In other words, the higher the level of total role overload the less likely one is to cope by putting family first - an unfortunate finding as higher use of coping by putting family first is associated with better mental health (i.e., lower levels perceived stress and depression), increased ability to balance work and family (i.e., lower work interferes with

family), and a greater commitment and loyalty to one's employer (i.e., lower intent to turnover, higher commitment).

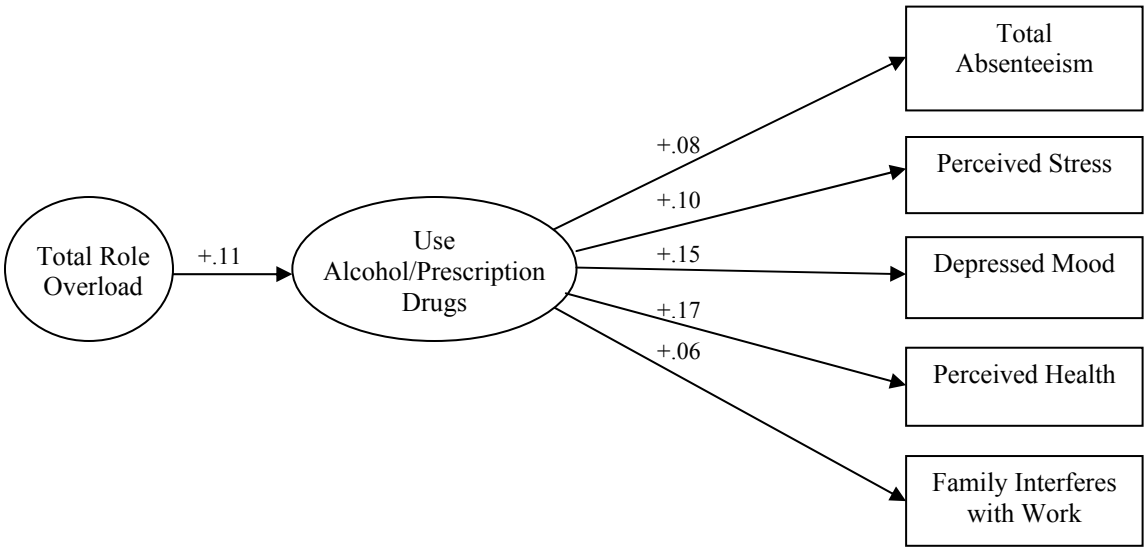
Figure 4.33: Mediation of the Relationship between Total Overload and Outcomes: Coping By Putting Family First



Coping by taking prescription medicine/using alcohol was found to mediate the relationship between total role overload and absenteeism, perceived stress, EAP use, depression, family interferes with work, and perceived health (see Figure 4.34). A look at the path coefficients gives us the following scenario with respect to the use of prescription medicine/using alcohol.

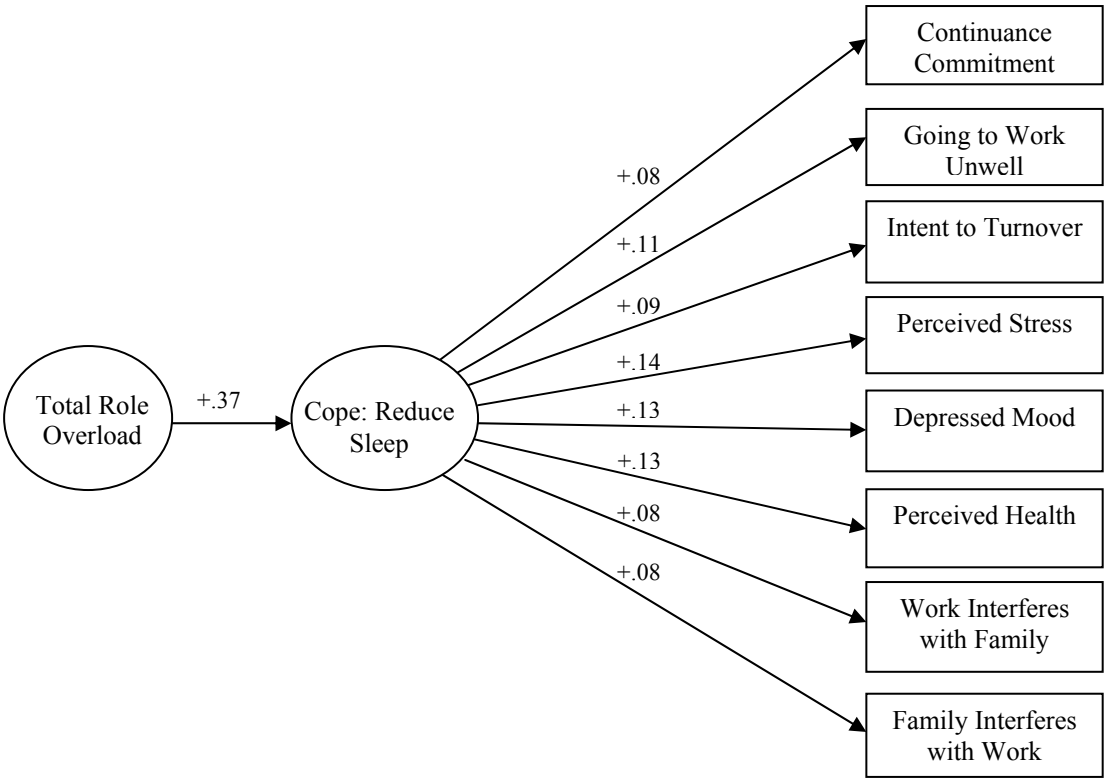
Higher levels of total overload trigger the use of prescription medicine and alcohol. At higher levels the use of prescription medicine/alcohol are associated with greater total absenteeism, poorer physical health, poorer mental health (higher depression and perceived stress) and higher family interferes with work. It is difficult to determine the direction of causality of some of these relationships. It is possible, for example, that poorer mental health, increased absenteeism, poorer health and increased alcohol/prescription drug use are both caused by high role overload. Alternatively it may be that the use of alcohol and prescription drugs as a way to cope with overload exacerbates pre-existing physical and mental health problems.

Figure 4.34: Mediation of the Relationship between Total Overload and Outcomes: Coping By Alcohol/Drugs



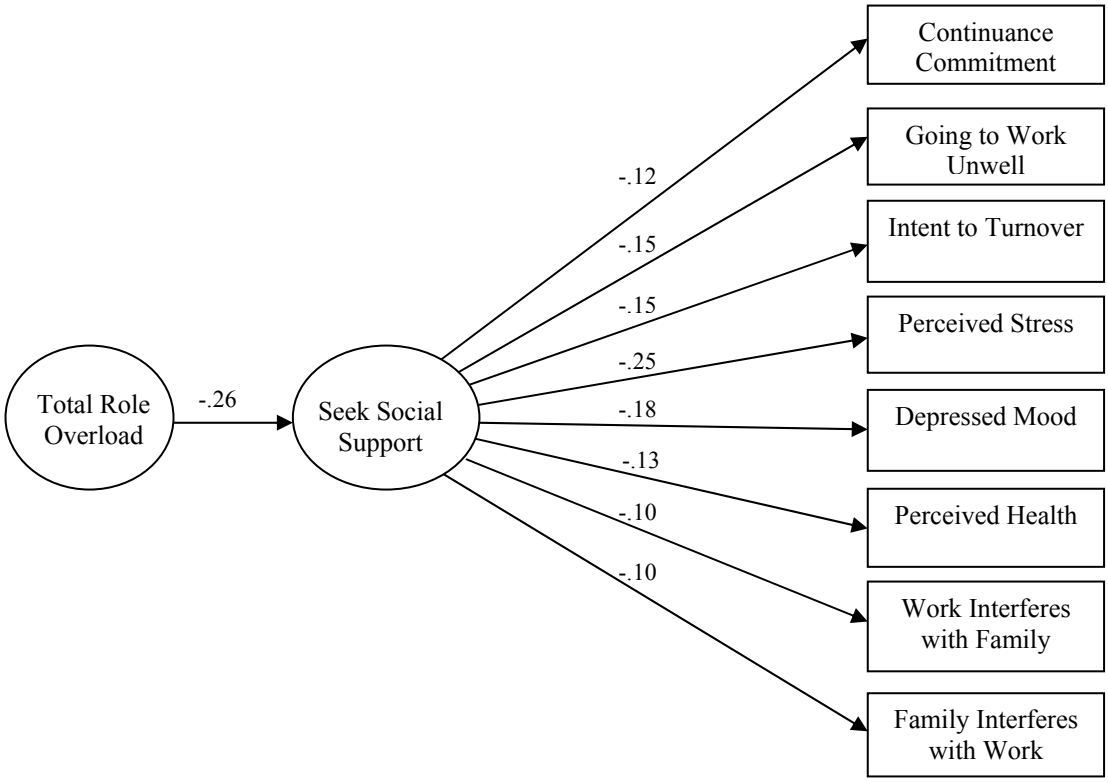
Coping by reducing sleep was found to mediate the relationship between total role overload and essentially all of the outcomes in the model. Examination of the path coefficients (see Figure 4.35) illustrates the negative impacts that coping by cutting back on sleep has on the individual and the organization. For example, while high levels of role overload triggers coping by reducing sleep, at higher levels, coping by reducing sleep is associated with poorer physical health, poorer mental health (higher depression and perceived stress), higher work life conflict (greater work interferes with family and family interferes with work), higher intent to turnover, lower commitment and loyalty, and an increased tendency to go to work when unwell. These findings are cause for concern as coping by cutting back on sleep is one of the most frequently used coping strategies in this study (51% of the sample use it often, 29% use it occasionally). These data say that employees who use this strategy are "only fooling themselves" – and that their attempts to cope will likely exacerbate the situation. These findings indicate that organizations "overwork" employees at their own risk – as overloaded employees are more likely to turn to alcohol and prescription drugs, the use of which is associated with a number of negative consequences to the employer.

Figure 4.35: Mediation of the Relationship between Total Overload and Outcomes: Coping By Reducing Sleep



Coping by seeking social support was also found to mediate virtually all the relationships between total role overload and the outcomes in the model (i.e., and continuance commitment, going to work when unwell, intent to turnover, perceived stress, depressed mood, work interferes with family, family interferes with work and physical health). The path coefficients shown in Figure 4.36 illustrate how social support mediates the relationship between total overload and these outcomes. It would appear that higher levels of role overload trigger a reduction in the use of social support (probably because people do not have time for such activities) but that higher levels of social support are associated with a greater likelihood of staying with the organization, a reduced likelihood of going to work when unwell, better physical health, better mental health (lower depression and perceived stress) and lower work-life conflict (i.e., lower work interferes with family and family interferes with work). It is interesting to note that in this case support from family and colleagues at work are more important at driving the mediation than is support from friends. When one is busy it is hard to find time to socialize and talk to family, friends and colleagues and ask for help – but these data suggest that those who make the effort to find the time will reap benefits at work and at home. The data also say that organizations who give employees opportunities at work to socialize and talk will be rewarded with higher commitment and loyalty and decreased turnover.

Figure 4.36: Mediation of the Relationship between Total Overload and Outcomes: Coping By Seeking Social Support



The key findings with respect to mediation of our model are summarized in Table 4.8. This research supports the following conclusions.

- At higher levels of total overload people are more likely to cope by using alcohol and drugs and reducing their sleep. This is unfortunate as increased use of both of these strategies is associated with increased absence from work, a decline in employee mental health (increased incidence of stress and depressed mood), a decline in physical health and increased work life conflict because employees are more likely to put family demands ahead of work. Employees who reduce their sleep as a way to cope with overload are also less committed and loyal to the organization, more likely to come to work when unwell and more likely to be thinking of leaving the organization.

- At higher levels of total overload people are less likely to cope by separating themselves emotionally or physically from the situation that contributes to the overload, seek social support and put their family first. This is unfortunate as greater use of these strategies are associated with increased loyalty at work, lower levels of intent to turnover, better mental health (lower levels of stress and depression) and physical health, and better balance between work and family.

Table 4.8: Summary of Findings with Respect to Mediation

Strategy	When Overload Increases Use of this Strategy	% of sample using Often	Impact increased use of the strategy has on:								
			Organization				Individual			Work-Family	
			Commitment	Turnover	Absenteeism	Work unwell	Stress	DM	Health	W → F	F → W
Avoidance	↓	21	↑	--	--	--	↓	--	--	↓	--
Family First	↓	15	↑	↓	--	--	↓	↓	↑	↓	--
Alcohol/Drugs	↑	5	--	--	↑	--	↑	↑	↓	--	↑
Reduce Sleep	↑	51	↓	↑	↑	↑	↑	↑	↓	↑	↑
Social Support	↓	60	↑	↓	--	↓	↓	↓	↑	↓	↓

- Employers who wish to reduce turnover need to reduce the workloads on their staff and give them opportunities to socialize and communicate with their colleagues at work.

- Employees who wish to reduce absenteeism need to reduce workloads and the sense of overload – by addressing the conditions that cause overload at work (culture, understaffing).

- Employees who wish to improve their mental and physical health need to make an effort to get enough sleep, put their family first, seek social support from friends and colleagues at work, and reduce their use of alcohol and over the counter medication.

- Employees who wish to improve their work life balance need to try and emotionally distance themselves from the situation causing them stress as well as make an effort to get enough sleep, put their family first, seek social support from friends and colleagues at work, and reduce their use of alcohol and over the counter medication.

12. Summary and Conclusions

Sector female dominated

The typical respondent to this survey is a married woman with heavy demands at work (work full time) and at home (39% spend time each week in childcare, 36% spend time each week in both childcare and eldercare and 13% spend time each week in eldercare) who lives in a family where money is not an issue.

Most workers part of a dual income family where responsibilities shared

The vast majority of the married individuals in the sample are in dual income families where family responsibilities are shared. Just over ninety per cent (94%) of the sample indicated that their partner is employed outside the home and devotes approximately 38.6 hours a week to employment activities. Three quarters said that their spouse spends time each week parenting and half said that their spouse helped with home chores and yard work. These partners spent approximately 14 hours per week in activities associated with parenting and 11 hours per week in home chores and childcare.

Experienced employees answered the survey

The majority of the respondents have worked for their current employer and held their current job for a significant period of time and belong to a union. While the majority of the sample work a fixed schedule, one in three (31%) work shifts. While just over half of the respondents (56%) do not supervise the work of others, one in four has a high number of direct reports (9 or more individuals).

Objective work demands are not onerous

Objective work demands are not onerous (the typical employee devotes approximately 37 hours per week to work), supporting our argument that hours in work is not the most important predictor of role overload.

Job quality is high for most

The data indicate that the vast majority of health care workers have high quality jobs that provide them a sense of accomplishment and enjoyment. One in three seem to have very high quality jobs (i.e., jobs that stir up real enthusiasm on their part).

Task interdependence is very high

Health care providers working in a hospital setting have high levels of task interdependence (i.e., for 60% of the sample, their ability to accomplish their work goals and complete their work depends very much on others getting their work done). High levels of task interdependence are stressful and associated with increased levels of work overload.

Many health care workers feel that their employer does not recognize their accomplishments

The majority of the respondents report moderate (44%) or low (28%) levels of Work Exchange Commitment. By comparison 68% of the sample report high levels of Family Exchange Commitment. In other words, employees are more likely to feel rewarded and valued for what they do at home – a factor that is likely to exacerbate work-life conflict and stress. Taken together, these data indicate that employers who are interested in increasing the sense of loyalty and emotional attachment in their workforce (factors that are strongly linked to retention and engagement) have to do more to recognize their employee's accomplishments at work.

Employees in the health care sector face very significant demands at home

Employees in the health care sector face very significant demands at home – a finding which is likely a function of the fact that the health care sector is female dominated. Total hours per week devoted to non-work activities was calculated to be 57.5 hours: an average of 12.2 hours per week in home chores and yard work, 7.7 hours per week commuting to work, 13.5 hours per week in leisure activities, 18.9 hours per week in childcare, 2.5 hours per week in eldercare and 2.7 hours per week volunteer activities/community work.

The role of parent and manager are particularly stressful

An examination of the total role data gives us a better appreciation of the life circumstances of the individuals in our sample. The typical respondent spends time and energy each week in 4 to 6 different roles. One in four participate in 7 or more roles each week. The Life Roles data show that three roles are problematic for the majority of the respondents in that they require a

moderate to high amount of time and energy from the role holder: parent of a dependent child, employee and supervisor manager.

Understaffing, increased complexity of the work and the culture of health care are contributing to increased overload

In terms of stressors from the organizational domain, the most problematic appear to be understaffing and increased complexity of the work (40% of the sample said that these were often a source of role overload for them). Other factors that were problematic for a substantive group of workers include the culture of health care (one in three find this problematic), government policies with respect to wait time and ineffective change management practices (one in four had problems in both of these areas). Very few people (15% of the sample) appear to experience stresses from working at multiple sites.

The majority of health care workers report high levels of work overload and total overload

Overall these findings indicate that high levels of work role overload and total role overload are problematic for a majority of those working in Canada's hospitals. The fact that the hospital workers in our sample are twice as likely to report high levels of work role overload (57% high) as report high levels of family role overload (24% high) suggests that work demands are more likely to overwhelm employees than are family demands. The fact that fewer of the respondents report high levels of total role overload (48% high) than report high levels of work overload support our contention that some employees cope better with domain specific role overload (i.e., overload from the work and family domains) than others.

One in four employees in this sample has high intent to turnover

The continuance commitment and intent to turnover data paint a similar picture: while half the respondents to this study are unlikely to leave their current employer (half have high levels of continuance commitment and 43% say they rarely think of leaving their current place of work) the fact that approximately one in four are likely to leave (27% have low continuance commitment, 26% are thinking of leaving several times a week or daily) should be cause for concern given the significant costs associated with recruitment. Of relevance to this issue is the fact that the data indicate that employees are unlikely to leave for higher pay. Instead, the two most common reasons for leaving (cited by almost half the sample) are greater control over work hours and more respect.

Absenteeism is very high within the health care sector

Absenteeism is very high within the health care sector. Two thirds of respondents missed work in the past six months. Total days absence for the total sample is 8.4 days per year while those in the absent subsample missed 13 days of work in the past year. The most common causes of absenteeism are health problems, physical or emotional fatigue (i.e., "a mental health day") and childcare. While relatively few employees miss work because of eldercare, because a personal/vacation day was not granted or because they are avoiding issues at work, those who do

take time off for these reasons miss a substantive number of days work a year (6.4 days due to eldercare, 3.2 days because time off not granted, and 4 days because of issues at work).

One in three are absent from work due to emotional and physical fatigue

Absence due to emotional and physical fatigue, in particular, seems to be a problem in this sector. One in three has missed work in the past six months due to emotional or physical fatigue. These employees missed almost 9 days of work a year. These data suggest that approximately one in three hospital employees are at risk for burnout.

The typical health care worker comes to work when they are physically unwell

Three-quarters of the survey respondents frequently (i.e., 6 times per year on average) came into work when they were unwell. While the tendency to come in to work when unwell seems to be part of the culture of healthcare, this behavior is problematic in that it is likely to be associated with decreases in productivity and efficiency.

Benefits use attributable to increased overload is high

Just over half of the respondents (55%) have purchased prescription medicine for their personal use in the last six months and 11% have used EAP services. Since the organization pays for both of these benefits, linking their use due to the incidence of role overload allows us to link overload to the organization's bottom line.

Many health care workers in Canadian hospitals are in poorer mental and physical health

The data on the mental and physical health of our sample of hospital workers are worrisome as they indicate that a significant per cent of the health care workers in Canadian hospitals are in poorer mental and physical health (i.e., 59% report high levels of stress, 36% report high levels of depressed mood and one in five in are poor physical health). It should be noted that the levels of stress and depressed mood observed in this sample are substantively higher than in other sectors (see Duxbury and Higgins, 2009).

Employees three times more likely to give priority to work than family

Only one form of work-life conflict appears to be problematic for our respondents: work interferes with family. One in three report high levels of work interferes with family (i.e., that their responsibilities at work interfere with their ability to meet role demands at home) – three times the number that report that their family responsibilities interfere with their work. Virtually no one in the sample reported high levels of caregiver strain due to eldercare. While the findings with respect to work interferes with family and family interferes with work are similar to those reported by Duxbury and Higgins (2009), caregiver strain appears to be lower in this sector.

Hospital workers cope with overload by taking direct action, reducing sleep and seeking support

To cope with overload respondents take direct action (63%) and they get by on less sleep (51%). One in three seek help from others and try and view the situation positively. One in five try and separate themselves emotionally or physically from the situation. While very few individuals seek to cope by putting their family first (15%) or drinking/using prescription medicine, it should be noted, however, that 5% use prescription medicine/alcohol often and another 18% use them occasionally as a way to cope with overload. Health care employees also cope by seeking support from others. Two thirds of the sample seek support from friends and family. Just over half seek support from colleagues at work.

Health care workers have very low control over their work

Perceived control is defined "as the belief that one has the ability to make a difference in the course or the consequences of some event or experience" There is a vast literature linking perceived control with an increased ability to deal with stressors. While half the sample (54%) have high levels of perceived control over their family life (41% have moderate levels and 5% have low levels.), very few hospital workers high levels of control over their work environment (only 13% high), their pace of work (only 15% high), or over their work day (25% with high perceived flexibility). Finally, perceived control over work schedule is highly variable with approximately equal numbers saying they have high control, moderate control and low control. As will be noted later, job type is a very strong predictor of control over work schedule.

Very few employees perceive their hospital to be a supportive employer

Perceived organizational support (POS) within the hospitals we studied is very low. Only 24% of the sample report high POS while 33% report low. The rest of the sample (42%) report moderate levels of POS.

Less than half the sample perceives their immediate manager to be supportive

Fewer than half (45%) of the respondents view their manager as supportive, 21% rate their manager as non-supportive and 34% view their manager as "mixed" – supportive in some ways, non-supportive in others. Unfortunately, our previous work in the area shows that employees respond in essentially the same fashion to mixed managers as they do to non-supportive managers.

Very few employees have a positive view of the organizational culture

How do respondents see the culture within their organization? Less than one in four agree that the culture has the positive attributes associated with a values driven, cohesive culture, a culture of appreciation and respect, and a culture of team work, while approximately 30% disagree that these cultures exist in their place of work. On a more positive note, only one in five agree that the culture is one that forces a choice between work and family while one in three disagree.

Organizational culture, understaffing, and the increased complexity of work are key predictors of work role overload

Ten predictors of role overload explain 51% of the variation in work role overload. Higher levels of work role overload are strongly associated with:

- working in an environment that subscribes to the culture of health care: the more the employee believes that they cannot say no to more work, that they have too many priorities, that it is hard to get help, and that it is hard to leave when ones shift is over, the more likely they are to experience work overload.
- working in an area that is understaffed.
- the increased complexity of the cases facing many health care providers.
- higher levels of task interdependence (i.e., cannot complete work independently).
- having to work at multiple sites or for multiple units.
- the occupancy of a greater number of roles.
- the number of hours one spends in work per week.
- having to supervise the work of others (the more direct reports one has, the higher the work overload they are likely to experience).
- government policies designed to reduce wait times.
- a decrease in the amount of time one has to spend in leisure.
- working full time (rather than part time or on a casual basis).

The actual hours in work per week is not the most important predictor of work role overload.

The families' financial situation and the number of roles they hold are key predictors of family role overload

We are not as able to predict family role overload as work role overload. Six variables were able to explain 24% of the variation in family role overload. Higher levels of family role overload are strongly associated with:

- Total Roles: the more roles one has, the higher the family role overload.
- The families' financial situation: the lower the family income, the higher the family role overload. This finding is likely due to the fact that people who live in families where money is tight are less able to purchase support for family tasks.
- Hours per week in childcare, home chores and eldercare: the more time one spends in childcare, home chores and eldercare, the higher the family overload.
- The more value an employee places on their role as a parent, the more likely they are to experience higher levels of family role overload.
- Spouse hours in childcare and home chores.
- Working in an environment that subscribes to the culture of health care (i.e., cannot say no, cannot get away from work on time).

Overload at work and home predict total role overload

Both family role overload and work role overload are important predictors of total role overload. We are able to predict 48% of the variation in total role overload if we know how overloaded an individual is at work and at home. Not surprisingly, the higher the overload is at work and at home the greater the overload is overall.

Overloaded employees more likely to be absent from work and think of quitting

The data from this study indicate that the higher the total role overload the more likely the employee is to be absent from work, to use the organization's EAP services, and to think of leaving the organization, and the less likely they are to be loyal to the organization. These findings link higher levels of role overload to challenges with respect to recruitment, retention and the organization's bottom line (costs associated with absenteeism and benefits).

Overloaded employees more likely to be in poor mental and physical health

The data from this analysis show that the higher the total overload experienced by an employee, the poorer their physical and mental health (i.e., higher overload predictive of higher stress, higher depressed mood and poorer physical health).

Overloaded employees more likely to experience challenges balancing work and family

The data from this research initiative indicate that the higher the total overload experienced by an employee, the higher the conflict between work and family (i.e., the greater the work interferes with family, family interferes with work and caregiver strain).

Management support moderates the relationship between work overload and total overload

Management support moderates the relationship between work role overload and total role overload. The presence of a supportive manager reduces the negative effect of work role overload on total role overload ($p < .05$).

To reduce the negative impact of total overload health care organizations need to focus on organizational culture and the immediate manager

Findings from this study indicate that health care organizations who wish to reduce the negative connection between high levels of total role overload and impaired organizational performance, poorer employee physical and mental health, and increased work life conflict, need to focus their attention on cultural change and increasing levels of management support. The following findings with respect to moderation support this contention.

- A culture of work or family moderates the relationship between total role overload and most of the organizational outcomes examined in this study. In particular it increases the negative

effects of total role overload on total absenteeism, the likelihood an individual will go to work when they unwell, and intent to turnover.

- A culture of appreciation weakens the negative relationship between total role overload and total absenteeism and between total role overload and intent to turnover.

- A cohesive, values culture reduces the negative effect of total role overload on two of the organizational outcomes included in our model. More specifically it reduces the negative relationships between total role overload and total absenteeism and total role overload and the likelihood an employee will go to work when they are unwell.

- A culture of teamwork reduces the negative impact of total role overload on intent to turnover.

- The presence of non-supportive management moderates the relationship between total overload and intent to turnover and the relationship between total role overload and the use of EAP such that there is an increase in intent to turnover and a decline in the use of EAP in the presence of non-supportive management.

- The presence of a supportive manager also moderates the relationship between total overload and the use of EAP such that there is an increase in the use of EAP in the presence of a supportive manager.

Social support makes a positive difference, but overloaded individuals have less time to socialize

Social support mediates the relationship between work overload and total overload. Social support also mediates virtually all the relationships between total role overload and the outcomes in the model. In all cases, higher levels of overload (work or total) trigger a reduction in the use of social support (probably because people do not have time for such activities). This is an unfortunate finding as higher levels of social support are associated with lower levels of total overload, a greater likelihood of staying with the organization, a reduced likelihood of going to work when unwell, better physical health, better mental health (lower depression and perceived stress) and lower work-life conflict (i.e., lower work interferes with family and family interferes with work). When one is busy it is hard to find the time to socialize and talk to family, friends and colleagues and ask for help – but these data suggest that those who make the effort to find the time will reap benefits at work and at home. The data also say that organizations who give employees opportunities at work to socialize and talk will be rewarded with higher commitment and loyalty and decreased turnover.

Distancing oneself from the stressor makes a positive difference, but overloaded individuals less able to avoid the situation

Coping through the use of avoidance mediates the relationship between work overload and total overload and between total overload and continuance commitment, stress and work interferes

with family. Examination of the path coefficients paints the following picture. The higher the overload experienced by the employee, the less likely they are to cope by avoidance (probably because the situation is so overwhelming that it is hard for them to separate themselves from it emotionally). The less able the employee is to cope by avoidance the more likely they are to report high total overload, to be thinking of leaving the organization, to report high levels of perceived stress and to experience interference between work and family, probably because they take the "problem" home with them. These findings suggest that confronting the source of overload and continual exposure to the situation that is causing the overload to occur increases one's sense of being overloaded. Employees who can separate themselves physically and mentally from the situation causing the work overload appear to be better off.

