

# Chapter 1 Introduction

## 1.1 Introduction

Work and family constitute the dominant life roles for most employed adults in contemporary society. Thus, employed men and women are increasingly concerned about managing the conflicts experienced in fulfilling the dual demands and responsibilities of work and family roles. The unfolding changes in the composition of the workforce together with the growing proportion of workers in non-traditional family forms have focused heightened attention on the conflicts faced by employed men and women in balancing the competing demands and responsibilities of work and family roles (Parasuraman & Greenhaus, 1999). In a US study, work-life balance was ranked among the most important factor considered by individuals in accepting a new position (Galinsky, Bond & Friedman, 1993). Indeed, the growing concern about the problems in integrating the demands of work and home and the adverse effects it has for employees, families and employers have led to the emergence of work-personal life integration as a prominent social issue in Europe and the US, including The Netherlands.

## 1.2 Political and Societal Background

There is a longstanding interest and increasing involvement of the European Union (EU) in the relationship between paid work on the one hand, and the responsibilities and unpaid work arising from providing care for the family, on the other (Moss, 1996). The Eurospeak shorthand that appears in documents is the ‘reconciliation of employment and family responsibilities’. The major reason for the EU’s active involvement in promoting reconciliation between employment and family responsibilities arises from the Union’s commitment to the objective of gender equality. The 1994 White paper on European Social Policy highlights the aspiration of reconciliation and the need to address the unequal division of care and family responsibilities, on the part of the EU:

“Progress towards new ways of perceiving family responsibilities may slowly relieve the burden on women and allow men to play a more fulfilling role in society. However greater solidarity between men and women is needed if men are to take on



greater responsibility for the caring roles in our society and if flexibility in employment is not to lead to new pressures on women.” (European Commission 1994:43).

The need to address the issue of work-family balance or reconciliation is highlighted by the structural changes that have taken place in Europe and the Netherlands. Overall, the 25-49 (age group) share of the labour market has increased from 51% in 1960 to 62% in 1990, with further increases projected. Men’s employment in this age group has remained high and women’s employment (mainly among women with children) has increased steadily and is projected to do so (European Commission, 1992). At the same time, the average age for women in Europe to have a first child has moved upwards into this age group, presently at 27 years.

In the Netherlands, 58% of the total growth in employment (more than half a million people) is accounted for by women (Social & Cultural Report, 2000). Indeed, 1999 was the first year that more than 50% of women between 15 and 65 had paid work for at least 12 hours a week. The net participation rate of females (between 15-64) has risen dramatically from 29.2% in 1970 to 51% in 1999 (CBS, 1999). Indeed, the net participation rate rises to 73% when we only consider women who have achieved polytechnic (HBO in the Netherlands) or university education (CBS, 1999). Most interestingly, analyses show that structural characteristics (e.g. childcare, maternity leave) have a very limited effect on female participation. Grift, Plantenga, Schippers and Siegers (1999) estimate that the availability of three days of free childcare per week for all families with children aged 0-4 would in average increase the total supply of female labour by no more than one hour a week. Graafland (1999) estimates that scrapping the existing subsidies on childcare facilities (including the tax deduction) would reduce the total supply of female labour (expressed in hours) by only 1.52%. Although 1.52% of the female population is not insignificant, it does pale in somewhat when compared with the structural increase in female participation since 1970. Therefore, it seems that the increase in female participation can only to a small extent be explained by changes in women’s objective characteristics and circumstances. The progress has probably more to do with psychological factors such as changing ideas about women’s role in society and family life. For example, the percentage of the population who thought that a married woman with school age children and working was “not objectionable” was 70% in 1985 and 81% in 1997

(SCP, 1998). The historical and demographic trends suggest that women will increasingly participate in the workforce (and join their male colleagues), and as such the probability that work-home interference will become an ever-increasing problem for both sexes is surer than the ways in which it will express itself.

### **1.3 Definition of Work-Home /Home-Work Interference**

One difficulty in synthesizing the literature of the work-home relationship is the differing terminology used by various authors to describe essentially the same constructs (Gutek, Repetti & Silver, 1998; Lewis & Cooper, 1998). For example, Greenhaus and Beutell (1985, p. 79) provide a summary of studies that illustrate the number of different terms. A review of the literature indicates that work-home interference has also been defined as: work-family conflict (Higgins & Duxbury, 1992), job-family role strain (Bohen & Viveros-Long, 1981; Kelly & Voydanoff, 1985), family/work role incompatibility (Jones & Butler, 1980) and interrole conflict (Kopelman, Greenhaus & Connolly, 1983). For the purposes of the present thesis, *work-home interference* will be the adopted label. Given the potential for confusion from such an array of multiple labels, it is appropriate to begin this thesis with a working definition of work and home. Therefore, work is defined as instrumental activity intended to provide goods and services to support life (Piotrkowski, Rapoport & Rapoport, 1987). Such a definition does not define work as a physical location, particularly with the advent of advanced communications technology. Work signifies membership in a market or organisation that gives the worker rewards in exchange for his/her contribution. Like work, home (or family) implies membership in a social organisation to which the person contributes (Zedeck, 1992). However, such contributions are not intended to gain extrinsic rewards, but rather are intended to promote the well-being and stability of family and home life (Edwards, 1998). Interestingly, Rothhausen (1999) has presented an exhaustive analysis of how the concept of “family” has been operationalised by W/O psychologists and other work-focused researchers and offers five different models. In the absence of an agreed definition she suggests that a “realistic definition of family would include all others who meet certain needs or functions formerly thought to be met by the family; this is a functional or effective, rather than a ‘traditional’ or legal definition of family” (1999: 820). Ideally, one should try to define one’s concepts carefully, but the interesting issue here is that it is partly the blurring of the distinctions and the borders



between them that has stimulated interest in the topic. All that said, a clear definition of the concepts to be studied is best way to proceed.