Cutting back on sleep does not work

Coping by reducing sleep was found to mediate the relationship between work overload and total overload and between total role overload and essentially all of the outcomes in the model (i.e., ccontinuance commitment, going to work when unwell, intent to turnover, perceived stress, depressed mood, work interferes with family, family interferes with work and physical health). The data show that people who are exposed to higher levels of work overload and total overload are more likely to try and cope by cutting back on their sleep. The more they cut back on sleep, however, the more likely they are to report higher levels of total overload, poorer physical health, poorer mental health (higher depression and perceived stress), higher work life conflict (greater work interferes with family and family interferes with work), higher intent to turnover, lower commitment and loyalty, and an increased tendency to go to work when unwell. These findings are cause for concern as coping by cutting back on sleep is one of the most frequently used coping strategies in this study (51% of the sample use it often, 29% use it occasionally). Our research shows that employees who use this strategy are "only fooling themselves" – and that their attempts to cope will likely exacerbate the situation.

Putting family first associated with a number of positive outcomes

Putting family first mediates the relationship between total overload and most of the outcomes in this study. In all cases the relationship is the same. The higher the levels of total role overload the less likely one is to cope by putting family first - an unfortunate finding as higher use of coping by putting family first is associated with better mental health (i.e., lower levels perceived stress and depression), an increased ability to balance work and family (i.e., lower work interferes with family), and a greater commitment and loyalty to one's employer (i.e., lower intent to turnover, higher commitment).

The use of prescription medicine and alcohol as a way to cope with overload is problematic

Higher levels of total overload trigger the use of prescription medicine and alcohol. At higher levels the use of prescription medicine/alcohol are associated with greater total absenteeism, poorer physical health, poorer mental health (higher depression and perceived stress), and higher family interferes with work. It is difficult to determine the direction of causality of some of these relationships. It is possible, for example, that poorer mental health, increased absenteeism, poorer health and increased alcohol/prescription drug use are both caused by high role overload.

Alternatively it may be that the use of alcohol and prescription drugs as a way to cope with overload exacerbates pre-existing physical and mental health problems.

Recommendations to key stakeholder

This research supports the following conclusions.

- Employers who wish to reduce turnover need to reduce the workloads on their staff and give them opportunities to socialize and communicate with their colleagues at work.

- Employees who wish to reduce absenteeism need to reduce workloads and the sense of overload – by addressing the conditions that cause overload at work (culture, understaffing, complexity of work).

- Employees who wish to improve their mental and physical health need to make an effort to get enough sleep, put their family first, seek social support from colleagues at work and friends and reduce their use of alcohol and over the counter medication.

- Employees who wish to improve their work life balance need to try and emotionally distance themselves from the situation causing them stress as well as to make an effort to get enough sleep, put their family first, seek social support from colleagues at work and friends and reduce their use of alcohol and over the counter medication.

Key findings: job type

The sample is well distributed with respect to job type. The characteristics of the sample varied somewhat with job type. Job type was not associated with levels of family role overload, continuance commitment, intent to turnover, the likelihood of going to work when unwell (it's the culture!), absenteeism due to childcare and eldercare, use of EAP, and the likelihood of purchasing prescription drugs. Nor was job type associated with two of the three measures of work-life conflict examined in this study: family interferes with work and caregiver strain. Job type is, however, strongly associated with the other variables examined in the analysis. These differences are articulated below.

Physicians: Compared to those in the other job groupings, the typical physician in the sample is older (55% Boomer), male, married and lives in a family where money is not an issue. They feel valued by their family (75% report high levels of family exchange commitment) and spend fewer hours in yard work and home chores than those in other job groups. They are, however, less likely to perceive that they have control over their home life (only 42% of physicians reported high levels of control over their home life).

Physicians are less likely to work shifts and more likely to supervise 9 or more people (21% do so) and hold more than one job for pay. They have also spent more years in their current job than those in the other job groupings.

The physicians give their jobs the highest quality rating of any group (85% say that most of the time/always they feel that they have accomplished something worthwhile at the end of the day; 95% say that the kind of work they do has a favorable influence on their attitude towards their job and 80% enjoy the majority of the things they do at work). Physicians also report significantly lower levels of task interdependence (i.e., more able to be able to work independently, less of a reliance on others) – a factor that likely moderates the relationship between work demands and physical and mental health. Physicians were also more likely than others to perceive that they had a moderate level of control over their work environment, lower levels of task interdependence (i.e., more able to work independently) and reported higher levels of perceived organizational support (40% high).

Physicians were more likely than those in other groups to report to a mixed manager – a finding that is likely due to the fact that many physicians have been trained to and prefer to treat patients, not manage their colleagues.

Physicians have higher levels of work overload (60% high), total overload (61% high) and very high levels of work interferes with family (55% high). This is consistent with the fact that they are more likely to carry a pager and be required to work on call 4+ times per month.

Those in the physician group were more likely to identify the following as key predictors of overload for them: the culture of health care (40%), they fact that they have to work at multiple sites (21%), and because their work is now more complex (51%).

Those in the Physician group are less likely to be absent from work than those in other job groups (40% of physicians have missed work in the last six months compared to just over two-thirds of those in the other groups). This difference can be attributed to the fact that those in the Physician groups were substantially less likely than other employees to miss work due to health problems, emotional and physical fatigue and because they were not allowed a personal day off work. It is also consistent with the data showing they are in better health (i.e., less likely to report high levels of stress (50% high) and depressed mood (16% high), less likely to say they are in poor health (7% poor) than other health care workers.

Finally, physicians are more likely to cope with overload by taking direct action (68%) and by seeking social support from their families (75%) and their colleagues at work (66%).

In summary, the data would suggest that in many ways, physicians are relatively well off compared to other health care workers.

Nurses/Clinical Staff

Compared to those in the other job groupings, the typical nurse in the sample is more likely to live in a family where money is tight and work shifts. At work they are less likely to supervise 9 or more people.

The job itself seems to be problematic for nurses/clinical staff. Nurses/clinical staff are more likely than those in other job groups to perceive their jobs to be lower in quality and have the

highest levels of task interdependence (75% have high interdependence) and lowest levels of work exchange commitment (35% low). In other words, it is very hard for nurses and clinical staff to get their job done independently and individuals in these jobs do not feel that their employer recognizes when they do a good job.

The lack of control of their work and their work environment appears to be a major problem for nurses/clinical staff. They have the lowest levels of control over their work environment (only 8% high levels of control), their work schedule (60% report low control, only 18% have high control), the pace of their work (half report low levels of control, only 10% have high control), and their work day (60% have low perceived flexibility). They are also more likely to say that they often experience stress because of understaffing (52%) and because their work is now more complex (50%).

Nurses/Clinical Staff report higher levels of work role overload (60% high) but not total overload (45% high). They are also more likely to report that their physical health is poor (26% poor).

These findings are consistent with the fact that nurses/clinical staff are less likely to perceive that the organization is supportive (40% low POS) and more likely to disagree that the organizational culture in their hospital was one of appreciation and respect (33% disagree).

Nurses/clinical staff are more likely to cope with stress by using alcohol/drugs (25% use them occasionally or often), absenting themselves from work to avoid issues, and less likely to cope by seeking support from their families (60%).

Allied Health: Professional

The data would suggest that employees in this group are relatively well off compared to other health care workers. Compared to those in the other job groupings, the typical Allied Health: Professional in the sample is less likely to work shifts , less likely to supervise 9 or more people, and more likely to say that the kind of work they do has a favorable influence on their attitudes towards their job. This group is more likely to perceive their jobs to be of higher quality and they have lower levels of task interdependence (49% have high interdependence). Employees in this group report lower levels of work interferes with family (20% high) and are more likely to feel that they have control over the pace of their work (25% high) as well as their work environment (57% have moderate control). They are, however, more likely to say that they often experience stress because their work is now more complex (50%).

Allied Health: Technical

Compared to other groups those in the Allied Health: Technical sample are more likely to rate their jobs as higher in quality. They are more likely to say that the kind of work they do has a favorable influence on their attitudes towards their job, that they enjoy what they do at work, and that their work stirs up real enthusiasm. Employees in this group are also less likely to supervise 9 or more people.

The data also indicate that employees in the Allied Health: Technical group face significant challenges. Compared to those in the other job groupings, the typical Allied Health: Technical worker:

- is more likely to work shifts.
- is more likely to have to work on call 4+ times per month.
- has spent more years in their current job (despite the fact that they tend to be younger).
- has higher levels of task interdependence (60% high).
- has lower levels of work exchange commitment (34% feel that their employer does not value their work) and perceived organizational support (44% feel that the organization is not supportive).
- is more likely to say that they often experience stress because of understaffing (54% feel this way).
- is more likely to report to a supportive manager (only 27% rated their manager as supportive while 32% rated them as non-supportive).
- is more likely to perceive that they have very little control over their work (only 8% have high levels of control over their work environment, only 18% have high control over their work schedule, 10% have high control over the pace of their work, and 15% have high control over their work day).
- is more likely to suffer from depressed mood (44% high, the highest level of depression in the sample).

Not surprisingly, given the above finding, those in the Allied Health: Technical group have the most negative view of the culture within their hospital: only 16% agreed that it was one that was value driven, only 12% agreed that it was one of appreciation and respect, only 15% said it was one of teamwork. One in three agreed that it was one that forced a choice between work or family.

Those in the Allied Health: Technical group are more likely to cope with stress and overload by using avoidance (30%), alcohol/drugs (32% use occasionally or often) and being absent because they wanted to avoid issues at work. They were less likely to cope by taking direct action (55%), seeking help from others (22%) and by seeking support from colleagues at work (45%).

Support Staff

Compared to those in the other job groupings, the typical respondent in the Support Staff group is older (60% boomer) and more likely to live in a family where money is tight. They are less likely to work shifts and less likely to supervise 9 or more people. While they are less likely to work in jobs with high levels of interdependence, they are more likely to perceive that their jobs are lower in quality, report less control over their work day, and are less likely to feel that their organization is supportive (i.e., 40% low perceived organizational support). They are also more likely to disagree that the organizational culture in their hospital emphasized and supported teams (35% disagree) and was one of appreciation and respect (33% disagree).

Management

Compared to those in the other job groupings, the typical Manager in the sample is older (60% boomer) and less likely to work shifts. Virtually everyone (77%) in this group supervises 9 or more people. They are more likely to have to carry a pager and be required to work on call 4+ times per month. They have spent fewer years in their current job and virtually no one in this group works part-time.

Those in the Management group are less likely to be absent from work (46% of management have missed work in the last six months compared to just over two-thirds of those in the other groups). This difference can be attributed to the fact that those in the Management groups were substantially less likely than other employees to miss work due to health problems, emotional and physical fatigue, and because they were not allowed a personal day off work.

Those in the Management group are more likely to cope by using Positive Thinking (40%), help seeking (40%), taking direct action (66%) and by using alcohol/drugs (27% use occasionally or often).

The negatives of the job of management within a hospital can be appreciated by the following data:

- Management has the lowest quality jobs in the sample. Only 46% say that most of the time/always do they feel that they have accomplished something worthwhile at the end of the day and only 20% have jobs that stirs up enthusiasm for them.
- Management also very high levels of task interdependence (70% high).
- Management is more likely to say that they often experience stress because of the culture of health care (52%), because they work at multiple sites (33%) and because their work is now more complex (51%).
- Management reports the highest levels of work role overload (78% high) and very high levels of total role overload (60% high).
- Management reports the highest stress levels in the sample (65% high).
- Management reports higher levels of work interferes with family (40% high).

What is, striking, however, is how differently those in the Management group perceive the organization. Consider the following:

- Management report the highest levels of work exchange commitment (sense of being valued by their employer - 44% high).
- Those in management positions are more likely to perceive that they have control over their work environment and their work schedule (53% high, 7% low). They also report more control over their work day (50% have high perceived flexibility) and higher perceived organizational support (40% high).
- Management are more likely to have a supportive manager (61% view their manager as supportive, 9% view their manager as non-supportive).
- Management has a different view of the culture than the rest of the workforce. They are more likely to perceive that the culture is cohesive and values driven (45% agree, only 15%

disagree) and is based on appreciation and respect (40% agree, only 12% disagree). Managers were also more likely to be sitting on the fence with respect to the culture of teamwork (65% neither agreed nor disagreed).

These findings present a challenge. Senior leadership needs to drive any efforts to change the culture within the organization but, given the above responses, many in this group may not see the need for change.

Key Findings: Life Cycle Stage

Life cycle stage is not associated with the majority of the variables considered in this study. Life cycle is not, for example, associated with work demands, quality of work, having a pager, having to work on call, work exchange commitment, family exchange commitment, time per week in home chores and community work, work role overload, continuance commitment, intent to turnover, the likelihood of going to work when unwell, use of EAP, the purchase of prescription drugs, total absenteeism and absenteeism due to mental fatigue, physical or mental health, work interferes with family or caregiver strain. In fact, one conclusion that is supported by these findings is that hospitals are "life cycle stage" blind and treat work and family as separate worlds – a strategy that runs counter to what many in other sectors are doing.

The discussion below, points out the few differences that are related to life cycle stage.

<u>No dependents and eldercare group</u>

Compared to those in the other life cycle stages, the typical individual in the no dependent and eldercare group are less likely to be married (25% of those in the no dependent group and 33% in eldercare group are single) and more likely to say money is not an issue in their family. Employees in both groups are more likely to have no direct reports and have fewer years of tenure in their current organization and their current job. They are more likely to work in lower quality jobs and have higher levels of task interdependence. They have fewer demands outside of work and report lower levels of family role overload (10% of no dependent group and 16% of eldercare group high) and total role overload (38% high in no dependent group and 40% of eldercare group high).

<u>Childcare only</u>

Compared to those in the other life cycle stages, the typical individual in the Childcare group is more likely to be a married Baby Boomers (65%), to live in families where money is tight, to supervise 9 or more people, to have spent 11+ years working for their present hospital and 5+ years working in their current job. They are more likely to work in high quality jobs and have lower levels of interdependence They spend more time in childcare per week (22 hours) and report higher levels of family interferes with work (15% high), family role overload (33% high), and total role overload (52% high). They are more likely to miss work due to problems with their children).

Sandwich

Compared to those in the other life cycle stages, the typical individual in the Sandwich group is more likely to be a married Baby Boomer (50%) or part of Gen X (45%). They are more likely to live in families where money is tight, supervise 9 or more people, have spent 11+ years working for their present hospital and 5+ years working in their current job. They too are more likely to work in high quality jobs and have lower levels of interdependence. They have very high family demands: 27 hours per week in childcare and 4 hours per week in eldercare. They report higher levels of family role overload (28% high), total role overload (51% high) and family interferes with work (15% high). They are more likely to miss work due to problems with their children and because of eldercare concerns.

This concludes our analyses of the survey data. The next chapter of the report presents findings from our interview study which was designed to give us a deeper understanding of the causes, consequences and moderators of role overload.

Chapter Five
Key Findings From The Employee Interview

The final phase of our research involved in-depth interviews designed to help increase our understanding of the survey data and to give us a better understanding of the factors that make some people feel overloaded in a particular situation – while others do not. Specifically, this part of the research study was designed to help us understand:

- The role overload appraisal process
- What contributes to feelings of overload and work and at home
- How people cope with overload and work and at home
- The consequences of overload at work and at home

This chapter is divided into 4 sections. Section one describes the methodology used to conduct the interviews. Section two provides an overview of responses given by respondents when asked to describe two overload situations: one that had resolved itself successfully and one that had not. Section three examines the responses given to five summary questions at the end of the interview. Conclusions are drawn in the fourth and final section of this chapter.

1 Methodology

This section of the chapter is divided into three parts. The first describes how the interview sample was selected. The second gives a brief demographic description of the sample. In part three we summarize how the interview was undertaken and the data analyzed.

1.1 Sample selection

At the end of the survey we included the following question:

> "Would you be willing to be interviewed in order to help us understand how to address the issue of role overload within your hospital. If so, please provide us your first name and telephone number in the space provided below."

In total 252 people gave us their names (18% of the total sample). The interview sample was selected as follows. As a first step we classified all respondents into sixteen groups based on their work overload (H/L), family overload (H/L), total overload (H/L), and perceived stress (H/L), scores. In all cases scores were classified as being either "High" or "Low" using population norms (see data analysis section in Chapter Four). We then selected the sample so that, with one exception (those with low stress scores), it would correspond as much as possible to the survey sample with respect to job type, gender, etc. Consistent with the findings from the survey, relatively few volunteers had low perceived stress scores. As such, we decided to interview all volunteers with low stress scores that we could reach. This decision is consistent with the fact that one of the main objectives of this phase of the study was to try and determine why some people feel overloaded in a particular situation while others do not.

The final breakdown of the 150 people in our interview sample is given in Table 5.1.

Table 5.1: Interview Sample by level of Overload and Stress

High Work Overload, High Family Overload		**% of Total Sample**	
High Total Overload, High stress	n = 35	23%	
High Total Overload, Low stress	n = 16	11%	43%
Low Total Overload, High stress	n = 5	3%	
Low Total Overload, Low stress	n = 9	6%	
High Work Overload, Low Family Overload			
High Total Overload, High stress	n = 20	13%	
High Total Overload, Low stress	n = 18	12%	39%
Low Total Overload, High stress	n = 6	4%	
Low Total Overload, Low stress	n = 14	9%	
Low Work Overload, High Family Overload			
High Total Overload, High stress	n = 2	1%	
High Total Overload, Low stress	n = 3	2%	6%
Low Total Overload, High stress	n = 2	1%	
Low Total Overload, Low stress	n = 3	2%	
Low Work Overload, Low Family Overload			
High Total Overload, High stress	n = 1	0%	
High Total Overload, Low stress	n = 0	0%	11%
Low Total Overload, High stress	n = 2	1%	
Low Total Overload, Low stress	n = 14	9%	

This sample distribution is virtually identical to the distribution of the total survey sample with respect to the relationship between work overload, family overload, total overload and perceived stress. A number of important observation can be made from this analysis:

- High work overload and high family overload frequently co-exist (43% of the sample report high levels of both forms of overload).
- High work overload and high total overload, frequently co-exist (60% of the sample report high work overload and high total overload). By comparison, only 24% of those with high family overload also report high total overload.
- Very few employees within the health care sector experience low levels of work role overload (17%).
- Employees do not experience high levels of total overload if they are not overloaded at either work or at home (only 1 person out of 150 had high total overload but low work and family overload).
- Half (48%) of those in the high work overload group report low levels of stress compared to 29% of those in the high family overload group; 37% of those in the high total overload group report high stress.
- Half the sample report lower levels of stress. The low stress group is distributed as follows: 18% also have low work, family and total overload, 21% have high work, family and total overload, 12% have high work, high family and low total overload, 23% have high work and

total overload but low family overload, and 18% have high work, low family and low total overload.

1.2 Demographics of the sample

The demographic characteristics of the interview sample were very similar to that observed for the survey sample. Almost one in five (17%) of the interview respondents were male. With respect to job type, 5% were doctors, 17% were nursing/clinical staff, 23% were Allied Health: Professional and 7% were Allied Health: Technical. One in four (25%) were managers and 22% were union/non-union support. Just over half (57%) have been in their current role for less than five years while 43% have been in their current position for 5 years or more. Half of the sample spend less than 25% of their day dealing with patients, the rest spend more than half of their day dealing with patients.

1.3 Analysis of the interview data

The interview script is given in Appendix D. The script was developed iteratively and pretested on five individuals before being rolled out. The interviews were conducted by telephone in the spring, summer and fall of 2008 by three PhD students from Carleton University. They were all recorded with permission of the respondents. The interviews took between 30 and 90 minutes to complete (those in the H, H, H, H group were, in particular, very long). The interview was content analyzed for themes and a coding sheet prepared by the PhD student who will be using some of this data for her thesis. The approach taken in the initial coding sheet creation stage was to include a category for all possible relevant responses – the rationale being that categories could be collapsed later but it would be difficult to disentangle a category that was large and general. The coding sheet was reviewed by the other interviewers and the researchers and refined three times. The students who conducted the interviews then content coded the interviews using the final version of the coding sheet. No one coded their own interviews. The PhD student who managed the projects randomly checked some of the coded interviews to ensure consistency of interpretation. The three PhD students discussed any problems and sought clarification when necessary throughout the interview process. The coded interviews were input into SPSS and response frequencies were calculated. The data was then examined again and response categories collapsed as necessary.

2. Role overload scenarios

We began the main part of the interview with the following preamble:

> *"In this section of the interview we are going to focus on your experiences of role overload. Role overload is defined as having too much to do and not enough time to do it. In order to understand how people respond and cope with overload I would like you to think about a situation where you felt overloaded – you just had too much to do, and not enough time. This situation can be at work OR at home, whatever comes to mind. I'm going to walk you through the experience by asking you a number of questions to help me understand the situation, how it unfolded, how you felt about the situation, what you did to try and reduce the overload, and how you now evaluate your actions."*

We then asked the respondent a series of questions about this situation.

We ended this section of the interview with the following statement:

> *Thanks for sharing this example with me. It was very useful. You described an overload situation that (you were able to overcome so that you felt comfortable with at the end of the day/ was stressful for you and that resulted in your feeling overwhelmed and you were not happy with how it turned out). Can you describe a situation within the past six months that went the other way. Where despite feeling overloaded you were able to resolve the situation in the end in a very favourable way/the situation resulted in you feeling very overwhelmed – and you were not happy with how it had turned out. Again, this could be at work or home. I am going to ask you the same set of questions as before, but in this case I want you to focus on this second situation.*

This section of the report presents the results of these two sections of the interview. We present them side by side so the reader can see the similarities and differences with respect to the two different types of scenarios. It should be noted that only those responses given by 10% or more of the sample in at least one time period are presented and discussed in the section below. It should also be noted that in the discussion below we often refer to these two situations as Situation A (the one that was resolved) and Situation B (the one that was not resolved) and that the responses often sum up to more than 100 as many respondents gave multiple responses to each question.

Situation they *could* resolve	**Situation they *could not* resolve**
• 79%: no difficulty thinking of situation • 19% had difficulty: most of the individuals who gave this response stated that they were overloaded continuously/frequently and had problems picking one specific situation. • 97% of the respondents indicated that they had identified a situation that was very stressful or overwhelming but they were able to overcome	• 80%: no difficulty thinking of situation • 15% had difficulty: most of the individuals who gave this response stated that they were overloaded continuously/frequently and had problems picking one specific situation. • 95% of the respondents indicated that they had identified a situation that was very stressful or overwhelming and that were not happy with how the situation had turned out.

2.1. Description of the situation

The majority of the respondents had no problems thinking of two situations that had caused them to feel overloaded: one they could resolve, the other that they could not. Those who had difficulty thinking of a situation were overloaded so often that they had difficult thinking of just one situation that was problematic. In the end, virtually everyone answered the complete set of questions referring to two different scenarios.

We began the interview by asking the respondents to describe the situation for us. Specifically we asked them:

- What made you feel overloaded? What was it about the situation itself?
- What were your initial thoughts about the situation? Did you feel that the situation was harmful to you, or potentially threatening in any way, or challenging to you? In what way?
- What was your over riding feeling about the situation?

Responses to these questions are discussed below.

Situation they *could* resolve		**Situation they *could not* resolve**	
Roles involved in this overload scenario			
Work role	79%	Work role	69%
Family role (i.e. parent, spouse)	19%	Family role (i.e. parent, spouse)	23%
Combination of roles	9%	Combination of roles	10%
Describe the situation			
Major project at work	22%	Major project at work	22%
Unscheduled/additional work	21%	Unscheduled/additional work	21%
My ongoing daily work life	21%	My ongoing daily work life	7%
Competing demands on my time	14%	Competing demands on my time	8%
Interpersonal conflict	4%	Interpersonal conflict	15%
What was it about the situation itself that made you feel overloaded?			
Too much to do in the time available	46%	Too much to do in the time available	37%
Time intensive, complex task	30%	Time intensive, complex task	23%
Unexpected high priority issues	16%	Unexpected high priority issues	9%
Others expectations of you	13%	Others expectations of you	15%
Was the only one able or available to do the job	13%	Was the only one able or available to do the job	17%
A lack of control over the situation	10%	A lack of control over the situation	10%

There were very few differences between the two sets of scenarios. What causes people to feel overloaded? Most of the situations described involved work (e.g. a major project at work, unscheduled or additional work, or competing demands on their time) and most of the situations involved a lack of time, a lack of help, or a lack of personal resources (physical or emotional).

Respondents identified six things that characterize a situation that causes role overload including the fact that the they do not have enough time (i.e. too much to do in the time available, too many demands on my time, or assigned on top of my regular workload), that the task itself is time intensive and complex, that the situation is unexpected but at the same time it is high priority and its completion is urgent, that others have high expectations of them and what they can accomplish, and that they are solely responsible for this situation (the only one able or available to do the job). While only one in ten specifically mentioned a lack of control over the situation, most of the other responses speak indirectly to a lack of control. These responses suggest that overload is the result of over-commitment, a lack of control, a sense of urgency, a lack of options and a sense of responsibility.

The data also suggests that while work alone does not cause overload, having to perform work that one does not have time, skills or emotional resources to complete does. Family situations appear to be less problematic than work situations as the scenarios people talked about were three times more likely to involve work than family.

What are the differences between resolved and non-resolved overload scenarios? Surprisingly, there are very few. Those that were not resolved satisfactorily were, however, less likely to involve work and less likely to involve a lack of time. Those that were not resolved were more likely to involve a lack of personal resources and be related to interpersonal conflict with others.

Situation they *could* resolve		**Situation they *could not* resolve**	
What were your initial thoughts about the situation?			
How am I going to get through this?	43%	How am I going to get through this?	34%
Very emotional and negative	16%	Very emotional and negative	18%
Overwhelmed and stressed	15%	Overwhelmed and stressed	13%
Resigned, pessimistic and regretful	13%	Resigned, pessimistic and regretful	11%
Optimistic about the outcome	12%	Optimistic about the outcome	8%
What was your evaluation of this situation?			
Challenging/very challenging	80%	Challenging/very challenging	55%
Threatening/potentially harmful to me personally	22%	Threatening/potentially harmful to me personally	48%
Threatening/potentially harmful to significant other	8%	Threatening/potentially harmful to significant other	21%
What was your overriding feeling about the situation?			
Positive Feelings: motivated, determined, confident	22%	Positive Feelings: motivated, determined, confident	7%
Overwhelmed, pressured, rushed	27%	Overwhelmed, pressured, rushed	41%
Worried/anxious	25%	Worried/anxious	19%
Annoyed/Angry	25%	Annoyed/Angry	33%
Frustrated	23%	Frustrated	24%
Guilty	10%	Guilty	8%

When faced with a situation such as those described above, the majority of individuals started thinking about how they should address the problem (i.e. problem solve). Others become overwhelmed emotionally, stressed and/or pessimistic about the outcome. What is striking is the extent to which negative emotions and thoughts characterize role overload scenarios, at least at the beginning. Again, we notice very few differences between the resolved and unresolved scenario. It is interesting to note, however, that for those situations that could not be resolved, respondents were less likely to have begun by problem solving.

How did individuals evaluate the overload situation? Challenging, personally threatening and/or threatening to someone they care about. The responses given with respect to a situation that was resolved satisfactorily were very different from those given about a situation that was not. When talking about a situation that had not been resolved successfully, close to seven out of ten people talked about how they worried that the situation would harm them personally or harm someone who was significant to them. Less than half this number raised these issues in the resolved

scenarios. When talking about a situation that had been resolved the dominant feeling was one of challenge versus threat and harm. In addition, 17% of those talking about resolved situations and 25% talking about unresolved situations mentioned other negative feelings such as stress, sadness, grief, hurt, loss, helplessness, fear, despair, exhaustion and resignation.

The data support the idea that the feelings associated with being overloaded are largely negative: words such as overwhelmed, pressured, frustrated, and angry were common descriptors used by the respondents. Very few people linked feeling overloaded to positive feelings such as motivation and determination. It is also interesting to note that respondents talked about very different feelings when they were talking about a situation that had been resolved (e.g. determined, motivated) than when they were talking about one that was not (e.g. overwhelmed, pressured, rushed).

2.2. Consequences

After the individuals described the situation that had caused them to feel overloaded, we then asked them several questions designed to understand what the individual felt would happen if the situation was not resolved. Specifically we asked the following questions:

- I want to identify the potential consequences of the situation if it were not resolved successfully:

a) Firstly, what did it mean for you?
b) How was it likely to affect your organization/boss/colleagues/patients/family members, and what did that mean to you?

We ended this section by asking respondents:

- What was the single most important factor that made this situation potentially overwhelming or stressful for you?

Responses to these three questions are summarized below.

Situation they *could* resolve		**Situation they *could not* resolve**	
Consequences to the individual			
Fail at work role	54%	Fail at work role	47%
Would feel a failure in my role as a family member	14%	Would feel a failure in my role as a family member	14%
My credibility and reputation is at stake	11%	My credibility and reputation is at stake	8%
Financial implications	10%	Financial implications	10%
Loss of confidence/self esteem at risk	10%	Loss of confidence/self esteem at risk	10%
Negative impact on health	6%	Negative impact on health	10%
Consequences to significant others			
Negative impact on patients	44%	Negative impact on patients	27%
Negative impact on staff/colleagues	33%	Negative impact on staff/colleagues	35%
Negative impact on organization	33%	Negative impact on organization	35%

Negative impact on family	11%	Negative impact on family	16%
Patients would suffer harm (death)	6%	Patients would suffer harm (death)	11%

Overload and fear of failure seem to go hand in hand – fear of failing at ones work role (i.e. not able to provide the level or quality of care they would like) being mentioned 5 times more frequently than fear of failing at ones family roles (parent or spouse), fear of losing credibility or reputation (i.e. loss of face) and fear of losing self confidence (e.g. personal image would "take a hit"). Other consequences mentioned less frequently by respondents included the negative financial implications of failing (e.g. job loss or a poor performance appraisal), negative impacts on health and wellbeing, increased workload, and emotional hurt. It should be noted that only 3 individuals said that they did not perceive any consequences to them of not being able to resolve the situation causing the overload. Again we note that individuals mentioned essentially the same set of consequences for both overload scenarios.

One in ten could not identify any negative consequences of the situation not being resolved for anyone other than themselves. The others talked about how their patients would not get the time or treatment they need; how the situation would negatively impact their colleagues (e.g. safety issues, increased overload, increased burnout, increased workloads , low morale, and labour relations issues), the organization (e.g. stakeholders expectations would not be met, liability issues for hospital, damage to the hospital's reputation, negative financial implications for the hospital), or their family (they would not be happy) ;or that patients could die. Just under one in ten also talked about how the situation could negatively impact their relationships with people in their personal life. Again, it should be noted that respondents were more likely to talk about how colleagues and clients at work could be negatively impacted by their being overloaded than they were to talk about how their family would be negatively impacted. While the responses given to this question when discussing Scenario A were very similar to those given in the discussion of Scenario B, respondents were less likely to talk about how their patients would be negatively impacted when discussing the unresolved scenario.

Situation they *could* resolve		**Situation they *could not* resolve**	
Single most important factor that made the situation potentially overwhelming/stressful			
Too much responsibility	27%	Too much responsibility	20%
Lack of time	24%	Lack of time	12%
High potential for very negative outcomes at work	16%	High potential for very negative outcomes at work	8%
Lack of support, resources or help	12%	Lack of support, resources or help	12%
High potential for very negative outcomes at home	11%	High potential for very negative outcomes at home	15%
Uncertain of how to deal with the situation	10%	Uncertain of how to deal with the situation	5%
The expectations of others	9%	The expectations of others	8%
A lack of control over the situation	7%	A lack of control over the situation	20%
Situation personally threatening	3%	Situation personally threatening	19%

What is the single most important thing that made this situation overwhelming or stressful? Responses to this question reinforce our understanding of what contributes to overload: too much responsibility (be it the volume of work, the number of tasks, or the outcomes); too little

time (most people talked about how this lack of time was overwhelming); a high potential for the situation to negatively impact either their patients/colleagues (i.e. a life and death situation), their family, or themselves (the situation threatened the individuals self image or financial security); lack of support or help to deal with the situation; uncertainty with respect to how to deal with the situation (i.e. lack of knowledge or experience); the expectations of others (e.g. people were depending on me, no one else could do it) and a lack of control over the situation (e.g. it was totally unexpected).
Respondents were much more likely to talk about a lack of control and how the situation was personally threatening when discussing a situation that had not been resolved successfully than when talking about one that had a positive resolution.

2.3. Resolvability

The next group of questions were to determine how well prepared respondents felt they were to respond to the situations they had described. Specifically we asked:

- To what extent did you believe the situation could be resolved successfully?
- How well prepared were you to respond to the situation?
- Please describe your initial thoughts about how you could overcome the situation?

Responses to these questions are given below.

Situation they *could* resolve		**Situation they *could not* resolve**	
Did you believe the situation could be resolved successfully?			
Reasonably confident	78%	Reasonably confident	47%
Not confident at all- no possible resolution	12%	Not confident at all- no possible resolution	23%
Not sure, it could go either way.	8%	Not sure, it could go either way.	15%
Initially confident then confidence deteriorated	1%	Initially confident then confidence deteriorated	12%

To what extent did the respondent believe the situation could be resolved successfully? Responses to this question depended on the situation being described. While three quarters of the sample expressed confidence when talking about a situation that had been resolved, only half displayed the same level of confidence when talking about a scenario that had not been resolved. Similarly, twice as many respondents indicated "not at all confident, cannot see how it could be resolved" when talking about a situation that had not been resolved satisfactorily than when talking about one that had. Also worthy of note is the fact that individuals were more likely to talk about how their confidence had deteriorated over time and how they were uncertain about the ultimate outcome when describing Scenario B (not resolved) than when talking about Scenario A (had been resolved).

Situation they *could* resolve		Situation they *could not* resolve	
How well prepared were you to respond?			
Prepared:		Prepared:	
I felt I had the necessary skills	37%	I felt I had the necessary skills	21%
I had a plan, knew what would happen	14%	I had a plan, knew what would happen	13%
Had a good support team	12%	Had a good support team	1%
Not a new situation – knew what to do	11%	Not a new situation – knew what to do	6%
Not Prepared:		Not Prepared:	
Just could not handle any more demands	21%	Just could not handle any more demands	15%
Did not have the resources/support	9%	Did not have the resources/support	22%
Caught off guard. Needed a plan	7%	Caught off guard. Needed a plan	16%
Not personally well prepared	9%	Not personally well prepared	17%
Somewhat Prepared:		Somewhat Prepared:	
Could do some of the tasks, persevered	8%	Could do some of the tasks, persevered	5%

Perceptions on how well prepared an individual felt to handle the overload depended on the context and the individual's past experience. Individuals felt prepared if they had the skills demanded by the situation, if they had a plan, a good support team, or had past experience with the situation they were facing. On the other hand, respondents who did not feel prepared were already over committed (i.e. could not handle more demands) or lacked support or were caught off guard and had no plan on how to deal with the situation or felt unready personally (i.e. emotionally not well prepared, did not have necessary knowledge, experience or skills to deal with the situation).

Perceptions with respect to preparedness also varied depending on whether or not the scenario had been resolved. Respondents were more likely to talk about how they were prepared when describing a situation which had been resolved than when talking about one that had not. On the other hand, when talking about a situation that had not been resolved respondents were more likely to talk about how they had not felt prepared. More specifically, for the latter case, they were more likely to talk about a lack of support and resources, being caught off guard and not able to plan, or being personally unprepared.

Situation they *could* resolve		Situation they *could not* resolve	
Initial thoughts on how to overcome the situation			
Work harder	41%	Work harder	33%
Prioritize	23%	Prioritize	6%
Get extra help/resources: speak to boss	20%	Get extra help/resources: speak to boss	13%
Be organized/plan ahead	16%	Be organized/plan ahead	13%
Panic	5%	Panic	13%
Get practical help/support from work team partner/family	8%	Get practical help/support from work team partner/family	11%
Avoidance	3%	Avoidance	10%

How did employees plan on overcoming the overload they were faced with – at least initially? The majority of individuals in this sample, when faced with an overload situation, planned on using active coping strategies: they planned to work harder (e.g. just do it, get in there and get it done, skip lunch and breaks), they planned to prioritize, they expected to speak to their boss about the situation in an effort to get extra help and resources, or they intended get practical help from their work team or family. Others initial plans were less effective in that they involved strategies such as panicking (e.g. I couldn't think how to plan, I was emotionally overwhelmed) and avoidance (e.g. take time off work, change jobs, just do not do it, ignore it).

Respondents were more likely to use active coping strategies (especially prioritizing) when faced with a situation that was ultimately resolved and more likely to panic and avoid the problem when the situation was one that was ultimately not resolved. It is hard to determine causality here. Did respondents cope actively with the situation which then was resolved, or did they define the situation as one that could not be solved, cope accordingly and then experience the self fulfilling prophecy when the scenario was not resolved. The interviews suggest that the second explanation is more likely – the respondent's initial appraisal of the situation as one that could not be solved, affected how they dealt with the situation which ultimately may have caused the problem to persist.

2.4. Coping

Several questions were asked to help us understand what the respondent did to cope with the situations they were describing. Specifically we asked them:

- What actions did you take to cope with this situation? Did these actions differ from your initial plan?
- Why did you cope the way you did?
- Did these strategies work or not? In what way?
- What actions did others take? Did they work or not? In what way?
- What did you do to deal with the emotional aspects of the situation? Why this? Did this work or not?

Responses to each of these questions are given below.

Situation they *could* resolve		**Situation they *could not* resolve**	
What did <u>you</u> do to cope with the situation? What <u>actions</u> did you take?			
Work harder	47%	Work harder	61%
Be organized/plan ahead	35%	Be organized/plan ahead	18%
Prioritize	32%	Prioritize	12%
Get practical help/support from work team partner/family	17%	Get practical help/support from work team partner/family	15%
Delegate	16%	Delegate	6%
Reduce the quality of work and cut out the non essential tasks	15%	Reduce the quality of work and cut out the non essential tasks	11%
Got control of my emotions	14%	Got control of my emotions	7%
Get extra help	14%	Get extra help	15%
Compartmentalise	10%	Compartmentalise	7%
Did how you actually cope with the situation differ from your initial plan?			
No	57%	No	11%
Yes	23%	Yes	91%
Yes, did what was planned plus more	18%		

In the majority of the cases where the situation had been resolved, the individual stuck to their original plan or did what they planned plus more. In virtually all of the cases where the scenario had not been resolved, the individual's actions differed from what they had planned to do. This inability to follow through might help us understand the difference in resolution between the two scenarios – having a plan and sticking to the plan seems to make a difference.

The majority of individuals in this sample, when faced with an overload situation, actually do cope by using active coping strategies: they work harder (e.g. just do it, get in there and get it done, skip lunch and breaks), they plan ahead and communicate the plan to significant others, they prioritize, they get practical help from their work team or family, or they speak to their boss about the situation in an effort to get extra help and resources. While many talked about panicking and avoidance very few actually used these strategies. Instead they delegated, reduced the quality of the work they did and cut out the non essential tasks, got their emotions under control (took a step back, tried to remain calm and focused on the task) and/or compartmentalised (left work at work, made time for themselves and their family).

When talking about scenarios that had not been resolved, individuals were more likely to say that they had coped by working hard (e.g. I just tried to do it all) and less likely to say that they had used active coping strategies such as being organized, planning, prioritizing, or delegating. They were also less likely to have gained control over their emotions. It may be their inability to plan, prioritize or delegate and the tendency to try to do it all, that contributed to the lack of resolution of the overload situation.

Situation they *could* resolve		Situation they *could not* resolve	
Did these strategies work to reduce your overload?			
Yes	78%	Yes	47%
Some did, some did not	18%	Some did, some did not	29%
No	1%	No	16%
Why did they work? Why did they not work?			
Worked because:		Worked because:	
Helped in a practical sense	81%	Helped in a practical sense	34%
Helped in an emotional sense	13%	Helped in an emotional sense	20%
Did not worked because:		Did not work because:	
The situation remains/didn't change	5%	The situation remains/didn't change	20%
Strategy negatively affected my health and wellbeing	4%	Strategy negatively affected my health and wellbeing	13%
Other negative reasons like not ideal solution, not good for long term, negative impact on family	10%	Other negative reasons like not ideal solution, not good for long term, negative impact on family	14%

Respondents gave two major reasons why they felt that their coping strategy had worked: it helped practically (e.g. being organised and having a plan helps gives one clarity and direction, allowed me to reduce my workload or freed up time) and it helped emotionally (e.g. reduced my stress and nervousness – which allowed me to get on with it). The fact that the strategy helped them "get on with it" in a practical sense was mentioned more frequently than the fact that it had helped them control the emotions associated with role overload.

Respondents gave three reasons for perceiving that their coping strategy had not worked. First (and most obviously to them), the situation remained unresolved. Second, the strategy that they had chosen (in virtually all cases "working harder") had negatively impacted their health. Finally, respondents mentioned a number of idiosyncratic reasons for believing it had not worked including the fact that it had hurt their family and was not sustainable over the long run.

Responses to the question of why the strategy worked or did not work varied depending on whether or not the individual was describing a situation that had been resolved or not. In those cases where the situation had been resolved, individuals were more likely to talk about the fact that their solution (e.g. planning, prioritizing) had helped them practically but had few reasons as to why what they had done had not worked. In the cases where the situation had not been resolved, individuals were more likely to talk about how some of the things they had tried had worked while others had not than to say that the strategy they used just did not work. Those in the non resolved group were also more likely to justify their response by noting that the situation remained unchanged and more likely to talk about how the strategy they had used (i.e. working harder) had hurt their health.

Situation they *could* resolve		Situation they *could not* resolve	
What actions did others take to help you cope with the situation?			
They did not offer any support	20%	They did not offer any support	35%
Co-worker or team took some of my workload/ worked extra hours	36%	Co-worker or team took some of my workload/ worked extra hours	15%
Colleagues with relevant experience helped me make a plan/gave me advise	22%	Colleagues with relevant experience helped me make a plan/gave me advise	20%
Friends/family helped and were supportive	17%	Friends/family helped and were supportive	21%
My boss helped (took some work, rearranged my work schedule, was supportive)	15%	My boss helped (took some work, rearranged my work schedule, was supportive)	10%
Co-workers were understanding, co-operative, encouraging and supportive	11%	Co-workers were understanding, co-operative, encouraging and supportive	9%
Did these strategies work to reduce your overload?			
Yes	67%	Yes	51%
Some did, some did not	9%	Some did, some did not	9%
No	2%	No	4%
There was no support	20%	There was no support	36%
Why did they work? Why did they not work?			
Worked because:		Worked Because:	
Helped in a practical sense	32%	Helped in a practical sense	25%
Helped in an emotional sense	24%	Helped in an emotional sense	30%
Helped me reduce my workload	19%	Helped me reduce my workload	19%
Did not worked because:		Did not work because:	
They did nothing to support me	25%	They did nothing to support me	41%
The situation remained unchanged	1%	The situation remained unchanged	10%

What actions did others take to help respondents cope with role overload? While a substantive number of respondents did not receive any support from others (20% in the case where the situation was resolved, 35% in the case where it was not), the rest were able to identify things that others had done to help them cope. Specifically, they felt that others had helped by taking on some of the workload (or worked extra hours), by sharing their expertise when it came to creating a plan or by providing emotional support.

Respondents gave three major reasons why they felt that the support that had been offered by others worked: it helped practically (i.e. their advice, solutions, expertise or knowledge helped me get the job done and validated my position), it helped emotionally (e.g. reduced my stress and nervousness, I was no longer alone) or it helped them reduce their workload and free up time to deal with this situation. The fact that the strategy helped them "get on with it" in a practical sense was mentioned more frequently than the idea that the support had helped them control the

emotions associated with role overload. These results are consistent with our contention that while both practical and emotional support are important, when it comes right down to it, getting concrete help is more important than emotional support for coping with role overload.

Again, we see some important differences between situations that were resolved and those that were not with respect to support from others. More specifically, in those cases where the situation was not resolved, individuals were less likely to have had either practical or emotional support from others in coping with the situation.

Situation they *could* resolve		**Situation they *could not* resolve**	
What did you do to cope with the emotions of the situation?			
Did not do anything to control emotions	20%	Did not do anything to control emotions	16%
Engage in stress reducing activates	32%	Engage in stress reducing activates	20%
Talk to trusted family member, friend or partner	30%	Talk to trusted family member, friend or partner	40%
I did not allow my self to get emotional	17%	I did not allow my self to get emotional	18%
Engaged in escapist coping strategies	15%	Engaged in escapist coping strategies	12%
Vent to let off steam	12%	Vent to let off steam	18%
Engaged in positive strategies to cope with emotions	12%	Engaged in positive strategies to cope with emotions	18%
Reduced my expectations	10%	Reduced my expectations	16%
Did these strategies work to reduce your emotional response to overload?			
Yes	60%	Yes	55%
Some did, some did not	15%	Some did, some did not	23%
No	4%	No	6%
Did not do anything	20%	Did not do anything	16%
Why did they work? Why did they not work?			
Worked because:		Worked Because:	
They calmed me down	17%	They calmed me down	10%
They helped me put things into perspective	15%	They helped me put things into perspective	18%
Takes my mind off my problems, helps me unwind, re-energizes me	10%	Takes my mind off my problems, helps me unwind, re-energizes me	9%
Did not worked because:		Did not work because:	
I did not do anything	20%	I did not do anything	16%
Helped me cope emotionally at the time, but did nothing to change the situation and was unhealthy over the long term	16%	Helped me cope emotionally at the time, but did nothing to change the situation and was unhealthy over the long term	26%
No: I am still having problems: I still can't sleep, can't turn it off	10%	No: I am still having problems: I still can't sleep, can't turn it off	6%

What did respondents do to cope with the emotions associated with being overloaded? One in five of the respondents indicated that they did nothing to try and control their emotions when dealing with their overload scenario. The rest indicated that they engaged in stress reducing activates (e.g. exercise, visit the gym, yoga, rest, relaxation, socialize with others, go for a walk, take breaks, spend time on hobbies or things I enjoy); talked to a trusted family member, friend or partner; did not allow themselves self to get emotional (e.g. too busy, there is just no room for emotions); engaged in escapist coping strategies (e.g. cried, took sick leave, turned to food, alcohol, and/or smoking); vented to let off steam; engaged in positive strategies to cope with emotions (e.g. sought professional counselling, took comfort in their spiritual beliefs, prayed, used humour, stayed positive, identified a reward to look forward to, wrote a journal, engaged in positive self talk) or reduced their expectations (i.e. recognized they could not do everything, took a step back).

Half the respondents felt that these strategies had helped them deal with the overload by allowing them to keep calm, by helping them put things into perspectives, or by making it easier for them to unwind (i.e. help dissipate the adrenal response). One in five, however, noted that while these strategies had helped them control their emotions at the time the overload was high, they did nothing to change the situation and as a result their health had suffered in the long run.

There were very few differences in the responses given when talking about controlling emotions during a situation that had been resolved and one that had not been resolved. In the case where the situation was not resolved, however, people were more likely to talk to others and less likely to engage in stress reducing activities. They were also more likely to say that while the strategy had worked with respect to controlling their emotions, it had not actually done anything to change the situation and as a result they had experienced health problems over the long run. These findings reinforce our contention that emotional support is not as effective as practical support when it comes to dealing with role overload.

2.5. Outcomes

At the end of the scenario sections we asked respondents the following three final questions:

- How did the situation end?
- Was this what you expected to happen or not? Why do you say this?
- How did you feel at the end of the situation?

Responses to each of these questions are given below.

Situation they *could* resolve		Situation they *could not* resolve	
How did the situation end?			
Successfully/positively	81%	Successfully/positively	39%
Unsuccessfully/negatively	1%	Unsuccessfully/negatively	29%
Its still ongoing/ it will never end	4%	Its still ongoing/ it will never end	20%
Some resolution but there are still issues to resolve	13%	Some resolution but there are still issues to resolve	12%
Is this what you expected to happen?			
Yes	66%	Yes	49%
No	20%	No	37%
In most ways	12%	In most ways	14%
Why do you say this?			
Past experience with these kinds of situations	36%	Past experience with these kinds of situations	18%
I expected it would be overcome: I was confident about the plan	24%	I expected it would be overcome: I was confident about the plan	18%
It was not as expected – unanticipated problems	10%	It was not as expected – unanticipated problems	21%
Not as expected: easier	10%	Not as expected: easier	5%
Not as expected: harder	9%	Not as expected: harder	28%

Not unexpectedly, the individual's evaluation of how the scenario ended depended very much on which scenario they were describing with people giving a much more negative evaluation to Scenario B (not resolved) than Scenario A (resolved).

When discussing the situation that had been resolved those with positive expectations justified their response by noting that their experience in the past with situations like the one they had just described had helped them set realistic goals and expectations and given them confidence in their plan. People were much less likely to talk about their past experience dealing with similar situations and their confidence in their plan when talking about the unresolved scenario. Instead they focused on how the situation had not gone as expected because of unanticipated problems (e.g. less help than promised, unpredictable outcome, lack of support from boss) or how the situation had been harder to deal with than they had expected (e.g. under estimated effort, took longer than anticipated).

These findings emphasize, again, the importance of experience, realistic expectations and planning to the successful resolution of situations causing role overload.

Situation they *could* resolve		Situation they *could not* resolve	
How did you feel at the end of the situation?			
I felt happy/ satisfied/ more relaxed about it	55%	I felt happy/ satisfied/ more relaxed about it	14%
Relief (that it was over, that it turned out well)	22%	Relief (that it was over, that it turned out well)	16%
Experienced positive emotions: Proud, sense of accomplishment, empowered, validated my capabilities)	22%	Experienced positive emotions: Proud, sense of accomplishment, empowered, validated my capabilities)	7%
In poor physical health: exhausted, tired	18%	In poor physical health: exhausted, tired	16%
Experienced negative emotions: frustrated, betrayed, used, angry, irritated, guilty, discouraged, resentful	11%	Experienced negative emotions: frustrated, betrayed, used, angry, irritated, guilty, discouraged, resentful	66%
In poor mental health: stressed, overwhelmed, anxious, depressed	4%	In poor mental health: stressed, overwhelmed, anxious, depressed	18%

How did they feel at the end of the scenario? The individual's feelings at the end of their overload scenario depended strongly on which scenario they were describing. Individuals were upbeat when talking about an overload situation that they had resolved successfully: they felt happy, satisfied, relaxed, or relieved, and experienced other positive emotions such as a sense of accomplishment, personal pride or empowerment. On the other hand, individuals were very distraught when talking about an overload situation that had not been resolved successfully. Two thirds talked about feeling frustrated, betrayed, used, angry, discouraged or resentful. One in five talked about how the situation had impaired their mental health (e.g. stressed, depressed, anxious). Very few (only 7%) noted that they felt a sense of pride or validation of their capabilities. Finally, it is interesting to note that approximately one in five individuals, regardless of how the scenario had resolved itself, talked about how overload had hurt their physical health (e.g. it exhausted them).

These findings offer an important message to employers: if you expect the impossible from your employees, you will pay a price. If you challenge them but help them deal with the situation, on the other hand, you are likely to experience much more positive workforce outcomes.

3. Overview: Appraisal, Coping and Consequences of Role Overloaded

We began the last section of the interview by thanking respondents for sharing their experiences with us. We then provided the following preamble to the last section of the interview:

> *"The next few questions deal more generally with your experiences of overload at work and at home. They are designed to give us a better understanding of the factors that makes some people feel overloaded in a particular situation – while others do not."*

We then asked four sets of questions. The first set, which is dealt with in part one below, explored the causes of role overload at work and at home. The second set (see part two) explored how people cope with role overload. The third set of questions focused on identifying the consequences of feeling overloaded. Responses to these questions are the focus of the third part of this section. We ended the interview by asking people a number of questions designed to identify the key predictors, moderators and outcomes of role overload. We discuss responses to these questions in the final part of this section. It should be noted that all responses to each of the questions asked in this section of the report are given in the section below. In other words, we relaxed the 10% rule so we could get a more complete understanding of the etiology of role overload.

3.1 What makes you feel overloaded?

These questions were designed to shed light on the overload appraisal process. We asked respondents:

- From your own personal experience what have you found makes you feel overloaded:
  - When you are at work?
  - When you are at home?

What makes people feel overloaded at work? Respondents gave the following responses:

What makes people feel overloaded at work?	%
Too many people demanding my time	39%
Multiple competing demands and priorities: means too many interruptions	28%
Too much to do in the time available	21%
Time constraints: short or ambiguous deadlines/unexpected priority issues/ urgent issues, unclear priorities	25%
No one to help me: not enough staff/ responding to staff shortages/ no cover for vacation or sick leave, no time to take a break	17%
Lack of control: inability to influence policies, inability to say no inability to delegate	13%
Volume of emails/voice mails/pagers	11%
Difficult, angry or complex patient/client situations – crisis	8%
People management/ staff conflict	6%
Staff are not trained or experienced at the work they are asked to do	6%
Unrealistic work expectations: it is impossible to complete my work in the time allocated	5%
The personal expectations I place on myself – I want to do a good job	5%
Too many meetings/committees	4%

What causes overload at work? Lack of time (too many people demanding my time, time constraints, unrealistic work expectations), competing demands (multiple competing priorities, e-mail, meetings), a lack of help and support (no one to help me, staff not trained) and/or an inability to control the situation. In only a few cases is overload caused by the expectations people place on themselves.

What makes people feel overloaded at home? Respondents gave the following responses:

What makes people feel overloaded at home?	%
Trying to keep up with housework/ Chores visibly piled up at home.	32%
Conflicting schedules and priorities within family	29%
Taking work home/work overload affecting home life (takes time away from family)	25%
Family crisis (Illness, problems with children)	12%
Too much to do in the time available, too many demands on me.	11%
Balancing work and family with other commitments (Volunteer work/ recreational commitments, studying, second job)	10%
No help or support at home (single parent)	10%
Children at a difficult age (Teenagers, 2 yr olds)	7%
Lack of personal time/ no down time/time to rest	7%
High expectations of me by family members	7%
Elder care responsibilities	6%
Family "events" (preparing for vacation, visitors)	5%

What causes overload at home? The fact that work takes up so much time (chores piling up at home, taking work home which takes away from time with the family), lack of time (too much to do in the time available, high expectations of me from family members, lack of time for myself), competing demands and priorities (conflicting schedules and priorities within the family, need to balance work and family and other commitments), a lack of help and support (no help or support at home, family events), life cycle stage (eldercare, children at difficult age) or an inability to control the situation (family crisis).

There is a lot of overlap with respect to the causes of overload at work and at home – though it should be noted that family overload seems to be more of a product of overload at work than vice versa. There are two more interesting differences to note: family overload seems to be linked to life cycle stage while work overload has less of an obvious link to career stage: and overload at home seems to be more likely to be caused by the expectations other people and they place on themselves than is overload at work.

3.2 Coping with Overload

The few questions in this section dealt specifically with coping with overload. We asked respondents:

From your own personal experience what have you found helps you cope with:

- Overload at work? Specifically:
  - What personal actions?
  - What actions by your employer or your co-workers?
- Overload at home? Specifically:
  - What personal actions?
  - Actions by others

- From your own personal experience what have you found makes it more difficult for you to cope with:
  - Overload at work?
    - What personal factors?
    - What actions by your employer or co-workers?
  - Overload at home?
    - What personal factors?
    - What family circumstances, actions by others at home?
- Do you have any strategies that you have found to be successful in *preventing* role overload from happening in the first place?
  - What are they?
  - How do they work?
  - How often do you use this approach rather than coping with the situation once it has arisen?

What personal actions help people cope with overload overloaded at work? Respondents gave the following responses:

What personal actions help people cope with overload at work?	%
Pursue a healthy life style: Exercise/ sport/yoga, go to bed early, eat healthily, don't skip meals, meditate	29%
Prioritise: make sure most important tasks are dealt with first, do not multi task, focus on one task at a time	29%
Planning and organise: make lists, take notes, plan before acting	28%
Remove yourself from situation: take a break at work, take a walk	18%
Control your emotions: Stay calm and patient, keep your sense of humour, accept that you cannot do it all, don't let it bother you, be positive	17%
Extend work hours: Work overtime if you have to catch up, take work home, skip breaks and "me time"	16%
Delegate low priority work to others and ask for help	13%
Compartmentalising: no work at home physically or mentally and vice versa	12%
Push back: Take a day off, learnt to say no /question the necessity/ don't take on extra responsibilities or projects	12%
Vent to colleagues/family/friend	11%
Withdraw emotionally/avoid colleagues/ turn email and phone off	5%

Employees who are experiencing overload at work are likely to benefit if they do one or more of the following: prioritize (e.g. make time for stress relieving activities and time for yourself, make sure you do the most important tasks first, delegate low priority work to others), they plan and organize before taking action, they remove themselves either physically (take a walk) or emotionally from the situation causing them to feel overwhelmed and stressed, they keep control over their emotions and put the issue into perspective (e.g. stay calm, accept that you cannot do it all) or they push back (e.g. compartmentalize, learn to say no, do not take on extra responsibilities when already overloaded). It is interesting to note that 16% of the sample found that putting extra hours into work relieves their overload – a suggestion that runs counter to

many of the others and one that was shown in the survey data to be less effective at relieving overload.

What actions by the employer/co-workers help people cope with overload at work? Respondents gave the following responses:

What actions by the employer/co-workers help people cope with overload at work?	%
Tangible support from your colleagues or team: Colleague took some of my workload	41%
Gave us an opportunity to socialize and learn from our co-workers: a good social atmosphere at work makes a huge difference; we laugh a lot, can vent to each other	26%
Recognition of efforts and feedback on performance	26%
Supportive manager: my boss helped/ took some work, reorganized my workload.	25%
Proper staffing levels: give us the people to do the work	9%
Teamwork: Makes a difference when you work with a good team, support and empower your teams	7%
None	6%
EA programs	4%

What actions can employers take to help employees cope with overload at work? The responses to this question suggest that employers who wish to help their employees deal with role overload should not take a programmatic approach to the issue as this appears to make little to no difference. In fact, only one program was mentioned as helping (EA) and this by only 4% of the sample. What does make a difference? Tangible support from colleagues and the manager (i.e. take some of the work away), enough staff to do the work, or time to dialogue with each other at work (e.g. support your teams, give them time to learn from each other, vent to each other).

What personal actions help people cope with overload overloaded at home? Respondents gave the following responses:

What personal actions help people cope with overload at home?	%
Look after my health: Eat well, relax, go to bed early, take a break, get out of the house	25%
Exercise: sports, yoga	23%
Make time for myself / for my interests & hobbies	21%
Plan and organize	19%
Lowering my standards: don't put pressure on myself, live with clutter	17%
Ask for help from others and/or hire help	15%
Talking to/socialising with friends/family	15%
Prioritise/make lists to make sure most important tasks are dealt with.	12%
Talk/vent to partner	10%
Sacrifice myself: Get up early, stay up late or take vacation day to clean/ do chores	7%
Compartmentalize and put family first: Don't take work home, work part-time or flexi hours	5%

What personal actions can employees take to help them cope with overload at home? Employees who are experiencing overload at home are likely to benefit if they make an effort to look after their own health and make time for them (e.g. eat well, take breaks, exercise, have hobbies). While planning, organizing and prioritizing is not as effective a strategy for coping with overload at home as it is for coping with issues at work (41% mention these strategies as they related to home versus 57% who talked about how they help at work), it does appear in both lists as an effective way to cope. In both cases, respondents talked about the need to focus on the important tasks. One in ten respondents talked about how they had coped by lowering their standards at home – a strategy that was not mentioned at all in association with work! Similarly, while approximately 15% of the sample said that they had found asking others for help an effective way to cope with stress at work or at home, only in the home environment did they have the option to purchase support (i.e. outsource family tasks). Employees were more likely to cope with overload at home by talking to others – a strategy that again was not mentioned in association with the work domain. Finally, it is interesting to note that a small group of respondents mentioned sacrificing themselves (i.e. working longer hours, getting up early or staying up late to do chores) and venting to others as strategies that had helped them cope.

What actions by the others have helped respondents cope with overload at home? Respondents gave the following responses:

What actions by the others help people cope with overload at home?	**%**
My family (partner, children, extended family) pitches in and helps with tasks around the house	77%
My family is very understanding (plan and communicate within family, family gives me space)	32%
Spending time with friends and family	8%
My friends help (e.g. Carpooling)	7%
We hire help for the home chores	7%

The data from this study suggest that there is only really one thing that families and friends can do to help their family members cope with overload at home – help out and shoulder some of the burden. One in three also found emotional support and understanding to be helpful. In other words, at both work and home, while understanding and sympathy does offer some relief from high levels of overload, tangible support is what appears to make the real difference.

What personal actions make it more difficult for people to cope with overload at work? Respondents gave the following responses:

What personal actions make it more difficult to cope with overload at work?	%
Fatigue: high workload impacts ability to focus, remember things, decreases my efficiency at work	33%
Inability to separate work from home: Lack of control at home, problems at home make it harder to focus at work	31%
Nothing	17%
Personal illness: overload aggravates pre-existing health condition, reduces my ability to put in the hours at work	16%
Wanting to do a good job: too conscientious, can't say no, take on extra work and projects	10%
My work schedule: shift work	6%
Poor health habits: lack of exercise, skipping lunch	5%
A lack of confidence in my abilities and relevant work experience	5%

One in five respondents could not think of anything that they did that made the overload at work worse. The rest were, however, able to identify a number of factors that exacerbated work overload. The first, fatigue, was mentioned by one in three respondents. These individuals noted that when they were tired they worked less efficiently, largely due to a decline in their ability to focus. Another one in five talked about personal illness and how overload at work had hurt their health. These two sets of findings suggest that overload begets more overload. One in three spoke to how conditions at home reduced their ability to cope with overload at work. They noted how their lack of control at home and their ability to "leave family problems at home" compounded their feelings of overload at work. One in ten felt that their work ethic had increased their overload at work (i.e. they cannot say no) and 6% talked about difficulties associated with shift work.

What actions by the employer/co-workers make it more difficult for employees to cope with overload at work? Respondents gave the following responses:

What actions by the employer/co-workers make it more difficult to cope with overload at work?	%
They do not support their employees when they are overloaded: the lack of staff and resources means that there is no cover when staff off sick, on holiday - everyone is stressed and overwhelmed but employer does not push back, prioritize, say no	33%
Do not deal with the interpersonal conflict at work: complaints and griping reduces sense of team and ability to work effectively together	27%
Lack of good management: managers are non supportive and unable to plan work	21%
Unrealistic expectations: workload is excessive and persistent, there is always more to do, frowned on if you take a break, expected to work overtime, there is a very high levels of expectations from staff, patients, families, management	20%
The organizational structure is problematic: the lack of role clarity in the structure means that we all have to deal with competing priorities	13%
The politics and lack of team work: selfish colleagues, power battles, competing interests and views, different work ethic reduces our ability to get the work done	11%
The constant interruptions : Volume of emails, phone interruptions, colleagues	4%

All but 7% of the sample were able to identify things that the employer had done to make it more difficult for them to deal with the overload at work. Most were frustrated by the fact that they feel that their employer was doing nothing to address what they perceive to be the systemic underlying causes of overload: the lack of staff and under resourcing of the health care system, an inability or lack of will on the part of management to plan and prioritize, interpersonal conflict, poor management, and an organizational structure that provides little role clarity.

What personal actions make it more difficult for people to cope with overload at home? Respondents gave the following responses:

What personal actions make it more difficult to cope with overload a home?	**%**
There are none	29%
My workload at work: I have less time for home or for myself because of overtime, because I cannot get away from work on time	26%
Fatigue/ lack of sleep: I become impatient and short tempered	20%
Personal health or illness: doing too much aggravates pre-existing health condition	12%
Expectations I place on myself: I want to be a good parent/spouse/homemaker	10%
Time spent in personal, leisure or volunteer activities	8%
Financial stress	6%

Almost one in three respondents could not think of anything that they did that made the overload at home worse. The rest were, however, able to identify a number of factors that exacerbated overload at home. Three of these factors (fatigue, personal illness and expectations they placed on themselves) were also mentioned in our discussions of what personal factors made it more difficult to cope with overload at work. The other factors were, however, unique to the home situation. The most important of these unique factors is the fact that demands at work make it more difficult for them to cope at home. One in four talked about how the hours of work, their inability to get away on time and the need for overtime made it more difficult for them to cope with what was going on at home. One in ten talked about time in activities outside of work or family (overload it will be recalled is not just about these two domains) while 6% said that the fact that they were struggling financially limited what they could do to cope (i.e. could not purchase supports from outside the home, quit their job).

What actions by family members make it more difficult for employees to cope with overload at home? Respondents gave the following responses:

What actions by the family members make it more difficult to cope with overload at home?	%
Demands at home are very high: Special needs child/ disabled partner/children at a difficult/ demanding age	25%
Nothing	20%
Unexpected urgent demands at home: Family illness/ Child(ren) sick/ having a crisis	18%
Partner also overload/stressed/ bringing work home/away on business	17%
Expectations of family: pressure to be around for my family; I'm the one they turn to, drop off and pick up of children, helping children with homework	14%
Lack of tangible help from family: live alone, no help from extended family	12%
Elder care	9%
Lack of emotional support from family	5%
Relationship problems at home/break down in communications	3%

Twenty percent of the sample were unable to identify things that their family had done to make it more difficult for them to deal with the overload at home. The rest identified a number of factors that can be linked to life cycle stage and family situation (e.g.. children at difficult age, eldercare, unexpected crisis at home, being part of a dual-income family, family member with special needs) and gender (e.g. expectations of family – I am the one they turn to). Other factors that make overload at home worse include a lack of tangible and emotional support from family members.

Almost everyone in the sample (93%) was able to identify strategies that they have found to be successful in *preventing* role overload from happening in the first place. Strategies used to prevent overload by those in this sample include the following:

What strategies have you found to be successful in preventing role overload from happening in the first place?	%
Planning and organisation	37%
Make time for myself: look after my health, rest, exercise, eat well, have hobbies, do fun things, take a break, go for a walk	32%
Prioritise: make lists, say no to lower priority tasks such as volunteering and extra work, don't allow role drift	30%
Defining boundaries and simplifying where possible: knowing my limitations/being realistic with respect to setting expectations, give up some things; don't overbook my time; reduce children's extra curricular activities, get take outs, freeze dinner; eat out	16%
Ask for/get help	13%
Connect with your "team" at work and home: communication with colleagues and family, engage in time for team building/family activities	12%
Compartmentalise work and home life: protect time for family: leave work on time, take regular vacations/work part-time/ flexitime/ take sick leave	9%
Socialize with others and make time for fun	7%
I have not found any that work	7%
Maintain a positive attitude, focus on successes	6%
Delegate to others	6%

What preventive strategies can employees use to reduce prevent overload? Examination of this list reinforces the importance of planning, organizing and prioritizing to the reduction of role overload (i.e. say no to low priority tasks at work and at home and yes to yourself). Almost one in five talked about the importance of setting boundaries at work and at home and simplifying where ever possible when it comes to the prevention of role overload. Other strategies that respondents have felt proved useful include building relationships with key others at work and at home (e.g. connect with team, make time for fun), asking for help when it is needed, delegating if it is possible and appropriate, and compartmentalizing (work will intrude into family domain if you let it).

Why do these strategies work? Respondents identified the following causal mechanisms:

Why do these strategies work?	%
They increase the amount of control I have over the situation: they keep me on top of what I have to do – I am rarely caught off guard	43%
They reduce my stress levels: allow me to relax and unwind, gets me away from the situation, put things into perspective, reduces the emotional effect of overload which in turn prevents more overload	24%
They expand the amount of time available	16%
They reduce the occurrence of some forms of overload – they cannot, however, prevent overload that is caused by unexpected issues	12%
They help me focus and make better decisions	7%
Gives me confidence that I can deal with this kind of situation	3%

Half felt that strategies such as planning, organizing and setting priorities increased the amount of control they had over the situation by reducing the "unexpected", expanding the amount of time available, or facilitating focus and decision making. One in four stated that the chosen strategies worked because they helped the respondent deal with the emotional effect of stress (e.g. I relax, unwind, put things into perspective). Worthy of note is the acknowledgement, by one in ten, that planning, organizing etc helped them cope with some forms of overload but had little impact on their ability to deal with overload stemming from a crisis.

How often do people use these coping strategies to "head overload off at the pass"? The data here is quite reassuring. One in four said that they used these strategies "all the time, where ever possible." Half of the respondents use the strategies that they identified on a daily basis while 28% used them occasionally. One in ten said that they used the strategies as needed while 11% admitted that they were not using them as often as they would like.

3.3 Consequences of Overload

The questions in this section dealt specifically with what happens to people in overload situations at work and/or at home. We asked the following:

- What happens to you physically when you feel overloaded?
- What happens to you emotionally when you feel overloaded?

- Does feeling overloaded change how you deal with others at work? If yes, how?
- Does feeling overloaded change how you deal with others at home? If yes, how?
- Does feeling overloaded affect your productivity at work? If yes, how?
- Which type of overload do you consider more problematic: that stemming from work or that arising from your responsibilities at home? Why do you say this?

What are the physical manifestations of feeling overloaded? Respondents identified the following:

What happens to you physically when you feel overloaded?	**%**
Fatigue: tired, exhausted, can't sleep well	62%
Display physical symptoms associated with the stress/adrenal response: increased blood pressure, shortness of breath, increased heart rate, stomach upsets, jittery, agitated, chest pains	50%
Display physical symptoms associated with depression: cry, feel tearful, have difficulty getting up in the morning, getting going, lack of motivation, slower mental processes, difficulty focusing	28%
Get headaches/migraines	19%
Gain weight or lose weight: Develop unhealthy eating habits/don't eat/ drink more coffee, don't or cannot exercise	18%
Generally feel unwell: aggravates pre-existing health condition, develop specific health issues	10%

The interview responses reveal that role overload takes a physical toll on employees. Everyone was able to connect increased levels of role overload with a health problem that they had experienced, and most people identified a number of problems. Two-thirds of the sample linked role overload with an increased sense of fatigue (due in part to the fact that for many overload and insomnia go hand in hand), while half talk about how they had experienced physical symptoms that can be lumped together under the "flight or flight" syndrome (i.e. increased heart rate and blood pressure). Just over one in four described physical symptoms that are commonly associated with depression (e.g. crying, tearfulness, lack of motivation). One in five experienced more headaches and migraines, one in five had gained weigh or lost weight, and one in ten just generally did not feel well.

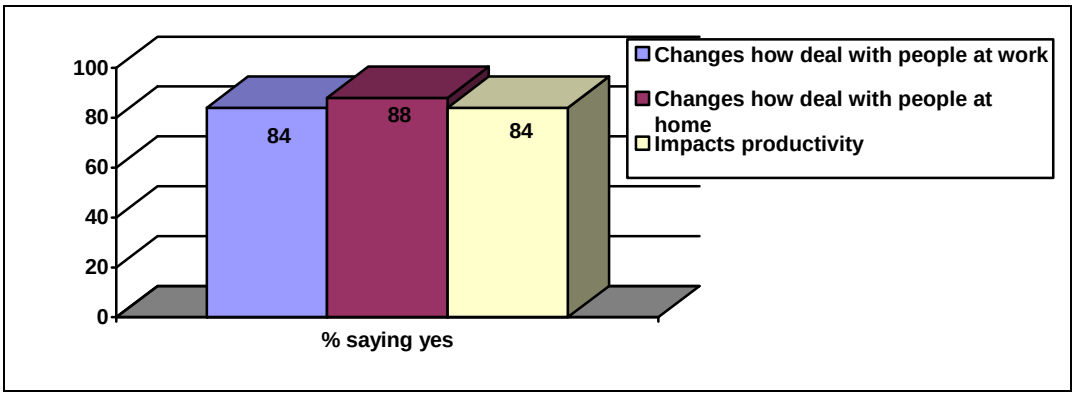
Respondents also identified a number of emotional issues that they connected with being overload:

What happens to you emotionally when you feel overloaded?	**%**
More irritable/ short tempered/angry	51%
Become depressed/ anxious/ overwhelmed/panicky	24%
Frustrated, impatient and intolerant	20%
I withdraw emotionally: become introverted/ less approachable	18%
Become upset more easily, teary, more emotional	17%
Become less focused, less able to concentrate	10%
Become filled with self doubt: question my abilities	7%

Role overload also takes an emotional toll on employees (everyone answered this question). Half the respondents noted that high levels of role overload made them irritable and short tempered – a response that is consistent with the fact that many are fatigued and tired. One in four said that they become depressed and anxious when they are overloaded, a finding that is again consistent with the physical symptoms they manifest. One in five talked about feeling frustrated, impatient and intolerant, one in five mentioned that the more overloaded they are, the more they withdraw emotionally, and one in five noted that they become more emotional, easily upset and teary. Many of these responses are also likely to be linked to the sense of fatigue mentioned earlier. Finally, some individuals mentioned that the more overloaded they became the less able they were to focus and concentrate (a symptom that is likely to contribute to yet more overload) and the more they questioned their abilities (i.e. overload is linked to a decline in self esteem).

After reading this list, it is hard to image how employers and policy makers could not recognize the link between overload and reduced productivity and increased use of Canada's health care system. To investigate this issue more fully we asked respondents if overload affected how they dealt with people at work, at home, and their productivity at work. Responses to these questions are given in Figure 5.1. Clarification of these responses is provided below.

Figure 5.1: Impact of Role Overload



The majority of the respondents felt that overload affected how they dealt with people at work (the rest said that they tried hard not to let it affect their relationships at work). Specifically they noted the following impacts:

Does overload change how you deal with other at work?	%
Short with people, less friendly, less empathetic, complain more	50%
More irritable/short tempered/angry	28%
I withdraw emotionally: reduce communications with others, less social	25%
More frustrated, impatient and intolerant	13%
Become more direct, assertive and task oriented	6%

All respondents talked about how overload had negatively impacted how they dealt with their colleagues at work. Specifically, they see themselves as becoming less friendly and empathetic,

more irritable and short tempered, less likely to socially engage, more impatient and intolerant and/or more direct/tasks oriented. These reactions are not surprising given the physical and emotional responses to overload noted previously but are unfortunate given the positive association between socializing at work and an increased ability to cope with overload.

All but 12% of the sample admitted that when they were overloaded their behavior became more inappropriate at home. Specifically, they noted the following impacts:

Does overload change how you deal with other at <u>home?</u>	**%**
More irritable/short tempered/angry	51%
I withdraw emotionally: reduce contact with friends and family, need more space, less attentive, more distracted	42%
Less patient	18%
I am unhappy so I am just no fun	5%

Many of the changes are similar to those described in association with work (i.e. more irritable and short tempered, less likely to socially engage with the family). One in five talked about how they were less patient with their children and spouse than they needed to be and 5% admitted that they were "just no fun."

Finally, 84% talked about how overload had impacted their productivity at work. They made the following observations:

Does overload affect your productivity at work?	**%**
Decreases productivity: Slows down my pace of work, I am more disorganized, do not know where to focus my attention	35%
Decreases productivity: Stress and anxiety decreases my ability to concentrate/focus	25%
Decreases productivity: Cut corners, take shortcuts/ make more mistakes	14%
Increases productivity: I work harder, devote more time to work	14%

Almost everyone who answered this question felt that they were less productive when they were overloaded. They attributed the decline to the fact that they are more disorganized, more stressed and anxious, less able to concentrate and focus or the fact that they cut corners and make more mistakes. One in ten felt that they were more productive when overloaded because they worked harder and devoted more hours to work. It should be noted, however, that hours at work is not a good predictor of productivity.

The final question in this section asked respondents which type of overload they consider more problematic: that stemming from work or that arising from your responsibilities at home? Two thirds of the respondents answered work to this question, 25% said home and 11% said both were equally problematic. Justifications for these responses are provided below.

Which type of overload do you find most problematic: that stemming from work or that arising from your responsibilities at home?	%
Work: My situation at home is less demanding (have someone to help at home, live on my own)	30%
Work: The nature of the responsibilities at work (life and death) and the fact that I am accountable means that I cannot forget about it when I am at home	19%
Work: The nature of the work (multiple demands, high workload, stressful environment, impacting time available for home/family/friends)	15%
Work: I have more control at home	15%
Work: I need the income	6%
Home: It's more important/ family more important (my behaviour at home has a bigger impact to those important to me)	13%
Home: I have less control at home/more at work (family dynamics change regularly, major health crisis at home, family member has a chronic condition, life cycle issues)	11%
Home: The nature of the role (multiple tasks)	7%
Both: Can't separate them (both very demanding and stressful, both equally important, hard to say no to either, depends where the pressure is on any given day)	10%

Why do some people think work overload is more problematic? This group perceives that demands are more significant at work (these people have fewer family demands, either because of their life cycle stage or because they can afford to hire someone to help at home or have a spouse who does not work), because they see the consequences of not doing a good job at work to be more problematic than not doing a good job at home (a patient will die, they will lose their job), because their work environment is more stressful than their family domain describing home as their "sanctuary" or because they perceive they have more control at home (life cycle stage, stay at home spouse, hired help). Those who felt that work overload was more problematic justified their response by stating that for them their family role is the most important one they had and they were unhappy when overload caused them to hurt those they love the most. Some also felt that they had less control at home (life cycle stage, family crisis, multiple demands). Those who stated both work and family justified their answer by noting that both roles were very important to them, and that their answer depended on "where the pressure was on a given day."

3.4 Summary questions at end of interview

The last brief set of questions in the interview were included to help us get an idea of what is important to the interview respondents (and by extrapolation hospital workers) with respect to overload. Since we asked all respondents to give us only one answer to each of these questions (not all complied with this request), the rank order of responses should help employers to prioritize their responses to role overload.

What ONE piece of advice would respondents offer to someone who is overloaded at work? Respondents suggested the following:

What ONE piece of advice would you offer to someone who is overloaded at work?	%
Try and remain calm and keep your emotions and feelings under control: step back, take a deep breath, try and get some perspective on the issue, see the big picture, take a break from work, take it one step at a time	28%
Prioritise: make lists and tick them off; make a plan, manage your time	26%
Talk to someone: EAP, professional counsellor, sympathetic colleague, friends, your boss	25%
Be realistic with respect to what you can do: give your self a break, do the best you can but accept that you cannot do everything, know your limits and stick to them, say no to things you do not have a passion for	18%
Get/Ask for help	15%
Look after yourself: take the time to exercise, take time for yourself, have hobbies, laugh with friends, take time for yourself, your interests and hobbies, laugh	13%
Take control over areas you can control: do your own work not other peoples, know what your responsibilities are, delegate	12%
Seek more balance in your life: Work is not who you are – you work to get paid. Is it worth it? Leave work at work,	8%

With respect to how to reduce work role overload, respondents offered advice that was aimed at controlling the emotions associated with overload as well as instrumental advice on how to the reduce demands that lead to feelings of overload. To control emotions respondents recommended that their colleague try and remain calm, keep their emotions under control and talk to someone. To reduce demands that are contributing to overload respondents recommended that respondents prioritize, say no to things that they do not have a passion for, make "you" a priority, take control over those areas of life you can control and/or compartmentalize by leaving work at work.

What ONE piece of advice would respondents offer to someone who is overloaded at home? Respondents suggested the following:

What ONE piece of advice would you offer to someone who is overloaded at home?	%
Get/ask for help, hire help	28%
Put things in perspective: step back, take a deep breath, see the big picture, do the best you can - accept you can't do everything, get away from the situation	23%
Talk to your partner/family about the overload	21%
Look after yourself and your health: get lots of rest, eat healthily and exercise, seek professional counselling if necessary, take time for your interests	17%
Adjust your standards and priorities: house doesn't have to be clean all the time, family is important, take time off work and modify work schedule	16%
Make time for your partner, family, friends: they are what is important	12%
Prioritize what's important to you and focus your energy there: pick the battles you have to fight	12%

Respondents gave the same pattern of advice (some instrumental, some aimed at controlling ones emotional response to overload) when talking about how people should cope with overload at home. Active coping strategies endorsed by the respondents included: ask for or hire help, make time for your partner, family and friends, prioritize, pick your battles, focus your energy on what is important and look after yourself. In terms of coping with the emotional component of overload, respondents suggested one or more of the following: that their colleague put things in perspective and accept that they cannot do everything, adjust their standards and priorities at home (house does not need to be spotless) and at work (you do not need to be at work all the time, someone else can do it) or that the colleague talk to their partner and family about overload.

What ONE thing could employers do to reduce the amount of overload employees encounter at work? Only 3% of the sample indicated that in their opinion the employer did not need to do anything as things are fine as they are. The rest offered the following suggestions.

What ONE thing could employers do to reduce the amount of overload employees encounter at work?	**%**
Increase staff numbers/ fill vacant positions	31%
Acknowledge the overload: listen to use, be more sympathetic, more empathetic, increase focus on employee well being, offer help, don't blame it all on "lack of funding"	18%
Examine workload systematically and look for ways to reduce or spread the workload: look for ways to improve workflow, improve institutional efficiency	14%
Prioritize: What is our strategic direction? Need to be clear about expectations and clarify role responsibilities, need to improve planning process, focus on fewer things to work on, be more selective before committing resources	13%
Increase the efficiency and effectiveness of the staff you have: increase opportunity to improve skills, improve communication, reduce e-mail, improve the physical environment	11%
Bring back secretarial/administrative support	10%
Provide more resources (not human) and increase resource availability	6%
Offer flexible working hours, family days and/or telework	6%
Establish realistic deadlines: there is no fat in the system, stop doubling assignments	5%

Suggestions offered by respondents were very practical. Hospitals need to either reduce the number of tasks that need to be done (e.g. look for way to reduce workload, prioritize, focus on fewer things, be more selective about committing resources, establish more realistic deadlines), and/or increase the number of employees doing the tasks (e.g. increase staff numbers, bring back administrative support) and/or change deadlines so that people have more time to complete work), and/or increase the efficiency of the employees that they have (e.g. increase resource availability, offer flexible working hours, establish realistic deadlines, conduct a systematic examination of workflow and work processes). One in five also wanted empathy and a tangible acknowledgement of the problem.

Finally, we concluded the interview by asking respondents to identify the ONE thing the employers do to help employees cope with role overload once it occurs. Only one individual said "nothing - it is fine as it is." The rest offered the suggestions that are given below.

One in three requested the hospital to make efforts to change the culture that validates role overload. One in five again talked about prioritizing. This group wanted the hospital to clarify who was doing what, relax deadlines and give employees more autonomy. One in five wanted the hospital to examine the issue of overload collaboratively and identify appropriate ways forward. Finally, a substantive number reiterated their request for more staff and administrative support.

What ONE thing could employers do to help employees cope with role overload once it occurs?	**%**
Change the culture that validates work overload	36%
Prioritize: Be clear about expectations, clarify duties, spread the workload/ reset priorities/ relax deadlines, give autonomy and let employees set own priorities	22%
Examine the issue collaboratively: use critical debrief, learn from it	17%
Increase staff numbers/ fill vacant positions	12%
Bring back secretarial/administrative support	12%
Be more flexible about schedules/work hours/ family days/ vacation request/job sharing	4%

4. Summary and Conclusions

What causes role overload?

What causes a person to feel overloaded? A combination of any or all of the following: too much responsibility (be it the volume of work, the number of tasks one has to complete, or the significance of the outcome), too little time, a high potential for the situation to negatively impact someone else or oneself, a lack of support or help to deal with the situation, uncertainty (due to a lack of knowledge or experience) about how best to proceed, the expectations of others and a lack of control over the situation. In other words, role overload can be considered to be the result of over-commitment, a lack of control, a sense of urgency, a lack of options and a sense of responsibility. It is also interesting to note that employees do not experience high levels of total overload if they are not overloaded at either work or at home (only 1 person out of 150 had high total overload but low work and family overload).

What causes overload at work?

What causes overload at work? A lack of time (caused by too many commitments, time constraints, and unrealistic work deadlines and work expectations), multiple competing priorities, a lack of help and support due, in many cases, to understaffing, and an inability to control the situation.

What causes overload at home?

What causes overload at home? Expectations at work (paid employment takes priority and overtime is systemic), a lack of time (i.e. too much to do in the time available, high expectations from family members, lack of time for oneself), competing demands and priorities (conflicting schedules and priorities within the family, need to balance work, family and other commitments), a lack of help and support, life cycle stage (particularly eldercare and children at a difficult age) and an inability to control the situation (such as in a family crisis).

What are the differences between overload at work and overload at home?

There is a lot of overlap with respect to the causes of overload at work and at home – though it should be noted that family overload seems to be more of a product of overload at work than vice versa. Also interesting to note is that family overload seems to be linked to life cycle stage while work overload has less of an obvious link to career stage. Finally, for women, overload at home is more strongly associated with the expectations other people and they place on themselves than is overload at work.

Why do some people feel overloaded when others, in the same situation, do not?

Perceptions on how well prepared an individual feels they are to handle a potentially threatening situation depends on context as well as the individual's past experience with this type of situation. Individuals were more able to deal with the situation if they had the necessary skills, a plan, a good support team and previous experience with the type of situation they were facing. Individuals who were already over committed (could not handle more demands), lacked support, were caught off guard, could not formulate a plan with respect to how best to deal with the situation and felt personally unready, either because they were emotionally not well prepared and/or because they did not have necessary knowledge, experience or skills to deal with the situation, were more likely to experience high levels of overload.

And so what? the consequences of role overload

Data from the interview study link higher levels of role overload with negative emotions, poorer physical health, poorer mental health, poorer relationships at work and at home, and lower productivity at work.

Role overload also takes an emotional toll on employees

How do individuals feel when they are overloaded? Challenged, personally threatened, and worried about how the situation and its resolution will affect someone they care about. This study found that the feelings associated with being overloaded are largely negative: words such as overwhelmed, pressured, frustrated, and angry were common descriptors used by the respondents to describe how they felt when overloaded. Overload and fear of failure also seem to go hand in hand – fear of failing at ones' work role, fear of failing at ones' family roles and fear of losing credibility/reputation (i.e. loss of face). Very few people linked feeling overloaded to positive feelings such as motivation and determination.

Role overload takes a physical toll on employees

All interview respondents were able to connect increased levels of role overload with one or more personal health problems. Two-thirds of the sample linked role overload with an increased sense of fatigue (due in part to the fact that for many overload and insomnia go hand in hand), while half talk about how they had experienced physical symptoms that can be lumped together under the "flight or flight" syndrome (i.e. increased heart rate and blood pressure). Just over one in four described physical symptoms that are commonly associated with depression (e.g. crying, tearfulness, lack of motivation). One in five experienced an increase in headaches and migraines, one in five had gained weigh or lost weight, and one in ten just generally did not feel well.

Role overload associated with declines in mental health

All interview respondents talked about how being overload had influenced their mental health. Half the respondents noted that high levels of role overload made them irritable and short tempered – a response that is consistent with the fact that many are fatigued and tired. One in four said that they become depressed and anxious when they were overloaded, a finding that is consistent with the physical symptoms they manifest. One in five talked about feeling frustrated, impatient and intolerant, one in five mentioned that the more overloaded they are, the more they withdraw emotionally and one in five noted that they become more emotional, easily upset and teary when overloaded. Finally, some individuals mentioned that the more overloaded they became the less able they were to focus and concentrate (a symptom that is likely to contribute to yet more overload) and the more they questioned their abilities (i.e. a decline in self esteem).

People take out their feelings of overload on others – at work and at home

All respondents talked about how overload had negatively impacted how they dealt with their colleagues at work and their family at home. Specifically, they see themselves as becoming less friendly and empathetic, more irritable and short tempered, less likely to engage with others, more impatient and intolerant and/or more task oriented. One in five talked about how they were less patient with their children and spouse than they needed to be and 5% admitted that they were "just no fun." These reactions are not surprising given the physical and emotional responses to overload noted previously but are unfortunate given the positive association between socializing at work and an increased ability to cope with overload.

Role overload contributes to declines in productivity

Virtually all (84%) of the individuals who participated in the interview study felt that they were less productive when they were overloaded. They attributed this decline to the fact that they are more disorganized, more stressed and anxious, less able to concentrate and focus and more likely to cut corners and make more mistakes when overloaded.

Which type of overload is more problematic?

Which type of overload is more problematic: that stemming from work or that arising from responsibilities at home? The data from this study indicate that for most hospital workers the

answer is work. The following data support this conclusion. First, when individuals were asked to describe a situation where they were overload, respondents were three times more likely to talk about challenges at work (such as a major project at work, unscheduled or additional work, competing demands on their time) than at home. Second, when asked this question directly in the interview itself, two thirds of the respondents answered work while 25% said home and 11% said both were equally problematic. Third, the data show that high work overload and high total overload are more likely to co-exist (60% of the sample report high work overload and high total overload) than are high family overload and high total overload (24% of those with high family overload also report high total overload) .

Health care workers use active coping strategies to cope with overload

The majority of individuals in this sample, when faced with an overload situation, cope by using active coping strategies: they work harder (e.g. just do it, skip lunch and breaks), they plan ahead, they prioritize, they get practical help from their work team or family, they speak to their boss and partner at home about the situation in an effort to get extra help and resources, they delegate, they reduce the quality of their work, they cut out non essential tasks, they work at keeping their emotions under control, and/or they compartmentalize (leave work at work and make time for themselves and their family).

To effectively cope with overload you need to deal with both the demands and the emotions

This study determined that to cope with overload employees need to use two sets of strategies: one set to help them deal with the demands they face and a second set to helps them cope with the emotional component of overload.

How can employees cope with the emotions associated with being overload?

How can employees cope with the emotions associated with being overloaded? Respondents from this study offered the following suggestions: engage in stress reducing activates (i.e. exercise, rest, socialize with others, go for a walk, take breaks, spend time on hobbies); talk to a trusted family member, friend or partner; keep your emotions in check (i.e. seek professional counseling, take comfort in spiritual beliefs and prayer, and/or remove yourself from the situation causing you to feel overwhelmed); put the issue into perspective and reduce the expectations you place on yourself (i.e stay calm and accept that you cannot do it all) and push back (i.e. learn to say no, do not take on extra responsibilities when already overloaded).

Why do these strategies work? Respondents stated that these strategies had helped them deal with the overload by allowing them keep calm, by helping them put things into perspectives and making it easier for them to unwind (i.e. helps dissipate the adrenal response).

How can employees cope with the "demand side" of being overload?

Respondents offered a number of practical suggestions on how to deal with the increased demands that are often a precursor to increased overload. Active coping strategies endorsed by the respondents to this study included prioritizing (e.g. make time for stress relieving activities

and time for yourself, make sure you do the most important tasks first, delegate low priority work to others, say no to things that you do not have a passion for), planning and organizing (to give clarity and direction), asking for or hiring help, and making time for your partner, family, friends, colleagues and "you."

What actions can others take to help someone cope with role overload?

Respondents to this study said that people at work and at home had helped them cope with overload by taking on some of the workload, by sharing their expertise when it came to creating a plan, and by providing emotional support. Respondents gave three major reasons why they felt that the support that had been offered by others worked: it helped practically (i.e. their advice, solutions, expertise and knowledge helped to get the job done and validates one's position) it helped emotionally (by reducing stress and nervousness and the feeling of being alone) and it helped them reduce their workload and free up time to deal with this situation.

Getting help from others makes a real difference

Respondents to this study indicated that practical support from others (i.e. getting someone to shoulder some of the burden) is more useful in terms of coping with overload than is emotional support and understanding. In other words, at both work and home, while understanding and sympathy does offer some relief from high levels of overload, tangible support is what appears to make the real difference.

Actions by the employer can help employees cope with overload

What actions can employers take to help employees cope with overload at work? The responses to this question suggest that employers who wish to help their employees deal with role overload should not take a programmatic approach to the issue as this appears to make little to no difference. In fact, only one program was mentioned as helping (EA) and this by only 4% of the sample. What does make a difference? Tangible support from colleagues and the manager (to take some of the work away), providing enough staff to do the work, and allowing time to dialogue with colleagues (e.g. to support your teams, give them time to learn from each other and vent to each other).

But actions by the employer can also make things worse

Virtually all of the respondents identified that actions by their employer had made it more difficult for them to deal with the overload at work. Most were frustrated by the fact that they felt that their employer was doing nothing to address what they perceive to be the systemic underlying causes of overload: the lack of staff and under resourcing of the health care system, an inability or lack of will on the part of management to plan and prioritize, interpersonal conflict, poor management, and an organizational structure that provides little role clarity.

What could employers do to reduce the amount of overload employees encounter at work?

Suggestions offered by respondents were very practical. Hospitals need to either reduce the number of tasks that need to be done (e.g. look for way to reduce workload, prioritize, focus on fewer things, be more selective about committing resources, and establish more realistic deadlines), and/or increase the number of employees doing the tasks (e.g. increase staff numbers, bring back administrative support) and/or change deadlines so that people have more time to complete the work, and/or increase the efficiency of the employees that they have (e.g. offer flexible working hours, establish realistic deadlines, conduct a systematic examination of workflow and work processes).

What could employers do to help employees cope with overload at work?

Key suggestions here included make efforts to change the culture that validates role overload, prioritize (i.e. establish priorities and link them to funding, clarify who is doing what, relax deadlines and give employees more autonomy) and increase the number of support staff.

What strategies can employees use to prevent overload from occurring?

What strategies can employees use to prevent overload from occurring? Almost one in five talked about the importance of setting boundaries at work and at home and simplifying where ever possible when it comes to the prevention of role overload. Other strategies that respondents have felt proved useful include building relationships with key others at work and at home (connect with team, make time for fun), ask for help when it is needed, delegate if it is possible and appropriate, and compartmentalize (work will intrude into family domain if you let it). Examination of this list reinforces the important of planning, organizing and prioritizing to the reduction of role overload (say no to low priority tasks at work and at home and yes to yourself).

Why do these strategies work?

Why do these strategies work? Half felt that strategies such as planning, organizing and setting priorities increased the amount of control they had over the situation by reducing the "unexpected", expanding the amount of time available, and facilitating focus and decision making. One in four stated that the strategies worked because they helped them deal with emotional effect of stress (i.e. I relax, unwind, put things into perspective). Worthy of note is the acknowledgement, by one in ten, that planning, organizing etc helped them cope with some forms of overload but had little impact on their ability to deal with overload stemming from a crisis.

What are the differences between resolved and non-resolved overload scenarios?

What are the differences between resolved and non-resolved overload scenarios? Surprisingly, there are very few. Those that were observed are summarized below:

- Situations that were not resolved satisfactorily were less likely to involve work

- Situations that were not resolved satisfactorily were more likely to involve a lack of personal resources and be related to interpersonal conflict with others.

- When talking about a situation that had not been resolved successfully, twice as many people talked about how they worried that the situation would harm them personally or harm someone who was significant to them as discussed these issues in the resolved scenarios.

- When talking about a situation that had not been resolved the dominant feelings mentioned by respondents were: threat, harm, being overwhelmed, pressured and rushed. When talking about a situation that had been resolved the dominant feelings mentioned by respondents were challenge, determination and motivation.

- When talking about a scenario that had not been resolved, respondents were more likely to display a lack of confidence in their ability to handle the situation and more likely to talk about how their confidence in a positive outcome had deteriorated over time.

- Perceptions with respect to preparedness varied depending on whether or not the scenario had been resolved. Respondents were more likely to talk about how they were prepared when describing a situation which had been resolved than when talking about one that had not. When talking about a situation that had not been resolved respondents were more likely to talk about a lack of support and resources, being caught off guard, not able to plan, and being personally unprepared.

- Respondents were more likely to use active coping strategies (especially prioritizing) when faced with a situation that was ultimately resolved and more likely to panic and avoid the problem when the situation was one that was ultimately not resolved.

- In the majority of the cases where the situation had been resolved, the individual had stuck to their original plan or did what they planned plus more. In virtually all of the cases where the scenario had not been resolved, the individual's actions differed from what they had planned to do. Having a plan and sticking to the plan seems to make a difference.

- When talking about scenarios that had not been resolved, individuals were more likely to say that they had coped by working hard (just tried to do it all) and less likely to say that they had used active coping strategies such as being organized, planning, prioritizing, and delegating. They were also less likely to have control over their emotions. It may be their inability to plan, prioritize and delegate and the tendency to try to do it all that contributed to the lack of resolution of the overload situation.
- When discussing situations that had been resolved respondents stated that this was what they had expected to happen because their experience in the past with situations like the one they had described had helped them set realistic goals and expectations and given them confidence in their plan. When discussing a situation that had not been resolved, on the other hand, people focused on how the situation had not gone as expected because of unanticipated problems (less help than promised, unpredictable outcome, lack of support from boss) and how the situation had been harder to deal with than they had expected (under estimated effort, took longer than anticipated).

- Individuals were upbeat when talking about an overload situation that they had resolved successfully: they felt happy, satisfied, relaxed, relieved and experienced positive emotions such as a sense of accomplishment, personal pride and empowered. On the other hand, individuals were very distraught when talking about an overload situation that had not been resolved successfully. Two thirds talked about feeling frustrated, betrayed, used, angry, discouraged and resentful. One in five talked about how the situation had impaired their mental health (stress, depressed, anxious).

Chapter Six
Conclusions

This study set out to answer the following questions:

- What are the key antecedents of role overload in Canadian hospitals?
- What are the consequences of high levels of role overload to those working in Canadian hospitals and their employers?
- What strategies can health care workers and health care organizations employ to reduce the formation of role overload?
- What coping strategies can health care workers and organizations health care employ to mitigate the negative impacts of role overload on individual and organizational well-being?
- What impact do job type and life cycle stage have on the etiology of role overload?

Detailed answers to each of these questions (especially the impact of job type and life cycle stage on the etiology of role overload) can be found in the conclusion sections at the end of chapters 3, 4 and 5. This section does not reiterate this information. Rather, it provides a summary of key findings with respect to all but one of these questions.[3] Also included in this chapter is a discussion of how this research contributes to the field of occupational health and safety and recommendations for future work in the area.

6.1 What are the key antecedents of role overload in Canadian hospitals?

The survey data determined that high levels of work role overload and total role overload are systemic in Canada's hospitals. The fact that the hospital workers in our sample are twice as likely to report high levels of work role overload (57% high) as report high levels of family role overload (24% high) suggests that work demands are more likely to overwhelm employees than are family demands.

The first research question addressed in this study asked "what are the key antecedents of role overload in Canadian hospitals?" Answers to this question can be taken from all three studies that were part of this initiative. The causes that were common between the three studies are listed in Table 6.1. Details are given below.

Focus Groups: Six sources of role overload were identified from the focus group study:

- *A lack of resources*: not enough staff, a lack of equipment, not everyone pulling their weight.

[3] The impact of job type and life cycle stage on the etiology of role overload is discussed in detail in Chapter 4 and not repeated here.

- *Unrealistic expectations*: the move towards counting beds rather than looking at the diagnosis, the demands for documentation, the frustration of families and patients, no time for training and education, no time for or recognition of personal commitments, too many priorities/too little time.

- *The nature of the work itself*: employees are never "finished", hard to get away to regroup, the work itself is unpredictable.

- *A lack of reward and recognition*: no sense of accomplishment, no sense of pride in the work, focus on negative rather than positive, negative work environment, employees frustrated with both extrinsic and intrinsic rewards.

- *The organization culture:* change is continuous, saying no is career limiting and personally unacceptable, culture forces employees to chose between work or family and focuses on what is done wrong, not what is done right.

- *Communication:* unidirectional (down not up), inefficient, ineffective, too much transmission and not enough "receivers at the top."

Table 6.1 Common Causes of Role Overload

What causes overload?	Focus Group	Survey	Interview
Lack of help/support (i.e. too much to do)	Understaffing Lack of resources	Understaffing	Lack of support or help Understaffing
A lack of time	Documentation Counting beds Unrealistic expectations	Ineffective change management practices Too many priorities Working at multiple sites Time in work role Time in family role	Sense of urgency Volume of work Over commitment Time constraints, Unrealistic work deadlines and work expectations
The nature of the task	Unpredictable, never finished	Increased complexity of the work	Significance of outcomes on others and themselves
The organization culture	Work or family not work and family Focus on what is done wrong, not what is done right.	Culture of Health Care (too many priorities, hard to say no, hard to leave when shift over)	Multiple competing priorities Inability to say no
Communication	Flows down not up, inefficient, ineffective	Government policies on wait time	
Lack of control	Cannot say no	High task interdependence Lower family income	Uncertainty as to how to proceed Lack of options

Survey: Analysis of the survey data showed that both family role overload and work role overload are important predictors of total role overload (i.e. we are able to predict 48% of the variation in total role overload if we know how overloaded an individual is at work and at home). Not surprisingly, the higher the overload is at work and at home the greater the overload is overall. This observation is consistent with the interview study which determined that employees do not experience high levels of total overload if they are not overloaded at either work or at home (only 1 person out of 150 had high total overload but low work and family overload).

Ten aspects of work predict 51% of the variation in work role overload. Higher levels of work role overload are strongly associated with:

- working in an environment that subscribes to the culture of health care: the more the employee believes that they cannot say no to more work, that they have too many priorities, that it is hard to get help, and that it is hard to leave when ones shift is over, the more likely they are to experience work overload.

- working in an area that is understaffed.

- the increased complexity of the cases facing many health care providers.

- higher levels of task interdependence (i.e., cannot complete work independently)

- having to work at multiple sites or for multiple units.

- the occupancy of a greater number of roles.

- the number of hours one spends in work per week.

- having to supervise the work of others (the more direct reports one has, the higher the work overload they are likely to experience).

- government policies designed to reduce wait times.

- a decrease in the amount of time one has to spend in leisure.

- working full time (rather than part time or on a casual basis).

Six aspects of the family role explain 24% of the variation in family role overload. Higher levels of family role overload are strongly associated with:

- Total Roles: the more roles one has, the higher the family role overload.

- The families' financial situation: the lower the family income, the higher the family role overload. This finding is likely due to the fact that people who live in families where money is tight are less able to purchase support for family tasks.

- Hours per week in childcare, home chores and eldercare: the more time one spends in childcare, home chores and eldercare, the higher the family overload.

- The more value an employee places on their role as a parent, the more likely they are to experience higher levels of family role overload.

- Spouse hours in childcare and home chores.

- Working in an environment that subscribes to the culture of health care (i.e., cannot say no, cannot get away from work on time).

The Interview Study: What causes a person to feel overloaded? The interview study indicated a combination of any or all of the following to be problematic:

- Too much responsibility (be it the volume of work, the number of tasks one has to complete, or the significance of the outcome).

- Too little time.

- A high potential for the situation to negatively impact someone else/themselves.

- A lack of support or help to deal with the situation.

- Uncertainty (due to a lack of knowledge or experience) about how best to proceed.

- The expectations of others.

- A lack of control over the situation.

What causes overload at work? A lack of time (too many commitments, time constraints, and unrealistic work deadlines and work expectations), multiple competing priorities, a lack of help and support due, in many cases, to understaffing and an inability to control the situation.

What causes overload at home? Expectations at work (paid employment takes priority and overtime systemic), a lack of time (too much to do in the time available), competing demands and priorities (conflicting schedules and priorities within the family), a lack of help and support (no help or support at home), life cycle stage (eldercare, children at a difficult age) and an inability to control the situation (family crisis).

There is a lot of overlap with respect to the causes of overload at work and at home – though it should be noted that family overload seems to be more of a product of overload at work than vice versa. Also interesting to note is that family overload seems to be linked to life cycle stage while work overload has less of an obvious link to career stage. Finally, for women, overload at home is more strongly associated with the expectations other people and they place on themselves than is overload at work.

6.2 What are the consequences of high levels of role overload?

The survey and interview data paint a consistent picture - the higher the level of role overload (be it work, family or total) the more likely the employee is to experience physical and mental health problems and the more likely the employer is to experience outcomes likely to have a negative impact on their efficiency, their effectiveness and their bottom line. Specific details supporting these conclusions are given below.

6.2.1 Overload is damaging to employees

Data from the survey and interview studies link higher levels of role overload with negative emotions (interview data only), poorer mental health, poorer physical health and poorer relationships at work and at home. Consider the following:

- Role overload takes an emotional toll on employees. This study found that the feelings associated with being overloaded are largely negative: words such as overwhelmed, pressured, frustrated, and angry were common descriptors used by the respondents to describe how they felt when overloaded.

- This research found a significant per cent of the health care workers in Canadian hospitals to be in poorer mental and physical health: 59% report high levels of stress, 36% report high levels of depressed mood and one in five in are poor physical health. Total role overload was shown to be a significant predictor of stress, depressed mood and perceived health: the higher the total overload the poorer the physical and mental health

- The interview study sheds light on the underlying mechanisms connecting increased overload to declines in physical and mental health.

- All interview respondents were able to connect increased levels of role overload with one or more personal health problems including an increased sense of fatigue, elevated heart rate and blood pressure, headaches and migraines and weigh gain or lost weight.

- All interview respondents talked about how being overloaded had negatively influenced their mental health. More specifically, they linked high levels of role overload with increased irritability and short temperedness, increases in depression and anxiety, feeling frustrated, impatient and intolerant, an increased tendency to withdraw emotionally, an inability to focus and concentrate and a decline in self esteem and self confidence.

- One in three health care workers report that their responsibilities at work interfere with their ability to meet role demands at home (i.e. experience high levels of work interferes with family). Total role overload was a significant predictor of work-life conflict: the higher the total overload the higher the conflict between work and family.

- The interview study also linked higher levels of role overload to a decline in relationships at work and at home. All respondents talked about how overload had negatively impacted how they dealt with their significant others. Specifically, they indicated that as overload

increased they became less friendly and empathetic, more irritable and short tempered, less likely to engage with others, more impatient and intolerant and more task oriented.

6.2.2 Overload is detrimental to health care organizations

Data from survey study links higher levels of role overload with greater intent to turnover, increased absenteeism, greater use of EAP, lower commitment and lower productivity. Consider the following:

- Approximately one in four of those answering the survey have low continuance commitment (i.e. not loyal to hospital) and high intent to turnover (think of leaving hospital several times a week or daily).

- Absenteeism is very high within the health care sector. Two thirds of survey respondents missed work in the past six months. The most common causes of absenteeism were health problems and physical or emotional fatigue (i.e., "a mental health day").

- Three-quarters of the survey respondents frequently (i.e., 6 times per year on average) came into work when they were unwell. This behavior is problematic in that it is likely to be associated with decreases in productivity and efficiency and an increased transmission of ill health in the workplace.

- One in ten employees in the survey sample used EAP services in the past six months.

- The higher the total role overload the more likely the employee is to be absent from work, to use the organization's EAP services, and to think of leaving the organization, and the less likely they are to be loyal to the organization. These findings link higher levels of role overload to challenges with respect to recruitment, retention and the organization's bottom line (costs associated with absenteeism and benefits).

- Virtually all (84%) of the individuals who participated in the interview study felt that they were less productive when they were overloaded. The attributed this decline to the fact that they are more disorganized, more stressed and anxious, less able to concentrate and focus and more likely to cut corners and make more mistakes when overloaded.

6.3 Coping with role overload

A main focus of this study was to identify:

- strategies health care workers and organizations can employ to reduce the formation of role overload.

- strategies health care workers and organizations can employ to mitigate the negative impacts of role overload on individual and organizational well-being

To do this we first had to identify how Canadian health care workers coped with overload and identify what types of support were offered by Canadian hospitals.

6.3.1 Canadian hospital workers employ a myriad of strategies to cope with role overload.

Canadian hospital workers employ a myriad of strategies to cope with role overload. Both the survey and interview data found that the majority of individuals, when faced with an overload situation, coped by using active coping strategies, taking direct action and getting by on less sleep. More specifically, they work harder they plan ahead, they prioritize, they get practical help from their work team or family, they speak to their boss/partner at home about the situation, they delegate, they reduce the quality of their work, they cut out non essential tasks and they compartmentalize. A minority try and separate themselves emotionally or physically from the situation and focus on keeping their emotions under control. Very few individuals seek to cope by putting their family first (15%). Approximately one in three cope by drinking/using prescription medicine occasionally: 15% use this strategy several times a week or daily. Health care employees also cope by seeking support from others: 66% seek support from friends and family and half half seek support from colleagues at work.

6.3.2 Canadian hospitals provide employees with few supports to help them cope with role overload

Canadian hospitals provide employees with few supports to help them cope with role overload. Consider the following:

- Perceived control, "the belief that one has the ability to make a difference in the course or the consequences of some event or experience" is very low within the hospital sector with very few hospital workers reporting high levels of control over their work environment (only 13% high), their pace of work (only 15% high), or over their work day (25% with high perceived flexibility).

- Very few employees perceive their hospital to be a supportive employer. Only 24% of the sample report high perceived organizational support (POS) while 33% report low.

- Fewer than half (45%) of the employees in this sample view their manager as supportive: one in five rate their manager as non-supportive.

- Very few employees have a positive view of the organizational culture in their hospital. Less than one in four agree that the culture has the positive attributes associated with a values driven, cohesive culture, a culture of appreciation and respect, and a culture of team work, while approximately 30% disagree that these cultures exist in their place of work. One in five agree that the culture is one that forces a choice between work and family (i.e. a culture of work or family) while one in three disagree (i.e. think that the culture is supportive of balance).

6.3.3 Coping with Role Overload: Prevention

What helps prevent overload from occurring? The interview study suggests the following list of things that employees can do to reduce the incidence of overload:

- Be prepared emotionally.
- Have the necessary knowledge, experience and skills to deal with the situation.
- Formulate a plan with respect to how best to deal with the situation.
- Have a good support team and access to help.
- Set boundaries at work and at home.
- Simplify where ever possible.

Why do these strategies work? Respondents stated that strategies such as planning, organizing and setting priorities increased the amount of control they had over the situation by reducing the "unexpected", expanding the amount of time available, and facilitating focus and decision making. Others stated that the strategies worked because they helped them deal with emotional effect of stress.

There are also a number of things that interview participants said their hospital could do to reduce the incidence of overload including:

- Reduce the number of tasks that need to be done (prioritize).
- Increase the number of employees doing the tasks (increase staff numbers, bring back administrative support).
- Set up more realistic deadlines so that people have more time to complete the work.
- Increase the efficiency of their current workforce (conduct a systematic examination of workflow and work processes).
- Increase the number of supportive managers in the organization (analysis of the survey data determined that supportive management reduces the negative effect of work role overload on total role overload).

6.3.4 Coping with Role Overload: Mitigation

What strategies can health care workers and organizations employ to mitigate the negative impacts of role overload on individual and organizational well-being? The survey component of this research supports the following conclusions:

- Employers who wish to reduce turnover need to reduce the workloads on their staff and give them opportunities to socialize and communicate with their colleagues at work.

- Employees who wish to reduce absenteeism need to reduce workloads and the sense of overload by addressing the conditions that cause overload at work (the culture, understaffing, complexity of work).

- Employees who wish to improve their mental and physical health need to make an effort to get enough sleep, put their family first, seek social support from colleagues at work and friends and reduce their use of alcohol and over the counter medication.

- Employees who wish to improve their work life balance need to try and emotionally distance themselves from the situation causing them stress as well as to make an effort to get enough sleep, put their family first, seek social support from colleagues at work and friends and reduce their use of alcohol and over the counter medication.

A second set of recommendations can be drawn from the interview study which determined that to cope with overload employees need to use two sets of strategies: one set to help them deal with the demands they face and a second set to helps them cope with the emotional component of overload.

Respondents from the interview study offered the following suggestions to colleagues on how to cope with the emotions associated with being overloaded:

- Engage in stress reducing activates (i.e. exercise).

- Talk to a trusted family member, friend or partner.

- Keep your emotions in check (seek professional counselling, take comfort in spiritual beliefs).

- Put the issue into perspective/reduce the expectations you place on yourself (stay calm, accept that you cannot do it all)/

- Push back (learn to say no, do not take on extra responsibilities when already overloaded).

Interview respondents also offered a number of practical suggestions on how to deal with the increased demands that are often a precursor to increased overload. Active coping strategies endorsed by the respondents to this study included:

- Prioritizing: make time for stress relieving activities and time for yourself, make sure you do the most important tasks first, delegate low priority work to others, say no to things that you do not have a passion for.

- Planning and organizing.

- Asking for/hiring help.

- Making time for partner, family, friends, colleagues and "you."

From the interview study we also get the following set of strategies employers can use to help employees cope with role overload:

- Increase the amount of tangible support available from ones colleagues and immediate manager.

- Increase staffing so there are enough staff to do the work.

- Give employees time to dialogue and learn from each with each other at work.

- Develop priorities and a plan, and stick with them.

- Increase role clarity by clarifying roles and responsibilities and restructuring as necessary.

- Change the culture from one which validates role overload to one that values employees.

- Increase the number of support staff.

Suggestions on how to address overload were also given in the focus groups. These groups suggested that to reduce role overload hospitals need to:

- Hire more staff and increase the number of resources available in the system or reduce the number of priorities.

- Give employees had more time to interact, socialize, share information with their colleagues and regroup. This needs to be built into the work day.

- Change the organizational culture to one that recognizes that employees have the right to a life outside of work. To do this they need to focus on the behaviour of leaders and managers.

- Improve communications within the organization. Reduce the use of hospital wide broadcasts and improve information flow.

Focus group participants also suggested that employees have to look after themselves by making that they have some downtime, setting life priorities (not just work priorities) and saying no.

6.4 Contribution and Suggestions for Future Research

Given the prevalence of role overload and the number of negative consequences it engenders, it is unfortunate that role overload has largely disappeared from the work-family literature. This

research initiative indicates that academics, practitioners and policy-makers alike would benefit from a deeper understanding of the total role overload construct. This research has determined that role overload has importance as a separate concept from role conflict in general, because it has important consequential differences. While conflict may be disheartening and distracting when it involves the amelioration of competing role demands, getting to a state of subjective overload – feeling like there is too much to do and too little time – is an altogether different state of affairs. Using Khan and his associates definition of role overload, we can say that it is a form of role conflict, but it is a unique form of conflict that merits its own attention because of its potential effects. This study has made the case that researchers need to make the distinction between work role overload, family role overload and role set overload, which appears to be the result of too many roles, including non-work and non-family roles, or excessive demands in any number of roles. In other words, researchers need to include the role overload construct in their study of workplace health and safety.

This study makes a number of important contributions to research in this area. First, it has developed and validated a model of role overload that informs our understanding of this construct and its etiology. Second, we have identified a number of moderators and mediators of the relationships between work overload and total overload and total overload and employee health, organizational health and work-life balance. This information can be used by policy makers and work-place health professionals to design programs to reduce role overload. Third, the data from this study can be used to build the business case for change in this area by helping practitioners determine the costs of overloading employees. Fourth, this study developed valid and reliable measures of the organizational antecedents of role overload within hospitals and the organizational culture within hospitals. Both of these measures can be used by health care organizations to benchmark their organizations, identify key priorities areas with respect to the design of interventions and evaluate the success of different intervention strategies. There are a number of possible interventions suggested by this study but we would recommend that organizations interested in reducing overload look first at immediate manager and cultural change as culture and manager moderate many of the relationships in the model.

Future research in this area should test our theoretical framework in other sectors and other types of organizations. It would also be interesting to undertake a number of longitudinal research studies which looks at interventions at either the employee or organizational level.

Finally, the link between role overload and employee physical and mental health is an important one for those concerned with health and safety as it suggests that supportive policies and work place safety initiatives, on their own, are unlikely to have the desired results on employee health if decision makers implement them into a work environment where there are not enough staff to do the work, the culture forces a choice between work or family, the urgent overtakes the important, where it is unacceptable to say no to more work. The link between overload and organizational effectiveness gives employers a further incentive to address this issue.

References

Advisory Committee on Health Human Resources. (2002). *Our health, our future - Creating quality workplaces for Canadian nurses: Final report of the Canadian Nursing Advisory Committee.* Ottawa: Canadian Nursing Advisory Committee.

Aryee, S., Luk, V., Leung, A. & Lo, S. (1999). Role stressors, interrole conflict and well-being: The moderating influence of spousal support and coping behaviors among employed parents in Hong Kong. *Journal of Vocational Behavior*, *54*, 259-278.

Bacharach, S. B., Bamberger, P., & Conley, S. (1991). Work-home conflict among nurses and engineers: Mediating the impact of role stress on burnout and satisfaction at work. *Journal of Organizational Behavior*, *12*, 39-53.

Barclay, D. W., Higgins, C. A. & Thompson, R. L. (1995). The partial least squares approach to causal modeling: Personal computer adoption and use PLS as an illustration. *Technology Studies* , *Special Issue, Research Methodology, 2*, 285-324.

Barnett, R. C. & Baruch, G. K. (1985). Women's involvement in multiple roles and psychological distress. *Journal of Personality and Social Psychology, 49*, 134-145.

Barnett, R. C., Raudenbush, S. W., Brennan, R. T., Pleck, J. H. & Marshall, J. L. (1995). Change in job and marital experiences and change in psychological distress: A longitudinal study of dual-earner couples, *Journal of Personality and Social Psychology*, *69*, 839-850.

Bohen, H.H. & Viveros-Long, A. (1981). *Balancing jobs and family life: Do flexible work schedules help?* Philadelphia: Temple University Press.

Brett, J. & Stroh, L. (2003). Working 61 plus hours a week: Why do managers do it? *Journal of Applied Psychology*, *88*, 67-78.

Cammann, C., Fichman, M., Jenkins, G. D., & Klesh, J. (1983). Michigan Organizational Assessment Questionnaire. In S. E. Seashore, E. E. Lawler, P. H. Mirvis & C. Cammann (Eds.) *Assessing organizational change: A guide to methods, measures and practices* (pp. 71-138). New York: Wiley-Interscience.

Canadian Institute for Health Information (CIHI). (2001). *Health Care in Canada*. Ottawa, ON: Canadian Institute for Health Information.

Canadian Institute for Health Information (CIHI). (2002). *Canada's Health Care Providers*. Ottawa, ON: Canadian Institute for Health Information.

Canadian Nurses Association. (2001). Quality Professional PracticeEnvironments. Ottawa: Canadian Institute for Health Information.

Canadian Medical Association (CMA). (2003). *CMA President launches Centre for hysician Health and Well-Being.* Retrieved August 19, 2003 from http://www.cma.ca/cma/common/displayPage.do?pageId=/staticContent/HTML/N0/l2/advocacy/news/2003/08-19.htm.

Canadian Policy Research Networks, Inc. (2002). Health Human Resource Planning in Canada - Physician and Nursing Work Force Issues, Summary Report submitted to the Commission on the Future of Health Care in Canada. (Available online at HTTP://WWW.CPRN.CA/CPRN.HTML)

Commission of the Future of Health Care in Canada. (2002). Building on Values: The Future of Health Care in Canada. Ottawa: The Commission of the Future of Health Care in Canada

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behaviour*, *24*, 385-396.
Cooke, R. A. & Rousseau, D. M. (1984). Stress and strain from family roles and work-role expectations. *Journal of Applied Psychology*, *69*, 252-260.
Coverman, S. (1989). Role overload, role conflict, and stress: Addressing consequences of multiple role demands. *Social Forces*, *67,* 965-982.
Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, *49*, 71-75.
Drucker, P. (1999). Knowledge worker productivity: The biggest challenge. *California Management Review*, *41*(2): 79-94.
Duxbury, L. & Higgins, C. (2001). *Work-life balance in the new millennium: Where are we? Where do we need to go?* Ottawa: Canadian Policy Research Networks, Discussion Paper No. W-12
Duxbury, L. & Higgins, C. (2003). *Work-life conflict in Canada in the new millennium: A status report*. Ottawa: Health Canada.
Duxbury, L. & Higgins, C. (2005). Who *is at risk? Predictors of work-life conflict.* Ottawa: Public Health Agency of Canada.
Duxbury, L., Higgins, C., Lee, C., & Mills, S. (1991). Balancing work and family: A study of the Canadian Federal Public Sector. Ottawa: Department of Health and Welfare Canada (NHRDP).
Duxbury, L., and Higgins, C. (2009). Work-Life Conflict in the New Millennium: Key Findings and Recommendations From The 2001 National Work-Life Conflict Study, Ottawa, Health Canada.
Website: http://www.HC-SG.gc.ca/ EWH-SEMT/PUBS/Occup-Travail/Balancing-Six-Equilibre-six/Index-Eng.php
Elloy, D. F. & Smith, C. R. (2003). Patterns of stress, work-family conflict, role conflict, role ambiguity and overload among dual career and single-career couples: An Australian study. *Cross Cultural Management*, *10*, 55-66.
Folkman, S. & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior, 21,* 219-239.
Fornell, C. & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*, 39-50.
Frone, M. R., Russell, M. & Cooper, M. L. (1992). Antecedents and outcomes of work-family conflict: Testing a model of the work-family interface. *Journal of Applied Psychology*, *77*, 65-78.
Frone, M. R., Yardley, J. K., & Markel, K. S. (1997). Developing and testing an integrative model of the work-family interface. *Journal of Vocational Behavior*. *50*, 145-167.
Goode, W. J. (1960). A theory of role strain. *American Sociological Review*, *25*, 483-496.
Greenhaus, J. H. & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review, 10*, 76-88.
Greenhaus, J. H. & Kopelman, R. E. (1981). Conflict between work and non-work roles: Implications for the career planning process. *Human Resource Planning*, *4*(1), 1-10.

Guelzow, M. G., Bird, G. W. & Koball, E. H. (1991). An explanatory path analysis of the stress process for dual-career men and women. *Journal of Marriage and the Family*, *5,* 151-164.
Gutek, B. A., Searle, S. & Klepa, L. (1991). Rational versus gender role explanations for work-family conflict. *Journal of Applied Psychology*, 76: 560-568.
Hall, D. T., & Richter, J. (1988). Balancing work life and home life: What can organizations do to help? *Academy of Management Executive, 3,* 213-223.
Havlovic, S. J. & Keenan, J. P. (1995). Coping with work stress: The influence of individual differences. in Crandall, R. and Perrewe, P. L. (Eds.) *Occupational stress: A handbook .(*pp. 199-212). Washington, DC: Taylor & Francis.
Higgins, C. A., Duxbury, L. E., & Irving, R. H. (1992). Work-family conflict in the dual-career family. *Organizational Behavior and Human Decision Processes*, *51*, 51-75.
Higgins, C., Duxbury, L., & Johnson, K. (2004). *Exploring the link between work-life conflict and demands on Canada's health care system (Report Three)*. Ottawa: Health Canada.
Heery, E. and Noon, M. (2001). *Oxford Dictionary of Human Resource Management*, London: Oxford University Press.
Jackson, S., & Schuler, R. (1985). A meta-analysis and conceptual critique of research on role ambiguity and role conflict in work settings. *Organizational Behavior and Human Decision Processes, 36*, 16-78.
Kandel, D. B., Davies, M. & Raveis, V. H. (1985). The stressfulness of daily social roles for women: Marital, occupational and household roles. *Journal of Health and Social Behaviour, 26*, 64-78
Kanungo, R. N. (1982). Measurement of job and work involvement. *Journal of Applied Psychology, 67*, 341-349.
Kelly, R. F. & Voydanoff, P. (1985). Work/family role strain among employed parents, *Family Relations, 34*, 367-374
Khan, R, L., Wolfe, D. M., Quinn, R. P., Snoek, J. D. & Rosenthal, R. A. (1964). *Organizational stress: Studies in role conflict and ambiguity*. New York: John Wiley & Sons.
Komarovsky, M. (1976). *Dimensions of masculinity: A study of college youth*. New York: W.W. Norton and Company.
Kopelman, R. E., Greenhaus, J. H., & Connolly, T. F. (1983). A model of work, family, and interrole conflict: A conflict validations study. *Organizational Behavior and Human Performance*, *32*, 198-215.
Latack, J. C. (1986). Coping with job stress: Measures and future directions for scale development. *Journal of Applied Psychology*, *71*, 377-385.
Latack, J. C. & Havlovic, S. J. (1992). Coping with job stress: A conceptual evaluation framework for coping measures. *Journal of Organizational Behavior*, *13*, 479-508.
Lazarus, R. S. & Folkman, S. (1984). *Stress, Appraisal, and Coping.* New York: Springer.
Lowe, G. S. (2001). *Employer of choice? Workplace innovation in government.* Ottawa, ON: Canadian Policy Research Networks.
Lowe, G. (2003). *Healthy Workplaces and Productivity: A Discussion paper*. Ottawa: Minister of Public Works and Government Services Canada.
Marks, S. (1977). Multiple roles and role strain: Some notes on human energy, time and commitment. *American Sociological Review*, *42*, 921-936.

Marks, S. R. & MacDermid, S. H. 1996. Multiple roles and the self: A theory of role balance. *Journal of Marriage and the Family*, *58*, 417-432.
Maxwell, J. (2002). Creating High-Quality Health-Care Workplaces. *Canadian Health Care Management, 102 (11),* 101-110.
McCubbin, H. I. (1979). Integrating coping behavior in family stress theory. *Journal of Marriage and the Family*, *41*, 237-244.
Moos, R. H., Cronkite, R. C., Billings, A. G., & Finney, J. W. (1988). *Health and daily living form manual*. Stanford, CA: Social Ecology Laboratory, Department of Psychiatry, Stanford University.
National Forum on Health. (1997). C*anada Health Action: Building on the Legacy. Final Report of the National Forum on Health*. Ottawa: Minister of Public Works and Government Services.
O'Neil, R. & Greenberger, E. (1994). Patterns of commitment to work and parenting: Implications for role strain. *Journal of Marriage and the Family*, *56*, 101-112.
Pearlin, L. J. (1975). Status inequality and stress in marriage. *American Sociological Review*, *40*, 344-357.
Pearlin, L. J. & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior*, *19*, 2-21.
Pleck, J.H. (1979). Men's family work: Three perspectives and some new data, *Family Coordinator*, *28*, 481-488.
Porter, L. W., Steers, R. M., Mowday, R. T. & Boulian, P. V. 1974. Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, *95,* 603-609.
Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS Procedures for Estimating Indirect Effects in Simple Mediation Models, *Behavior Research Methods, Instruments & Computers*,*36*,717-731.
Premier's Advisory Council on Health. (2001). *A Framework for Reform*. Edmonton: the Council. http://www.gov.ab.ca/home/health_first/documents_maz_report.cfm
Ridley, C. A. (1973). Exploring the impact of work satisfaction and involvement on marital interaction when both partners are employed. *Journal of Marriage and the Family, May*, 229-237.
Sieber, S. D. (1974). Toward a theory of role accumulation. *American Sociological Review*, 39, 567-578.
Staines, G.L., J.H. Pleck, L.C. Shepard & O'Connor, P.C, (1978). Wives' employment status and marital adjustment. *Psychology of Women Quarterly*, *3*, 90-120.
Standing Senate Committee on Social Affairs, Science and Technology. (2002). *The health of Canadians - The federal role. Volume Six: Recommendations for reform (Chapter Eleven).*Ottawa: Government of Canada.
Voydanoff, P. (1980). Work roles as stressors in corporate families. *Family Relations*, *4,* 489-494.
Weber, R. P. (1990). *Basic Content Analysis* (2nd ed.). Newbury Park, CA: Sage.

References for Measures

Balfour, D. and Wechsler, B. (1996). Organizational Commitment: Antecedents and Outcomes in Public Sector Organizations, Public Productivity and Management Review, 19 (3), 256-77.

Bohen, H.H. & Viveros-Long, A. (1981). *Balancing jobs and family life: Do flexible work schedules help?* Philadelphia: Temple University Press.

Broadhead, W., Gehlback, S., deGruy, F. and Kaplan, B. (1988). The Duke-UNC Functional Social Support Questionnaire: Measurement of Social Support in Family Medicine Patients, Medical Care, 26 (7). 709-723.

Caplan, R.D., Cobb, S., French, J.R.P., Jr., Harrison, R.V., and Pinneau, S.R., Jr. (1980). *Job demands and worker health: Main effects and occupational differences.* Ann Arbor, MI: University of Michigan, Institute for Social Research

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behaviour*, *24*, 385-396.

Dean, J. and Schnell, S. (1991). Integrated Manufacturing and Job Design: The Moderating Effects of Inertia. Academy of Management Journal, 34 (4) 776-84.

Dunham, R.B., Smith, F.J., Blackburn, R.S. (1977), "Validation of the index of organizational reactions with the JDI, the MSQ and faces scale", *Academy of Management Journal*, Vol. 20 pp.420-32.

Duxbury, L. & Higgins, C. (2001). *Work-life balance in the new millennium: Where are we? Where do we need to go?* Ottawa: Canadian Policy Research Networks, Discussion Paper No. W-12

Dwyer, D. and Ganster, D. (1991). The Effects of Job Demands and Control on Employee Attendance and Satisfaction, Journal of Organizational Behaviour, 12 (7), 596-608.

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. Journal of Applied Psychology, 71, 500-507.

Higgins, C., Duxbury, L. & Lyons, S. (2008). Reducing Work–Life Conflict: What Works? What Doesn't?: examines what employers, employees and their families can do to reduce work–life conflict, Ottawa: Health Canada
Website: http://www.hc-sc.gc.ca/ewh-semt/pubs/occup-travail/balancing-equilibre/index_e.html

Gutek, B. A., Searle, S. & Klepa, L. (1991). Rational versus gender role explanations for work-family conflict. *Journal of Applied Psychology*, 76: 560-568.

Havlovic, S. J. & Keenan, J. P. (1995). Coping with work stress: The influence of individual differences. in Crandall, R. and Perrewe, P. L. (Eds.) *Occupational stress: A handbook .(*pp. 199-212). Washington, DC: Taylor & Francis.

Hrebeniak, L.G., Alutto, J.A. (1972), "Personal and role related factors in the development of organizational commitment", *Administrative Science Quarterly*, Vol. 17 pp.555-73.

Moos, R. H., Cronkite, R. C., Billings, A. G., & Finney, J. W. (1988). *Health and daily living form manual*. Stanford, CA: Social Ecology Laboratory, Department of Psychiatry, Stanford University.

Robinson, B. (1983). Validation of a caregiver strain index, Journal of. Gerontalogy, 38., 344-348 (553).

Walters, V., Lenton, R., French, S., Eyles, J., Mayer, J., and Newbold, B. (1996). Paid Work, Unpaid Work and Social Support: A Study of the Health of Male and Female Nurses, Social Sciences and Medicine, 43 (11) 1627-36.

Zimet, G., Dahlem, N., Ziment, S. and Farlety, G. (1988). The Multi-Dimensional Scale of Perceived Social Support, Journal of Personality Assessment, 52 (1), 30-41.

Appendix A:
Focus Group Script

Introduce ourselves:

Who are we?

Our experience running focus groups

Rules of conduct

Linda Schweitzer is fluently bilingual… so you are fee to make comments in the language of your choice. Given the mix in the room the session will be run in English.

Only aggregate results with be reported - which means that you should respect confidentiality .. when talking to others about this session – you can talk about what we talked about, but not who said what

Background

Several months ago Drs. Duxbury, Higgins and Lyons were awarded a Workplace Safety Board Grant to look at the issue of role overload within the Health Care Sector

What is Role overload?

- Having too much to do in the time one has available
- Feeling rushed and stressed by accumulative work and non-work demands You can be overwhelmed because of family demands (family role overload), work demands (work overload) or your total demands – work and family together cause the problem (total role overload)

Why concerned about role overload?

- Our research shows that overload and work intensification has increased dramatically in Canada over the past decade
- High levels of overload are strongly predictive of poorer physical and mental health, increased absenteeism, increased use of EAP, increased use of prescription drug use
- Organizations who do not deal with workload issues will have problems recruiting and retaining employees in a seller's market – they are also likely to have problems with succession planning
- Data indicates that role overload is particularly high in Canada's health care sector

Main objective of the grant:

- Determine why perceived levels of role overload have increased in Canada in the past decade
- Identify effective strategies that can be used by organizations, employees and families to reduce role overload and to cope with its potentially negative effects

Our partners on this grant are four hospitals in the Ottawa Area:

- Queensway Carleton University
- Montfort
- Royal Ottawa
- Ottawa Hospital

Purpose of the day

The second step of this research project involves designing and administering a survey that will give us some very valuable benchmark data on role overload in health care settings

- What causes role overload?
- What are the consequences of role overload for employees? Families? The employer?
- What makes role overload worse? What kinds of things can different types of employees do to reduce the extent to which they experience role overload. To reduce the negative consequences of role overload once it occurs.
- What strategies can individuals, health care organizations and families employ to:
    - reduce the formation of role overload?
- mitigate the negative impacts of role overload on individual and organizational well-being?

We only have one chance to administer this survey .. and we suspect that while some of the things that cause role overload will be the same for employees, regardless of the type of job they do, others will be very specific to your job (eg. Nurses have to work unexpected shifts, doctors are on call)

This focus group is to help us understand what it is about your particular job that causes you to get overwhelmed by work.

Also helps us understand if there are particular circumstances at work or at home that make things better or worse for someone in your position

We are doing one focus group with each of the key job types within the health care setting –

- Physicians
- Nurses
- Allied Health Professionals/Para Health
- Management
- Non-union support staff
- Support Services

Each focus group hosted by a different hospital
Each focus group has participants from each hospital

What we will do with the data

Used to help us with the design of the survey.

But .. if you want to give us your e-mail, we will send you a copy of the key findings

Procedure:

Use a focus group technique called rice storm.

Will be giving you a certain number of post it notes for each of the four questions we will be talking about, and asking you to put one idea on each post it. Be brief… Not the story of your life but key idea. You will have a chance to discuss them in the session.

Will explain the rest of the technique as we go along.

Questions:

4. What things about your job cause you to feel overwhelmed? Too much to do, too little time. Not sure how you will fit it all in.

5. What makes these feelings worse?

6. What makes them better? This question will have two parts….

    a. What can your organization do to help you feel less overloaded?

    b. What can you personally do to reduce your levels of overload? Your feeling overloaded?

When thinking about your answer, remember that you or your organization can use two types of strategies to reduce overload. You can do things to reduce your demands, or you can do things to reduce the impact of those demands once they occur. So, going to give you four post its .. could you give me two of each kind.

Appendix B:
Documentation Used in the Survey Study and the Survey Itself

The following documents are included in this Appendix:

- A letter outlining the purpose of this study. This was sent by e-mail to all hospital employees with an e-mail address.
- A sample of the letter sent, by e-mail, to all hospital employees with an e-mail address. This letter was personalized by the four CEOs in the sample (i.e. used their own letterhead).
- An email Invitation to participate in the Web Survey
- Informed Consent Text for Web Survey Login Page
- References for measures used in the Survey
- The survey itself.

a. ***Letter outlining the purpose of this study. Sent out on Carleton University/University of Western Ontario letterhead***

Role Overload in Canada:
Causes, Consequences and Effective Coping Strategies: A National Study

Principal Researchers
Dr. Linda Duxbury, Professor, Sprott School of Business, Carleton University
Dr. Christopher Higgins, Professor, Richard Ivey School of Business, University of Western Ontario
Dr. Sean Lyons, Research Associate, Richard Ivey School of Business, University of Western Ontario

This document provides a brief outline of a research study that we are undertaking at the following seven hospitals in the Ottawa area: Cornwall Community Hospital, Montfort Hospital, Queensway Carleton Hospital, SCO Health Services, The Ottawa Hospital, Royal Ottawa Health Care Group and The Children's Hospital of Eastern Ontario

It outlines what we wish to accomplish with this study and why we would like you to consider participating in the study.

The study concerns the topic of role overload, which is a form of psychological conflict that individuals experience when they feel that they have too many things to do in their lives and not enough time in which to do them. Role overload is a significant problem faced by employees today and has been linked to a wide variety of psychological, family and work-related problems. More information on the impacts of role overload on individuals, families and employers can be found on the following sites: HTTP://WWW.PHAC-ASPC.GC.CA/PUBLICAT/WORK-TRAVAIL/INDEX.HTML HTTP://WWW.CPRN.ORG/EN/DOC.CFM?DOC=77 **.**

While the body of knowledge concerning overload is growing, there is still relatively little known about the contributing causes of increasing levels of overload or the relationship between these causes and the specific negative outcomes of overload. Our research is the first in-depth study of this topic. Our goal is to determine which factors precipitate feelings of overload in individuals, how high levels of overload affect individuals and employers and what strategies individuals and organizations can employ to effectively reduce overload in their workforce and lessen its impacts on their work and home lives

We will be using a number of research techniques in this study to collect relevant information from hospital employees on this topic including:

- Focus groups: will take approximately two hours of your time
- Personal interviews: will take approximately 30 minutes to an hour of your time

- Survey: will take approximately 30 minutes to an hour to complete.

Your employer has agreed to distribute this email to you on our behalf and encourages you to participate in the study. While your employer will receive an overall summary of the results, your individual survey responses will be viewed only by members of our research team. In the reporting of results, data will be aggregated so that no individual participant can be uniquely identified. Your employer has also agreed to distribute the summary results to all employees so that you have the opportunity to view the outcome of the study.

b. ***Letter sent out by hospital CEO outlining the purpose of this study and encouraging participation. Sent out on hospital letterhead***

Dear Colleague,

I am writing to request your participation in an important study that is being conducted by Dr. Linda Duxbury from the Sprott School of Business at Carleton University and Dr. Chris Higgins from the Richard Ivey School of Business at the University of Western Ontario. The study concerns the topic of role overload, which is a form of psychological conflict that individuals experience when they feel that they have too many things to do in their lives and not enough time in which to do them. Role overload is a significant problem faced by hospital employees and has been linked to a wide variety of psychological, family and work-related problems.

The study is being conducted in four Ottawa Hospitals and we are pleased to have been selected as one of these sites. Your participation in the study will help the researchers understand the causes and consequences of role overload and help them develop strategies that we all can use to cope with overload.

The survey will take about 30 minutes of your time and is completely anonymous. It has been passed through our own Ethics Committee as well as Ethics Committees at Carleton University and The University of Western Ontario.

Once the survey is completed and the data analyzed, the researchers will be providing a report on their findings. This report will be made available to all of you. Additionally, the researchers will be giving a talk, identifying the key results from the study. You will be made aware of the time and location of this talk and will be welcome to attend.

We would like to obtain a very high response rate – something that can only be done with your co-operation. Thank you for your consideration.

Sincerely,

c. ***Email Invitation to Participate in Web Survey***

I am writing to request your participation in an important study that is being conducted by Dr. Linda Duxbury from the Sprott School of Business at Carleton University and Dr. Chris Higgins from the Richard Ivey School of Business at the University of Western Ontario. The study concerns the topic of role overload, which is a form of psychological conflict that individuals experience when they feel that they have too many things to do in their lives and not enough time in which to do them. Role overload is a significant problem faced by employees today and has been linked to a wide variety of psychological, family and work-related problems.

While the body of knowledge concerning overload is growing, there is still relatively little known about the contributing causes of increasing levels of overload or the relationship between these causes and the specific negative outcomes of overload. Our research is the first in-depth study of this topic. Our goal is to determine which factors precipitate feelings of overload in individuals, how high levels of overload affect individuals and employers and what coping strategies individuals employ to effectively reduce overload and lessen its impacts on their work and home lives. A more detailed summary of the objectives of the research is attached for your information.

Your voluntary participation in the study would involve the completion of a web-based survey that would take between 25-30 minutes of your time. Participation in the survey is anonymous, so your responses will not be linked to you in any way. The web survey is hosted on a secure university web server that is accessible only to members of our research team.

On the survey itself you will be asked to provide your name and contact information if you are willing to participate in follow-up interviews on this topic. Please be assured that this identifying information will be separated from your survey data so that we have no way of linking the two. This information will also be destroyed after we have contacted you with respect to participating in any follow-up study.

Your employer has agreed to distribute this email to you on our behalf and encourages you to participate in the study. While your employer will receive an overall summary of the results, your individual survey responses will be viewed only by members of our research team. In the reporting of results, data will be aggregated so that no individual participant can be uniquely identified. Your employer has also agreed to distribute the summary results to all employees so that you have the opportunity to view the outcome of the study.

You may begin the survey by clicking on the following link: *http://www.[survey site].uwo.ca* and following the instructions on the login page.

THE LOGIN PASSWORD IS: [INSERT PASSWORD HERE]

This research project has been reviewed and received ethics clearance through the Carleton University Research Ethics Committee **as well as the ethics committee at your hospital.** Those participants with concerns or questions about their involvement in the study may contact either the ethics committee chair at Carleton University:

Prof. Antonio Gualtieri, Chair
Carleton University Research Ethics Committee
Tel: 613-520-2517
E-mail: **ETHICS@CARLETON.CA**

Or the Chairman of the Ottawa Hospital Research Ethics Board:
Tel: 613-798-5555, X14902

If you have any questions or comments about the survey itself, or encounter any technical difficulties with the web site, please contact us at: [email address]@ivey.uwo.ca

Thank you for your consideration. It is only through the cooperation of people like you that our research can be realized.

d. ***Informed Consent Text for Web Survey Login Page***

Role Overload in Canada: Causes, Consequences and Effective Coping Strategies: A National Study

General Instructions:

Thank you for taking the time to complete this survey. For your information, a summary of the background and objectives of the study is available here:

[link to html version of the information letter in Appendix A]

To begin the survey, enter the password in the field below. Please feel free to leave blank any question that you are uncomfortable answering for any reason. Please be assured that your responses will be held in confidence by the researchers.

PASSWORD: [ ]

This research project has been reviewed and received ethics clearance through the Carleton University Research Ethics Committee and the Ottawa Hospital Research Ethics Board. Those participants with concerns or questions about their involvement in the study may contact those participants with concerns or questions about their involvement in the study may contact either the ethics committee chair at Carleton University:

Prof. Antonio Gualtieri, Chair
Carleton University Research Ethics Committee
Tel: 613-520-2517
E-mail: **ETHICS@CARLETON.CA**

Or The Chairman of the Ottawa Hospital Research Ethics Board
Tel: 613-798-5555, X14902

Please contact us by email if you encounter technical any problems with this survey.
[email]@ivey.uwo.ca

Best Viewed in Internet Explorer
Download HERE

References for Measures

Balfour, D. and Wechsler, B. (1996). Organizational Commitment: Antecedents and Outcomes in Public Sector Organizations, Public Productivity and Management Review, 19 (3), 256-77.

Bohen, H.H. & Viveros-Long, A. (1981). Balancing jobs and family life: Do flexible work schedules help? Philadelphia: Temple University Press.

Broadhead, W., Gehlback, S., deGruy, F. and Kaplan, B. (1988). The Duke-UNC Functional Social Support Questionnaire: Measurement of Social Support in Family Medicine Patients, Medical Care, 26 (7). 709-723.

Caplan, R.D., Cobb, S., French, J.R.P., Jr., Harrison, R.V., and Pinneau, S.R., Jr. (1980). Job demands and worker health: Main effects and occupational differences. Ann Arbor, MI: University of Michigan, Institute for Social Research

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. Journal of Health and Social Behaviour, 24, 385-396.

Dean, J. and Schnell, S. (1991). Integrated Manufacturing and Job Design: The Moderating Effects of Inertia. Academy of Management Journal, 34 (4) 776-84.

Dunham, R.B., Smith, F.J., Blackburn, R.S. (1977), Validation of the index of organizational reactions with the JDI, the MSQ and faces scale, Academy of Management Journal, 20, pp.420-32.

Duxbury, L. & Higgins, C. (2001). Work-life balance in the new millennium: Where are we? Where do we need to go? Ottawa: Canadian Policy Research Networks, Discussion Paper No. W-12

Dwyer, D. and Ganster, D. (1991). The Effects of Job Demands and Control on Employee Attendance and Satisfaction, Journal of Organizational Behaviour, 12 (7), 596-608.

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. Journal of Applied Psychology, 71, 500-507.

Gutek, B. A., Searle, S. & Klepa, L. (1991). Rational versus gender role explanations for work-family conflict. Journal of Applied Psychology, 76: 560-568.

Havlovic, S. J. & Keenan, J. P. (1995). Coping with work stress: The influence of individual differences. in Crandall, R. and Perrewe, P. L. (Eds.) Occupational stress: A handbook . *(*pp. 199-212). Washington, DC: Taylor & Francis.

Higgins, C., Duxbury, L. & Lyons, S. (2008). Reducing Work–Life Conflict: What Works? What Doesn't?: Ottawa: Health Canada
Website: http://www.hc-sc.gc.ca/ewh-semt/pubs/occup-travail/balancing-equilibre/index_e.html

Hrebeniak, L.G., Alutto, J.A. (1972), "Personal and role related factors in the development of organizational commitment", Administrative Science Quarterly, 17 pp.555-73.

Moos, R. H., Cronkite, R. C., Billings, A. G., & Finney, J. W. (1988). Health and daily living form manual. Stanford, CA: Social Ecology Laboratory, Department of Psychiatry, Stanford University.

Robinson, B. (1983). Validation of a caregiver strain index, Journal of. Gerontology, 38., 344-348 (553).

Walters, V., Lenton, R., French, S., Eyles, J., Mayer, J., and Newbold, B. (1996). Paid Work, Unpaid Work and Social Support: A Study of the Health of Male and Female Nurses, Social Sciences and Medicine, 43 (11) 1627-36.

Zimet, G., Dahlem, N., Ziment, S. and Farlety, G. (1988). The Multi-Dimensional Scale of Perceived Social Support, Journal of Personality Assessment, 52 (1), 30-41.

Hospital Survey

This survey is supported by the following hospitals.

Ottawa Hospital / L'Hôpital d'Ottawa

Royal Ottawa Mental Health Centre / Centre de santé mentale Royal Ottawa

The Montford Hospital / L'Hôpital Montfort

The Queensway Carleton Hospital

This survey is being conducted with funding provided by the Workplace Safety and Insurance Board. The intent of the survey is to understand the causes and consequences of role overload in the health care industry. Ultimately, we are aiming to identify strategies that individuals and organizations can use to cope with ever increasing work and family demands.

The survey will take approximately 30 minutes of your time. Your responses are anonymous and only summary results will be provided to the hospitals.

Please take the time to complete this very important survey. We value your responses.

Dr. Linda Duxbury **Sprott School of Business** **Carleton University** **(613) 520-2600 x2385** **linda_duxbury@carelton.ca**	**Dr. Chris Higgins** **Ivey School of Business** **The University of Western Ontario** **(519) 661-3269** **chiggins@ivey.uwo.ca**	**Dr. Sean Lyons** **(xxx) xxx-xxxx**

Section A: Roles

We all play many roles in our lives such as parent, employee, and spouse. This section asks about your roles.

1. Below is a list of roles that people hold in their lives. For each role please indicate the level of demands that the role places on you in a typical month. If you do not play a role please indicate select "n/a" for not applicable.

	n/a	Requires almost no time/ energy	Requires a little bit of time/ energy	Requires a moderate amount of time/energy	Requires a great deal of time/energy
Parent to dependent children (biological, adopted, step children)	□	□	□	□	□
Parent to adult children (biological or adopted)……...	□	□	□	□	□
Caregiver to children other than your own (e.g., foster parent)	□	□	□	□	□
Caregiver for a person with a disability……	□	□	□	□	□
Spouse or partner in a long-term relationship……...	□	□	□	□	□
Divorced spouse with shared responsibility for children…….	□	□	□	□	□
Grandparent……....	□	□	□	□	□
Sibling…….....	□	□	□	□	□
Caregiver to elderly or infirm parents……..	□	□	□	□	□
Student……..	□	□	□	□	□
Employee……..	□	□	□	□	□
Co-worker…….	□	□	□	□	□
Supervisor or manager to others……...	□	□	□	□	□
Home maintainer …….	□	□	□	□	□
Employed in a second job……	□	□	□	□	□
Volunteer in a community or church organization……...	□	□	□	□	□
Member of a sports team or social group (e.g. book club)……...	□	□	□	□	□
Hobbyist/amateur…….....	□	□	□	□	□
Close friend……...	□	□	□	□	□

2. Please indicate the extent to which you agree or disagree with the following statements.

	Strongly Disagree		Neutral		Strongly Agree	n/a
It is important to me that I have a job/career in which I can achieve something of importance……..	1	2	3	4	5	6
It is important to me to feel successful in my job/career……	1	2	3	4	5	6
Building a name and reputation for myself through work/career is one of my life goals……..……	1	2	3	4	5	6
I value being in a career and devote the time and effort needed to develop it…….....	1	2	3	4	5	6
I like to work, but do not want to have a demanding career…….	1	2	3	4	5	6
I devote whatever time and energy it takes to move up in my job/career field……....	1	2	3	4	5	6
It is important to me to feel I am (will be) an effective parent……..	1	2	3	4	5	6
The whole idea of having children and raising them is not appealing to me………….	1	2	3	4	5	6
My life would be empty if I never had children……...	1	2	3	4	5	6
Becoming involved in the day to day details of being a parent involves costs in other areas of my life I am unwilling to make…	1	2	3	4	5	6
I devote a significant amount of my time and energy to the rearing of my children……	1	2	3	4	5	6
I am very involved in the day to day details of rearing my children…	1	2	3	4	5	6
My life would be empty if I never married/had a significant other…..	1	2	3	4	5	6
Having a successful marriage/being in a successful committed relationship is the most important thing in life to me……...	1	2	3	4	5	6
The major satisfactions in my life come from my marriage relationship/my relationship with my life partner……	1	2	3	4	5	6
I work hard to build a good relationship with my life partner/spouse even if it means limiting opportunities to pursue other personal goals	1	2	3	4	5	6
I commit whatever time is necessary to making my life partner/spouse feel supported and cared for…….	1	2	3	4	5	6
Really involving myself in a marriage relationship/partnership involves costs in other areas of my life that I am unwilling to accept	1	2	3	4	5	6

Section B: Work Role Demands

The following questions ask about the pressures you face at work.

3. Please indicate how often each of the following situations applies to you.

	Rarely		Sometimes		Very Often
How often does your job require you to work very fast?.....	1	2	3	4	5
How often does your job require you to work very hard?.....	1	2	3	4	5
How often do expectations at work mean that you cannot get everything done?.....	1	2	3	4	5
How often do you have time to just sit and contemplate when at work?.....	1	2	3	4	5
How often do the number of tasks you have to do at work exceed the amount of time you have to do them in?.....	1	2	3	4	5
How often do you feel emotionally exhausted from all you have to do at work?.....	1	2	3	4	5
How often do you feel physically exhausted from all you have to do at work?.....	1	2	3	4	5
How often do your colleagues make too many demands on you?.....	1	2	3	4	5
How often does your supervisor make too many demands on you?....	1	2	3	4	5
How often do your patients/the families of patients make too many demands on you? (please leave this blank if it does not apply).....	1	2	3	4	5
How often do you experience periods where the work slows down?...	1	2	3	4	5
How often do you experience lulls at work?.....	1	2	3	4	5

4. Approximately how many hours <u>per week</u> do you devote to:

Work-related activities (please include the time spent on work brought home at night and on the weekends)…….....	_____hrs per week
Parenting (please include time spent in activities with children, driving children around, helping children with homework, talking to children etc) ……	_____hrs per week
Caring for an elderly dependent (please include time spent talking to the dependent, driving the dependent around, running errands, helping with finances, etc.) ….....	_____hrs per week
Home chores and yard work…….....	_____hrs per week
Volunteer activities/community work (please include time spent in professional activities, helping out at your children's school, etc)…….	_____hrs per week
Commuting (to and from work and to various work locations during work hours)…….....	_____hrs per week
Leisure activities (please include social time with friends, time spent alone reading, watching TV, exercising etc.)……..…….	_____hrs per week

5. Below are listed a number of statements that could be used to describe a job. Please read each statement carefully and indicate how much control you have in the situations listed.

	Very Little		Moderate		Very Much
How able are you to predict the amount of work you will have to do on any given day?	1	2	3	4	5
How much control do you have over how quickly or slowly you have to work?.....	1	2	3	4	5
How much control do you have personally over how much work you get done?.....	1	2	3	4	5
How much control do you have over scheduling and duration of your rest breaks?.....	1	2	3	4	5
How much control do you have over when you come to work and when you leave?.....	1	2	3	4	5
How much control do you have over when you can take vacation or days off?.....	1	2	3	4	5
How much control do you have over the physical conditions of your workplace?.....	1	2	3	4	5
How much control do you have over how you do your work?.....	1	2	3	4	5
How much can you control when and how much you interact with others at work?.....	1	2	3	4	5
How much influence do you have over the policies and procedures in your work unit?.....	1	2	3	4	5
How much control do you have over the sources of information you need to do your job?.....	1	2	3	4	5
How much are things that affect you at work predictable, even if you can't directly control them?.....	1	2	3	4	5
How much control do you have over the amount of resources (tools, material, human resources) you get?.....	1	2	3	4	5
How much can you control the number of times you are interrupted while you work?.....	1	2	3	4	5
How much control do you have over how your work is evaluated?.....	1	2	3	4	5
In general, how much overall control do you have over work and work-related matters?.....	1	2	3	4	5

Section C: Family Role Demands

The following questions ask about the pressures you face at home.

6. Please indicate how often each of the following situations applies to you.

	Rarely		Sometimes		Very Often	n/a
How often do expectations at home leave you with little time to get things done?.....	1	2	3	4	5	6
How often is there a great deal to be done at home?.....	1	2	3	4	5	6
How often do you have time to just sit and contemplate when at home?.....	1	2	3	4	5	6
How often do you run out of time at home to do all the things that need to be done?.....	1	2	3	4	5	6
How often do the number of tasks you have to do at home exceed the amount of time you have to do them?.....	1	2	3	4	5	6
How often do you feel emotionally exhausted from all you have to do at home?.....	1	2	3	4	5	6
How often do you feel physically exhausted from all you have to do at home?.....	1	2	3	4	5	6
How often do your children make too many demands on you?.....	1	2	3	4	5	6
How often does your spouse make too many demands on you?.....	1	2	3	4	5	6
How often do your parents/in-laws make too many demands on you?	1	2	3	4	5	6
How often do other family members make too many demands on you?.....	1	2	3	4	5	6

7. Below are listed a number of statements that could be used to describe your situation outside of work. Please read each statement carefully and indicate how much control you have in the situations listed.

	Very Little		Moderate		Very Much
How much control do you have over your use of time at home?.....	1	2	3	4	5
How much control do you have over your ability to meet competing family demands?…….....	1	2	3	4	5
How much control do you have over the use of the family's income?.....	1	2	3	4	5
How much can you choose between a variety of tasks or projects to do when at home?.....	1	2	3	4	5
How much can you control the number of times you are interrupted when at home?.....	1	2	3	4	5
In general how much control do you have over family and family related matters?.....	1	2	3	4	5

Please skip this next question if you do not have a spouse/partner.

8. Approximately how many hours per week does your spouse/partner devote to:

Work-related activities (please include the time spent on work brought home at night and on the weekends)…….....	_____hrs per week
Parenting (please include time spent in activities with children, driving children around, helping children with homework, talking to children, etc.)….....	_____hrs per week
Home chores and yard work……...	_____hrs per week

Section D: Coping

Coping is the process by which people manage difficult circumstances: how they try to master, minimize, reduce or tolerate stress and conflict. The following questions relate to how you typically cope.

9. Please think of situations when you have felt that you had too much to do in your daily life and too little time to do it. Then, using the scale below, indicate how often you respond to such feelings.

	Hardly Ever		Occasionally		Almost Always
Try to keep away from this type of situation……..	1	2	3	4	5
Avoid being in this situation if I can……	1	2	3	4	5
Separate myself as much as possible from the people who created this situation……	1	2	3	4	5
Try not to get concerned about it…….	1	2	3	4	5
Think of ways to use this situation to show what I can do……..	1	2	3	4	5
Remind myself that other people have been in this situation and that I can probably do as well as they did……	1	2	3	4	5
Think about the challenges I can find in this situation……	1	2	3	4	5
Try to see this situation as an opportunity to learn and develop new skills…….	1	2	3	4	5
Devote more time and energy to meeting the demands of my various roles…….	1	2	3	4	5
Try to be more efficient and productive with my time……	1	2	3	4	5
Dedicate more effort and energy to the roles I hold in life……..	1	2	3	4	5
Try to be very organized so that I can keep on top of things……..	1	2	3	4	5
Seek advice from people about how to do what is expected of me…….	1	2	3	4	5
Request help from people who have the power to do something for me……...	1	2	3	4	5
Decide what I think should be done and explain this to the people who are affected……...	1	2	3	4	5
Talk with people about the situation…….....	1	2	3	4	5
Drink a moderate amount (i.e., 2 drinks) of liquor, beer or wine…	1	2	3	4	5
Drink more than a moderate amount of liquor, beer or wine……..	1	2	3	4	5
Take prescription or over the counter medication……...	1	2	3	4	5
Get by on less sleep than I would like…….	1	2	3	4	5
Modify my work schedule (i.e., reduce the amount of time I spend at work, work different hours)……...	1	2	3	4	5
Limit my job involvement so that I will have more time for my family……...	1	2	3	4	5
Leave work- related problems at work when I leave……...	1	2	3	4	5

10. Below is a list of some of the things that other people do for us or give us that may be helpful or supportive. Please read each statement and indicate the extent to which you agree or disagree that the following is true for you in your current situation.

	Strongly Disagree		Neither Agree or Disagree		Strongly Agree
My family really tries to help me……..	1	2	3	4	5
I get the emotional help and support I need from my family……	1	2	3	4	5
I can talk about my problems with my family……...	1	2	3	4	5
I can count on family when things go wrong……	1	2	3	4	5
My family understands the demands I face at work……..	1	2	3	4	5
I have friends with whom I can share my joys and sorrows……..	1	2	3	4	5
I can count on friends when things go wrong……	1	2	3	4	5
I can talk about my problems with my friends……..	1	2	3	4	5
My friends really try to help me……	1	2	3	4	5
I have colleagues at work with whom I can share my joys and sorrows…….....	1	2	3	4	5
I can count on my colleagues at work when things go wrong……...	1	2	3	4	5
I can talk about my problems with my colleagues at work ……..	1	2	3	4	5
My colleagues at work really try to help me…….	1	2	3	4	5

Section E: Your Job

The following questions ask about your job and your experience with your employer.

11. How often when you finish your day's work do you feel you've accomplished something worthwhile?

□ all the time
□ most of the time
□ about half the time
□ less than half the time
□ rarely

12. How does the kind of work you do influence your overall attitude towards your job?

□ it has a very favorable influence
□ it has no influence one way or the other
□ it has a very unfavorable influence

13. Approximately what percent of the things you do on your job do you enjoy? _____ per cent

14. Approximately what percent of the work you do stirs up real enthusiasm on your part? _____ per cent

15. In the past 6 months how often have you thought about leaving your current organization to work elsewhere?

o Never
o Monthly
o Weekly
o Several days per week
o Daily

16. Assume you were offered a similar job with another organization. How likely is it that you would leave your present organization under the following conditions?

	Not Likely				Very Likely
A slight increase in pay.....	1	2	3	4	5
More freedom to be professionally creative.....	1	2	3	4	5
More respect.....	1	2	3	4	5
To work with people who are friendlier.....	1	2	3	4	5
To work under a more supportive manager.....	1	2	3	4	5
More control over work hours.....	1	2	3	4	5

17. How easy or difficult is it for you to deal with the following.

	Very Difficult		Neither Easy or Difficult		Very Easy
To interrupt your work day for personal/family reasons and then return?	1	2	3	4	5
To arrange your work schedule (i.e., shifts, overtime) to meet family/personal commitments?	1	2	3	4	5
To take a paid day off work when a child is sick?	1	2	3	4	5
To take a paid day off work when an elderly relative needs you?	1	2	3	4	5

18. Please think of the job you do and indicate how often you are required to do each of the following:

	Rarely		Sometimes		Very Often
Coordinate work with others?	1	2	3	4	5
Start work that is finished by others?	1	2	3	4	5
Finish work that is started by others?	1	2	3	4	5
Cooperate with others?	1	2	3	4	5

Section F: Work Environment

The following questions ask about your experiences at your current place of work.

19. To what extent do you agree or disagree with the following statements.

	Strongly Disagree		Neither Agree or Disagree		Strongly Agree
This organization takes pride in my accomplishments at work…….	1	2	3	4	5
This organization shows very little concern for me……	1	2	3	4	5
This organization appreciates my accomplishments on the job…….....	1	2	3	4	5
This organization does all that it can to recognize employees for good performance……...	1	2	3	4	5
My efforts on the job are largely ignored or overlooked by this organization……….....	1	2	3	4	5
My family appreciates all I do for them at home……...	1	2	3	4	5
My efforts at home are largely ignored or overlooked by my spouse	1	2	3	4	5
My efforts at home are largely ignored/ overlooked by my children	1	2	3	4	5

20. To what extent do you agree or disagree with the following statements about your organization.

	Strongly Disagree		Neither Agree or Disagree		Strongly Agree
This organization strongly considers my goals and values……...	1	2	3	4	5
Help is available from my organization when I have a problem……...	1	2	3	4	5
This organization really cares about my well being……..	1	2	3	4	5
This organization is willing to extend itself to help me perform my job to the best of my ability…….	1	2	3	4	5
Even if I did the best job possible, this organization would fail to notice	1	2	3	4	5
This organization cares about my general satisfaction when at work…...	1	2	3	4	5
This organization cares about my opinions……...	1	2	3	4	5

21. The following questions are designed to provide us with an indication of the extent to which various stressors are sources of overload for you. We are interested in determining the prevalence of these stressors within your work environment and the impact they have on your ability to do your job. For each item please indicate the frequency with which the condition described is a source of overload for you.

	Rarely		Sometimes		Very Often
Not enough staff to do the work required…….	1	2	3	4	5
Not enough staff coverage to allow people to take breaks during work hours (i.e. lunch, coffee)……..	1	2	3	4	5
High reliance on part-time/causal staff ……	1	2	3	4	5
The cases I deal with are more complex than in the past and require greater effort ……	1	2	3	4	5
Culture makes it unacceptable to say no to more work ……..	1	2	3	4	5
Culture makes it difficult to leave when your shift is over……...	1	2	3	4	5
Culture makes it difficult to seek help from others when overloaded (those who do are seen as weak or needy)…….....	1	2	3	4	5
Working at multiple sites……..	1	2	3	4	5
Working for multiple units……...	1	2	3	4	5
Too many priorities teamed with an inability to say no……..	1	2	3	4	5
Responsibility for too many different things/disciplines……..	1	2	3	4	5
Requirement to work on teams…….	1	2	3	4	5
Ineffective communication often means do not know what to do……	1	2	3	4	5
No opportunity to give feedback means work is not done effectively	1	2	3	4	5
Managing expectations of patients and their families……..	1	2	3	4	5
No time/allowances made for training/education…….	1	2	3	4	5
Lack of resources (equipment/supplies) to do the work……...	1	2	3	4	5
Conflict with colleagues over resources……...	1	2	3	4	5
Not consulted on workplace changes……	1	2	3	4	5
Old/ineffective/inefficient equipment/systems…….	1	2	3	4	5
Lack of sound succession plan……..	1	2	3	4	5
Inability to control or manage change……..	1	2	3	4	5
Too many changes to procedures, structures, work……..	1	2	3	4	5
Government policies with respect to wait time……	1	2	3	4	5

Section G: Your Manager

The following questions ask about your experiences with your immediate manager/supervisor.

22. Please think about the individual who manages your work and indicate the extent to which you agree or disagree with the following statements by circling the most appropriate answers for each question.

My Manager:	**Strongly Disagree**		**Neither Agree or Disagree**		**Strongly Agree**
Gives recognition when I do my job well……..	1	2	3	4	5
Provides constructive feedback when performance standards are not met ……	1	2	3	4	5
Makes it clear what is expected of me (i.e., is good at communicating goals, objectives, how to proceed)…….	1	2	3	4	5
Listens to my concerns……..	1	2	3	4	5
Shares information with me……...	1	2	3	4	5
Is available to answer questions……	1	2	3	4	5
Is effective at planning the work to be done……..	1	2	3	4	5
Asks for input before making decisions that affect my work……	1	2	3	4	5
Provides me with challenging opportunities……..	1	2	3	4	5
Supports my decisions (i.e., with clients, upper management)…….	1	2	3	4	5
Puts me down in front of colleagues or patients……	1	2	3	4	5
Only talks to me when I make a mistake……...	1	2	3	4	5
Makes me feel guilty about time off for personal/family reasons…….	1	2	3	4	5
Focuses on hours of work rather than output…….	1	2	3	4	5
Has an unrealistic expectation about how much work can be done……..	1	2	3	4	5
Puts in long hours and expects me to do the same……	1	2	3	4	5

Section H: Physical and Mental Health

The following questions assess your physical and mental health.

23. In the past six months have you purchased prescription medicine for your personal use?

□ Yes
□ No

24. In the past six months have you used EAP services (i.e., psychological or health counseling)?

□ Yes
□ No

25. In the last six months, how many days have you:

Been unable to report to work or carry out your usual activities because of health problems?.....	____days
Been unable to report to work or carry out your usual activities because of children-related problems	____days
Been unable to report to work or carry out your usual activities because of problems concerning elderly relatives?..... …..	____days
Taken a day off work because you were emotionally, physically or mentally fatigued?.....	____days
Taken a sick day off work because a personal leave day/vacation day was not granted?.....	____days
Taken a day off work to avoid issues at work (abusive colleagues, difficult boss, difficult work environment)?.....	____days

26. In the past six months how many times have you:

Used vacation days to take care of personal/family issues?.....	____times
Gone to work when you were physically unwell?.....	____times

27. How often in the last three months have you:

	Never		Sometimes		Always
Been upset because something happened unexpectedly?……	1	2	3	4	5
Felt that you were unable to control important things in your life?….....	1	2	3	4	5
Felt nervous or stressed?……..	1	2	3	4	5
Felt confident about your ability to handle your personal/family problems?…….....	1	2	3	4	5
Felt that things were going your way?…….	1	2	3	4	5
Found that you could not cope?……...	1	2	3	4	5
Been able to control irritations in your life?……	1	2	3	4	5
Felt you were on top of things?……	1	2	3	4	5
Been angered because of things that happened outside of your control?	1	2	3	4	5

28. How often in the last three months have you:

	Never		Sometimes		Always
Felt that you just couldn't get going?.....	1	2	3	4	5
Felt that you were a worrier?.....	1	2	3	4	5
Felt that your memory wasn't all right?	1	2	3	4	5
Had personal worries that made you feel sick?.....	1	2	3	4	5
Felt that nothing turned out right for you?.....	1	2	3	4	5
Wondered if anything was worthwhile anymore?.....	1	2	3	4	5

29. How often do you:

	Never		**Sometimes**		**Always**
Feel exhausted at the end of the workday?.....	1	2	3	4	5
Suffer from headaches or migraines?.....	1	2	3	4	5
Have difficulty getting going?.....	1	2	3	4	5
Suffer from back pain?.....	1	2	3	4	5
Experience insomnia?.....	1	2	3	4	5

Section I: Work, Family and Personal Life

The following are ways in which work, family and personal life can interact.

30. To what extent do you agree or disagree with the following statements:

	Strongly Disagree		Neither Agree or Disagree		Strongly Agree	n/a
Making arrangements for children while I'm at work involves a lot of effort……	1	2	3	4	5	6
Making arrangements for elderly relatives while I'm at work involves a lot of effort…….	1	2	3	4	5	6
My family/personal life often keeps me from spending the amount of time I would like on my job/career……..	1	2	3	4	5	6
My family/personal life often interferes with my responsibilities at work (i.e., getting to work on time, ability to work overtime)……..	1	2	3	4	5	6
My work schedule often conflicts with my personal life…….	1	2	3	4	5	6
My family dislikes how often I am preoccupied with work while at home	1	2	3	4	5	6
The demands of my job make it difficult to be relaxed at home…….....	1	2	3	4	5	6
My work takes time I would like to spend with family or friends……...	1	2	3	4	5	6
My work makes it hard to be the kind of partner I would like to be……...	1	2	3	4	5	6
My work makes it hard to be the kind of parent I would like to be…….....	1	2	3	4	5	6

31. Please indicate the extent to which you agree or disagree with the following statements.

	Strongly Disagree		Neither Agree or Disagree		Strongly Agree
I feel I have more to do than I can comfortably handle……...	1	2	3	4	5
I feel physically drained by my demands at work and outside of work...	1	2	3	4	5
I feel I have to rush to get everything done each day……...	1	2	3	4	5
I feel I don't have enough time for myself……...	1	2	3	4	5

32. Below is a list of things which many people have found to be difficult with respect to the care of an elderly relative or dependent. How often do any of these apply to you? Please skip this question if you do not have elder care responsibilities.

	Never	Monthly	Weekly	Several times a week	Daily
Elder care is a physical strain (because of effort or concentration)……...	1	2	3	4	5
Elder care is a financial strain……	1	2	3	4	5
Elder care leaves me feeling completely overwhelmed (i.e., I worry about how I/we will manage)……	1	2	3	4	5

Section J: Organizational Culture

The following questions ask about the unwritten rules (i.e. norms) at your current place of work which can influence what you do.

33. Please indicate to what extent you agree or disagree with the following statements about your hospital?

	Strongly Disagree		Neither Agree or Disagree		Strongly Agree
There is a lack of respect in this organization for other professions…….	1	2	3	4	5
Morale in this organization is low…….	1	2	3	4	5
Management and staff do not trust each other……...	1	2	3	4	5
Workloads are uneven – the balance of work falls on those who care…..	1	2	3	4	5
There is no recognition given to the fact that employees have personal commitments outside of work……...	1	2	3	4	5
People who leave on time/do not take extra shifts are made to feel guilty	1	2	3	4	5
In this organization mistakes are seen as an opportunity to learn……	1	2	3	4	5
This organization promotes an environment that is supportive of employees' needs……...	1	2	3	4	5
In this organization we celebrate success……..	1	2	3	4	5
People in this organization have a positive attitude……...	1	2	3	4	5
Sufficient time is given for training and development…….	1	2	3	4	5
Time is available so that people can associate with their colleagues at work……...	1	2	3	4	5
There is good ongoing communication between different areas……...	1	2	3	4	5
There is a lot of bickering over who should do what……	1	2	3	4	5
People work as a team……...	1	2	3	4	5
My opinion really counts……...	1	2	3	4	5
Employees have access to the information they need to get their job done well……	1	2	3	4	5
We have the human resources necessary to manage the workload……...	1	2	3	4	5
People are truly appreciated for the contribution they make…….	1	2	3	4	5
The focus is on making sure that the workplace is a physically safe and secure…….	1	2	3	4	5
We have leaders who are expert at running the health care system……..	1	2	3	4	5
We have leaders who are appropriately accessible to employees…….	1	2	3	4	5
We have a clear sense of direction and a vision for the future……..	1	2	3	4	5
The people in charge make decisions that are consistent with the hospital's values…….	1	2	3	4	5

Section K: Demographics

We need some information about you to help us interpret this survey. Please remember that your responses are anonymous.

34. What is your sex? □ Male □ Female

35. What is your age group?

□ 20-25
□ 26-30
□ 31-35
□ 36-40
□ 41-45
□ 46-50
□ 51-55
□ 56-60
□ 61-65
□ 66+

36. How many children do you have? 0 1 2 3 4 5 6 7+

37. If you have children, please indicate the age of each by circling their age in years.

Child #1	< 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21+
Child #2	< 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21+
Child #3	< 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21+
Child #4	< 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21+
Child #5	< 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21+
Child #6	< 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21+

38. What is your present marital status?

□ Never married
□ Married or living with a partner
□ Separated or divorced
□ Widowed

39. Please select the statement which best describes your family's financial situation. If you do not live with family members, please answer the question from your own perspective.

□ Our family's financial resources are not enough to get by on
□ We get by on our family's financial resources but it is tight
□ We live comfortably on our financial resources but don't have money for extras
□ We live more than comfortably on our financial resources and have money for extras
□ Money is not an issue for our family

40. Please indicate your primary job type and classification.

□ Doctor: → □ On staff □ Non-staff

□ Clinical Staff/Nursing: → □ RN □ RPN □ Orderly □ Patient care assistant

□ Para/Allied Health Professional: →
- □ Counselor (addiction, life skills)
- □ Para support worker
- □ Case manager
- □ Dietician
- □ Coordinator (education, program evaluation, CTO)
- □ Consultant
- □ Mental health worker
- □ Therapist (occupational, physio, recreation, respiratory)
- □ Pharmacist
- □ Psychometrist
- □ Psychologist
- □ Social worker
- □ Vocational Rehab
- □ Speech Pathologist
- □ Sonographer/Polysomnographer

□ Para/Allied Health Technician
- □ Lab
- □ Pharmacy
- □ Venapuncture
- □ Diagnostic Imaging

□ Para/Allied Health Technologist
- □ Neurophysiology
- □ Radiology/EKG
- □ EEG
- □ CT scan
- □ Radiology
- □ Ultra sound
- □ Nuclear Medicine
- □ MRI

□ Para/Allied Health Other
- □ Biomed Engineer

□ Management

□ Non-union support

□ Union support: → □ Service □ Clerical

41. Which union do you belong to?

- □ Not a union member
- □ CUPE
- □ OPSEU
- □ ONA
- □ IUOE
- □ PIPSE

42. Do you work shifts? □ Yes □ No

43. If you work shifts, how many hours is your typical shift?

- □ 7.5-8 hrs
- □ 10 hrs
- □ 12 hrs
- □ It varies
- □ Other _____

44. What is your shift arrangement?

- □ Straights days
- □ Straight evenings
- □ Straight nights
- □ Day/evening
- □ Day/night
- □ Evening/night
- □ Varies
- □ Other_____

45. Do you carry a pager? □ Yes □ No

46. If you carry a pager, how many times per day, on average, are you paged: _____ times per day

47. Are you required to work on call?

- □ Yes: _____ times per month
- □ No

48. Do you supervise the work of others?

- □ Yes: I supervise the work of _____ employees
- □ No

49. How long have you worked for your current organization? _____ year(s)

50. How long have you had your present job? _____ year(s)

51. What is your employment status?

- □ Full time
- □ Part time
- □ Casual

52. Do you have more than one job for pay? □ Yes □ No

53. When do you plan to retire?

- o before 65 (at _____ years of age) – but I plan on working elsewhere after retirement
- o before 65 (at _____ years of age) – but I do not plan on working elsewhere after retirement
- o at 65
- o after 65 (at _____ years of age)

54. What hospital site do you work at?

- □ Royal Ottawa Mental Health Centre
- □ Brockville Mental Health Centre
- □ General Campus
- □ TRC (rehab)
- □ Riverside Campus
- □ Civic Campus
- □ The Heart Institute
- □ The Queensway Carleton Hospital
- □ The Montford Hospital

Appendix C: Correlations and Chi-Squared Analysis
Role Overload

1. Correlations

Qualitative Work Role Overload and

•	Hours in work per week	.21
•	Hours in leisure per week	-.17
•	Control over work environment	-.20
•	Control over scheduling of work	-.17
•	Control over pace of work	-.34
•	Number of employees supervise	.17
•	Perceived flexibility	-.18
•	Task interdependence	.29
•	Continuance commitment	.26
•	How often think of leaving organization	.28
•	Stress	.31
•	Depressed mood	.26
•	Physical health	.34
•	Work interferes with family	.47
•	Family interferes with work	.25
•	Friend support	-.11
•	Cope: get less sleep	.23
•	Cope: avoidance/resignation	-.15
•	Cope: Alcohol and drugs	.11
•	Cope: Put family first	-.22
•	Ineffective change management practices	.35
•	Culture of health care	.50
•	Complexity of work	.30
•	Understaffing	.29
•	Working at multiple work sites	.24
•	Government policies	.21
•	Non-supportive Manager	.33
•	Supportive Manager	-.17
•	Perceived flexibility	-.18
•	Perceived organizational support	-.25
•	Cohesive values driven culture	-.21
•	Culture of appreciation	-.23
•	Culture of teamwork	-.29
•	Culture of work OR family	.33

Qualitative Family Role Overload and:

- Parental Role Value .17
- Parental Role Commitment .15
- Hours in parenting per week .27
- Hours in eldercare per week .13
- Hours in home chores per week .16
- Hours in leisure per week -.26
- Spouse: houses in parenting per week .21
- Control over work environment -.12
- Control over family environment -.48
- Spouses' hours per week in parenting .21
- Parent .20
- Family Financial Status -.30
- Perceived flexibility -.16
- Continuance commitment .17
- How often think of leaving organization .14
- Total Absenteeism .16
- Absenteeism: Health .13
- Absenteeism: Childcare .16
- Stress .41
- Depressed mood .39
- Physical health .37
- Work interferes with family .31
- Family interferes with work .38
- Caregiver strain .17
- Family support -.28
- Friend support -.16
- Colleagues support -.14
- Cope: get less sleep .27
- Cope: Avoidance/resignation -.12
- Cope: Positive thinking -.14
- Cope: Alcohol and Drugs .16
- Cope: cut back on sleep .16
- Ineffective change management practices .20
- Culture of health care .16
- Complexity of work .13
- Understaffing .10
- Non-supportive Manager .16
- Supportive Manager -.11
- Perceived flexibility -.16
- Perceived organizational support -.14
- Cohesive values driven culture -.12
- Culture of appreciation -.14
- Culture of teamwork -.15
- Culture of work OR family .22

Total Role Overload and:

- Hours in work per week .17
- Hours in parenting per week .16
- Hours in leisure per week -.28
- Spouse: hours in parenting .13
- Control over work environment -.19
- Control over scheduling of work -.13
- Control over pace of work -.25
- Control over family environment -.36
- Spouses' hours per week in parenting .13
- Family Financial Status -.18
- Number of employees supervise .14
- Perceived flexibility -.22
- Task interdependence .14
- Continuance commitment .24
- How often think of leaving organization .30
- Total Absenteeism .16
- Absenteeism: Health .13
- Absenteeism: Childcare .16
- Stress .51
- Depressed mood .47
- Physical health .48
- Work interferes with family .60
- Family interferes with work .45
- Caregiver strain .14
- Family support -.21
- Friend support -.21
- Colleagues support -.16
- Cope: Avoidance/resignation -.17
- Cope: Positive thinking -.11
- Cope: Alcohol and Drugs .13
- Cope: Get less sleep .36
- Cope: Put family first -.16
- Take prescription medicine .12
- Ineffective change management practices .35
- Culture of health care .50
- Complexity of work .30
- Understaffing .29
- Working at multiple work sites .18
- Government policies .18
- Non-supportive Manager .29
- Supportive Manager -.17
- Perceived flexibility -.22
- Perceived organizational support -.24
- Cohesive values driven culture -.19
- Culture of appreciation -.19
- Culture of teamwork -.25
- Culture of work OR family .32

2. Chi Squared analysis

To be substantive really needs to be significant at .01

1. Total Roles with the three types of role overload

Cross Tabs: Total Roles	Qualitative Work Role Overload	Qualitative Family Role Overload	Total Role Overload
% low number of roles and high	44%	13%	33%
% high number of roles and high	70%	37%	64%

2. Measures of Control and the three types of role overload

Cross Tabs:	Qualitative Work Role Overload	Qualitative Family Role Overload	Total Role Overload
Control over work environment			
% low control and high	64%	30%	56%
% high control and high	44%	18%	38%
Control over Scheduling			
% low control and high	62%		
% high control and high	49%		
Control over pace of work			
% low control and high	70%		60%
% high control and high	36%		38%
Control over family environment			
% low control and high		68%	80%
% high control and high		13%	37%

3. Demographic characteristics and the three types of overload

Cross Tabs:	Qualitative Work Role Overload	Qualitative Family Role Overload	Total Role Overload
Age			
Under 35: % with high		22%	44%
35 to 50: % with high		30%	55%
Over 50: % with high		15%	39%
Have children			
No: % with high		13%	38%
Yes: % with high		28%	51%
Family financial status			
Income an issue		51%	64%
Income not an issue		15%	44%

4. Characteristics of the job and the three types of overload

Cross Tabs:	Qualitative Work Role Overload	Qualitative Family Role Overload	Total Role Overload
They have a pager			
Yes: % high	65%	19%	53%
No: % high	50%	30%	44%
Have to do "on call"			
Yes: % high			45%
No: % high			60%
Supervise the work of others			
Do not supervise	45%		44%
Supervise more than 9	71%		61%
Employment status			
Full time: % high	60%		
Part time: % high	46%		
Casual: % high	42%		

5. Perceived flexibility, task interdependence and the three types of role overload

Cross Tabs:	Qualitative Work Role Overload	Qualitative Family Role Overload	Total Role Overload
Perceived flexibility			
% low flex. and high	67%	29%	59%
% high flex. and high	52%	17%	37%
Task interdependence			
% low interdep. & high	28%		40%
% high interdep & high	65%		51%

6. Measures of support and the three types of role overload

Cross Tabs:	Qualitative Work Role Overload	Qualitative Family Role Overload	Total Role Overload
Family exchange commitment			
% low exchange & high		45%	64%
% high exchange & high		17%	42%
Perceived organizational support			
% low POS & high	71%		58%
% high POS & high	47%		36%
Working for a non-supportive manager			
% low non & high	50%	22%	48%
% high non & high	87%	41%	86%
Working for a supportive manager			
% low support & high	69%		60%
% high support & high	51%		42%

7. Organizational outcomes and the three types of role overload

Cross Tabs:	Qualitative Work Role Overload	Qualitative Family Role Overload	Total Role Overload
Continuance commitment			
% low com. & unlikely	45%	19%	38%
% high com. & likely	69%	38%	60%
Intent to turnover (how often thought of leaving			
% never. & high	42%	35%	40%
% always & high	75%	70%	51%
Absent all causes			
% no and high		18%	42%
% yes and high		30%	52%
Absent due to problems with children			
% no and high		20%	44%
% yes and high		40%	62%
Absent due to physical or emotional fatigue			
% no and high	53%	22%	44%
% yes and high	65%	31%	57%
Used vacation days to deal with personal problems			
% no and high	51%		41%
% yes and high	62%		54%
Gone to work when physically unwell			
% no and high	42%	15%	32%
% yes and high	62%	27%	54%
Used EAP			
% no and high			46%
% yes and high			60%
When do you plan on retiring?			
> 65: still work & high	68%	31%	
> 65: not work & high	53%	20%	
At 65 & high	49%	24%	
After 65 & high	56%	25%	

Absence due to eldercare not associated with any form of role overload

8 Employee outcomes and the three types of role overload

Cross Tabs:	Qualitative Work Role Overload	Qualitative Family Role Overload	Total Role Overload
Stress			
% low stress & high	25%	10%	12%
% high stress. & high	68%	33%	64%
Depressed Mood			
% low DM & high	41%	8%	23%
% high DM & high	68%	40%	69%
Physical Health			
% poor health & high	79%	43%	77%
% good health & high	42%	12%	27%
Work interferes with Family			
% low WIF & high	37%	15%	22%
% high WIF & high	78%	35%	80%
Family Interferes with Work			
% low FIW & high	50%	15%	38%
% high FIW & high	72%	45%	74%
Caregiver Strain			
% low CS & high		25%	46%
% high CS & high		45%	57%

9 Measures of support and the three types of role overload

Cross Tabs:	Qualitative Work Role Overload	Qualitative Family Role Overload	Total Role Overload
Family support			
% low support & high		40%	67%
% high support. & high		18%	42%
Friend support			
% low support & high			63%
% high support. & high			43%
Colleague support			
% low support & high		34%	61%
% high support. & high		21%	43%

10. Quality of work and the three types of role overload

Cross Tabs:	Qualitative Work Role Overload	Qualitative Family Role Overload	Total Role Overload
Feel you have accomplished something worthwhile at work			
% low accomp. & high	41%		36%
% high accomp.. & high	71%		71%
Percent of what they do on their job they enjoy			
% < 40 & high	63%	40%	63%
% > 60 & high	52%	22%	43%
Percent of what they do on their job stirs up enthusiasm			
% < 40 & high			54%
% > 60 & high			41%
Work interferes with Family			
% low WIF & high	37%	15%	22%
% high WIF & high	78%	35%	80%
Family Interferes with Work			
% low FIW & high	50%	15%	38%
% high FIW & high	72%	45%	74%
Caregiver Strain			
% low CS & high		25%	46%
% high CS & high		45%	57%

11. Individual Coping and the three types of role overload

Cross Tabs:	Qualitative Work Role Overload	Qualitative Family Role Overload	Total Role Overload
Cope: Avoidance/Resignation			
% low cope & high		32%	63%
% high cope & high		20%	41%
Cope: Alcohol and Drug use			
% low cope & high			45%
% high cope & high			60%
Cope: Put family first			
% low cope & high	66%		
% high cope & high	43%		
Cope: Cut back on sleep			
% low cope & high	45%	12%	28%
% high cope & high	60%	32%	61%

12. Employee Demands and the three types of role overload

Cross Tabs:	Qualitative Work Role Overload	Qualitative Family Role Overload	Total Role Overload
Work demands: Hours in work per week			
Low (> 30) & high	47		41
Moderate (31 to 41) & high	45		40
High (42 +) and high	73		60
Family demands: Hours in parenting per week			
Zero		13	37
Low (> 7) & high		19	42
Moderate (8 to 15) & high		25	49
High (16 +) and high		36	59
Family demands: Hours in home chores per week			
Low (0 to 5) & high		17	
Moderate (6 to 12) & high		21	
High (13+) and high		31	
Work and Family demands: Hours in leisure per week			
Low (0 to 9) & high	64	35	63
Moderate (10 to 15) & high	58	23	48
High (16+) and high	48	15	32
Family demands: Spouse hours in parenting per week			
Zero		12	40
Low (> 7) & high		26	50
Moderate (8 to 15) & high		31	51
High (16 +) and high		33	62

Spouse hours at work and spouse hours in home chores not associated with any form of role overload

13: Predictors of overload and the three types of role overload

Cross Tabs:	Qualitative Work Role Overload	Qualitative Family Role Overload	Total Role Overload
Ineffective change management practices			
% low & high	37%	20%	33%
% moderate & high	61%	23%	49%
% high & high	84%	34%	71%
The Culture of Health Care			
% low & high	25%	20%	25%
% moderate & high	62%	23%	51%
% high & high	87%	29%	71%
Complexity of Work			
% low & high	35%	20%	33%
% moderate & high	54%	22%	49%
% high & high	74%	29%	58%
Understaffing			
% low & high	32%	20%	35%
% moderate & high	49%	22%	42%
% high & high	78%	29%	61%
Working at multiple sites			
% low & high	49%		43%
% moderate & high	63%		49%
% high & high	74%		66%
Government Policies			
% low & high	49%		
% moderate & high	56%		
% high & high	70%		

14: Organizational Culture and the three types of role overload

Cross Tabs:	Qualitative Work Role Overload	Qualitative Family Role Overload	Total Role Overload
Cohesive, values driven culture			
% low & high	70%	31%	60%
% high & high	49%	22%	42%
Culture of appreciation			
% low & high	72%	32%	60%
% high & high	46%	23%	40%
Culture of teamwork			
% low & high	73%	28%	61%
% high & high	39%	18%	34%
Culture of work OR family			
% low & high	42%	17%	32%
% high & high	81%	38%	71%

15. Employee Group and work and total overload

Employee Group	% high Work Role Overload	% High Total Role Overload
Doctor	59	59
Nurse	58	45
Allied Health Professional	46	44
Allied Health Technical	66	49
Management	77	60
Non-union Support	58	48
Union Support	49	42

16. Retirement Intentions and Work and Total Overload

When plan on retiring	% high Work Role Overload	% High Family Role Overload
Before 65 – will work elsewhere	68	30
Before 65 – will not work elsewhere	54	20
At 65	49	24
After 65	56	21

Appendix D: Interview Script

Contact Script – Telephone Interview

May I speak to _____
My name is _____ from the Sprott School of Business, Carleton University. Earlier this year you completed a questionnaire as part of a study entitled "**Role Overload in Canada: Causes, Consequences and Effective Coping Strategies**." You may recall that when you completed the questionnaire you provided your name and telephone number indicating that you would be willing to be interviewed further about work and family issues. That is why I am calling you today.

Do you have a moment to talk? If not, then when would be a better time for me to call back?

_____Date and time for call back.

On call back, mention the study again and then begin here/OR if they do not want a call back continue with this material:
I am working with Dr. Linda Duxbury from the Sprott School of Business at Carleton University, Dr. Chris Higgins from the Ivey School of Business at the University of Western Ontario and Dr. Sean Lyons at University of Guelph. ** On the basis of your demographics, your name was selected as a possible participant in a more detailed study on the way that people manage their work, non-work and family roles.. The study is being funded by Workplace Safety and Insurance Board Research Advisory Council (WSIB RAC)

Your participation in this phase of the study will involve a telephone interview that will take approximately 30 to 60 minutes of your time. The interview asks a series of questions which were designed to help us:

- Understand why people feel overloaded through what is referred to as the appraisal process,
- Understand how being overloaded affects them, their families and their situation at work, and how people behave when they are overloaded (actions as well as emotions)
- Identify effective and ineffective ways to cope or deal with role overload. **

Are you still interested in participating in the interview?

If yes: Thank you very much for agreeing to participate. We would like to schedule your interview at a time that is convenient to you for sometime in the next week. Could you suggest a few times that you would be available and willing to participate in the interview. We will contact you within the next few days with the date and time for the telephone interview (**or confirm now if you can**). How would you like to be contacted?

Telephone (at what number) _____
E-mail (what is your e-mail address) _____

If you are calling back for an interview appointment,

Thanks again for agreeing to take part in this follow up study. Just as a reminder, this study is a follow up to the previous study in which you participated, and looks specifically at the demands that people face, how and why people become overloaded, and what can be done to reduce role overload. The interview today will be audio taped to support the analysis of the data. Audio files will be stored on a password protected PC and will be deleted once the data has been coded and analysed. Names and other identifying information will not be recorded or shared with the funder WSIB, You will only be identified by a code number assigned to you. Are you happy to go ahead?

If they are unhappy, try to identify and allay their concerns. If you cannot, end the interview and thank them for their time.

If they ask if the interview can be conducted in French, explain that you personally cannot speak French well enough and someone else will call them back to do arrange the interview and thank them.

Turn on the recorder and ask again.

For the benefit of the recording can I ask you to confirm that you are happy to proceed with the interview.

Section 1 Background Information

The first couple of questions give us some background information on you and what you do at work. This information will give us the context to help us interpret the data.

□ *1.* BRIEFLY describe your role at work.

_____

□ *2.* How long have you been in this role?

_____

□ *3.* What percentage of your typical work day is spent dealing with patients? _____ %

Section 2: Role Overload Scenarios

In this section of the interview we are going to focus on your experiences of role overload. Role overload is defined as having too much to do and not enough time to do it.

In order to understand how people respond and cope with overload I would like you to think about a situation where you felt overloaded – you just had too much to do, and not enough time. This situation can be at work OR at home, whatever comes to mind. I'm going to walk you through the experience by asking you a number of questions to help me understand the situation, how it unfolded, how you felt about the situation, what you did to try and reduce the overload, and how you now evaluate your actions.

Situation A:

1. So – to start. For this situation from the past six months where you felt overloaded – you had too much to do, not enough time to do it in (or time crunched) – can you give this event a title?

_____

In the instance that you just described:

 2. What made you feel overloaded? What was it about the situation itself?

_____

 3.a) What were your initial thoughts about the situation?

_____

b) Did you feel that the situation was harmful to you, or potentially threatening in any way, or challenging to you (if none of these – how would you describe it)? _____

i) In what way? _____

 4. What was your over riding feeling about the situation? (prompt: Excited, worried, overwhelmed, guilty, fearful, annoyed…..)

_____

 5. I want to identify the potential consequences of the situation if it were not resolved successfully:

 a) Firstly, what did it mean for you? (Prompt: to your goals or values)_____

 b) How was it likely to affect your organisation/boss/colleagues/patients/family members, and what did THAT mean to you? (*if it is work situation ask them about their organization, their boss, their colleagues, a patient --- if it is a family situation, ask about their family members*)

_____

 6. This question is to determine how well prepared you felt to respond to this situation?

_____

a) To what extent did you believe the situation could be resolved successfully?

_____

b) Describe your initial thoughts about how you could overcome the situation?

_____

_____

 7. What was the single most important factor that made this situation potentially overwhelming or stressful for you? _____

 8. I now want to ask what you did to cope with the situation?

a) What actions did you take? How did your actions differ from your initial plan? Why these actions? Did they work or not? In what way?

_____

□ b) What actions did others take? Did they work or not? In what way?

_____

□ c) What did you do to deal with the emotional aspects of the situation? Why this? Did this work or not?

_____

□ 9.a) How did the situation end ? _____

_____

b) Was this what you expected to happen or not? _____

i) Why do you say this? _____

ii) How did you feel at the end of the situation? (or, if the situation is on-going, how do you feel about it now)

_____

Situation B: Thanks for sharing this example with me. It was very useful. You described an overload situation that:

□ you were able to overcome so that you felt comfortable with at the end of the day

OR

□ was really(or somewhat) stressful for you and that resulted in your feeling (or somewhat) overwhelmed and you were not happy with how it turned out.

Can you describe a situation within the past six months that went the other way. Where despite feeling overloaded:

□ you were able to resolve the situation in the end in a very favourable way

OR

□ the situation resulted in you feeling very overwhelmed – and you were not happy with how it had turned out.

Again, this could be at work or home. I am going to ask you the same set of questions as before, but in this case I want you to focus on this second situation.

1. First, For this second situation where you felt overloaded – can you give this event a title?

_____

In the instance that you just described:

□ 2. What made you feel overloaded? What was it about the situation itself?

_____

□ 3.a) What were your initial thoughts about the situation?

_____

b) Did you feel that the situation was harmful to you, or potentially threatening in any way, or challenging to you (if none of these – how would you describe it)? _____

i) In what way? _____

□ 4. What was your over riding feeling about the situation?? (prompt: Excited, worried, overwhelmed, guilty, angry…..)

_____

□ 5. I want to identify the potential consequences of the situation if it were not resolved successfully:

□ a) Firstly, what did it mean for you? (Prompt: to your goals and/or values)

_____

□ b) How was it likely to affect your organisation/boss/colleagues/patents/family members and what did THAT mean to you? (*if it is work situation ask them about their organization, their boss, their colleagues, a patient --- if it is a family situation, ask about their family members*)

_____

□ 6. This question is to determine how well prepared you felt to respond?

_____

a) To what extent did you believe the situation could be resolved successfully?

_____

b) Describe your initial thoughts about how you could overcome the situation?

_____

_____

□ 7. What was the single most important factor that made this situation potentially overwhelming or stressful for you? _____

□ 8. I now want to ask what you did to cope with the situation?

a)What actions did you take? How did your strategies /actions differ from your initial plan?

Why these actions? Did they work or not? In what way?

_____

□ b) What actions did others take? Did they work or not? In what way?

_____

□ c) What did you do to deal with the emotional aspects of the situation? Why this? Did this work or not?

_____

□ 9.a) How did the situation end ?_____

_____

b) Was this what you expected to happen or not? _____

i) Why do you say this? _____

ii) How did you feel at the end of the situation? _____

_____

Section 3: Appraisal, Coping and Consequences

3.1 What makes you feel overloaded?

Thank you for sharing those experiences. The next few questions deal more generally with your experiences of overload at work and at home. They are designed to give us a better understanding of the factors that makes some people feel overloaded in a particular situation – while others do not.

1. From your own personal experience what have you found makes you feel overloaded:

□ a. When you are at work? (Prompt: Anything else &/or Please elaborate - To encourage multiple examples & their characteristics) _____

_____

□ b. When you are at home? (Prompt: Anything else&/or Please elaborate - To encourage multiple examples & their characteristics) _____

_____

3.2 Coping with Overload

The next few questions deal specifically with coping with overload.

From your own personal experience what have you found helps you cope with:

□ 2. Overload at work? (*After responses*, p*rompt to make sure they give examples of personal actions and actions by others)*

□ a. Personal actions _____

_____

□ b. Actions by your employer or co-workers?

_____

□ 3. Overload at home?

□ a. Personal actions_____

□ b. Actions by others _____

From your own personal experience what have you found makes it more difficult for you to cope with:

□ 4. Overload at work? (*After response, prompt to make sure they give examples of personal and non personal factors*)

□ a. Personal factors _____

□ b. Actions by your employer or co-workers?

_____

□ 5. Overload at home?

□ a. Personal factors _____

□ b. Family circumstances, actions by others at home _____

□ 6. a Do you have any strategies that you have found to be successful in PREVENTING role overload from happening?

b. What are they? _____

_____

c. How do they work? _____

d. How often do you use this approach rather than coping with the situation once it has arisen?

_____

3.3 Consequences of Overload

The next few questions deal specifically with what happens to you in overload situations at work and/or at home.

 7. What happens to you when you feel overloaded? _____

 a. Physically? _____

 b. Emotionally? _____

 8. Does it change how you deal with others at:

a. work? If yes, how? _____

b. At home? If yes, how? _____

c. Does it affect your productivity at work? If yes, how?_____

 9. a. Which type of overload do you consider more problematic: that stemming from work or that arising from your responsibilities at home? _____

d. Why do you say this?

Section 4 End of the Interview

The last brief set of questions are included to help us get an idea of what is important to YOU with respect to overload.

 1. What ONE piece of advice would you offer to someone who is overloaded:

 a. At work? _____

 b. At home? _____

 2. What ONE thing could your employer do to:

 a. Reduce the amount of overload you encounter at work? _____

_____

 b. Help you cope with role overload once it occurs? _____

_____

 3. Is there anything else that you would like to add that I did not cover?