Work-Home interference (WHI) and Home-Work interference (HWI) is experienced when pressures from the work and family roles are mutually incompatible, such that participation in one role makes it difficult to participate in the other (Greenhaus & Beutell, 1985). WHI and HWI have been well established as variables that influence worker health. The basic argument is that work demands affect family life through the creation of WHI, with consequent negative effects on social role quality at home. Conversely, home or family demands are thought to interfere with work, also creating HWI. Such types of interference can produce difficulties for employees and their families, for employers, and for society as a whole. Such interference is further compounded by the contemporary changes in the way in which people work, resulting in increasingly blurred boundaries between work and non-work (Montgomery, Panagopoulou, Peeters & Schaufeli, in press; Nippert-Eng, 1996). A growing number of people work overtime, work systematically one or more days at their home address (e.g., telework), and work often during hours beyond 'nine-to-five' (e.g., shift work, weekend work) (Merllié & Paoli, 2000; Paoli, 1997). Similarly, personal services have become a more frequent feature of the workplace (e.g., company sponsored hairdressing facilities, company gyms, shopping services). Additionally, working hours are also spent on personal activities (e.g., personal phone calls and e-mails). The modern dilemma of multiple obligations means that the incidence of work impacting on home (and vice versa) is more likely. Thus, the widespread experience of WHI and HWI creates multiple problems that affect different stakeholders in different ways.

The importance of the research area is highlighted by the fact that a large body of literature has identified WHI as being associated with a range of work-related (e.g., intention to turnover), nonwork related (e.g., marital satisfaction) and stress-related (e.g., burnout) adverse outcomes (see Allen, Herst, Bruck & Sutton, 2000 for discussion). As yet, research has not adequately identified the processes through which job and home characteristics intrude across the work/home nexus. Without a better understanding of the processes that link work and home life, it is difficult to identify effective strategies for helping workers balance the two. Workplace policies that are implemented can only be effective to the extent that the assumptions of how they come to affect workers are indeed accurate. Therefore, an understanding of the



processes linking work and home life is necessary to adequately evaluate the effectiveness of work place practices.

#### **1.4 Measurement of Work-Home and Home-Work Interference**

WHI and HWI are predominately measured by self-report measures (e.g., ‘How often do you find it difficult to fulfill your domestic obligations because you are constantly thinking about your work?’). At a general level, measures assess either the positive and/or negative impact of work on home, and the positive and/or negative impact of home on work. Most reviews of the area (e.g., Allen et al, 2000; Geurts & Demeroti, 2003) indicate that the phenomena has been tended to be measured from the negative of interference framework.

At a more refined level, some researchers have attempted to sub-divide these general categories into different forms of WHI/HWI. For example, Greenhaus and Beutell (1985) have distinguished between three different types: (1) time-based conflict, referring to time-based pressures (e.g., ‘The amount of time my job takes up makes it difficult to fulfill family responsibilities’); (2) strain-based conflict, referring to strain created by the participation in multiple domains (e.g., ‘My work makes it difficult for me to feel relaxed at home’); (3) behavior-based conflict, referring to incompatibility between patterns of role behavior transferring from one domain to another (e.g., ‘My job made me behave in ways that are unacceptable at home’). Such an approach has been hampered by the difficulties in the operationalization of the behaviour-based component, where there is little empirical evidence for the existence of this form of conflict (Geurts & Demerouti, 2003). Additionally, Aryee (1992, 1993) has conceptualized WHI in terms of interference between different roles (i.e., job-parent, job-spouse) and Kirchmeyer (1992, 1993) has conceptualized HWI in terms of how specific non-work roles (i.e., parenting role, community work role, recreation) impact on work. The aforementioned research represents attempts to more specifically define WHI/HWI. While such attempts may bring richer insights into the phenomenon, the most recent review of the area (Geurts & Demerouti, 2003) indicates that the accumulated evidence (so far) suggests that we can only discuss the dichotomy between WHI/HWI reliably. A ‘state-of-the-art’ assessment at this point recommends that we should view WHI and HWI as two distinct aspects of the work/home interaction (that are at best only moderately correlated). Therefore, the most conservative (reliable) approach is to measure the phenomenon from the



perspective of distinguishing between WHI/HWI and between positive and negative. With this in mind, the present thesis will operationalise the phenomena according to four general taxonomic categories included in the Survey Work-Home Interference of Nijmegen (SWING: Wagena & Geurts, 2000): (1) negative interference from work interfering to home (negative WHI); (2) negative interference from home to work (negative HWI); (3) positive interference/enhancement from work to home (positive WHI); (4) positive interference/enhancement from home to work (positive HWI). An exhaustive list of the items to be used in the present research can be found in Appendix A.

## 1.5 Theoretical Background

Zedeck and Mosier (1990) and more recently O'Driscoll (1996) note that there are typically five main models used to explain the relationship between work and life outside of work. (1) The *segmentation* (or segregation) model hypothesizes that work and home are two distinct domains of life that are lived quite separately and have no influence on each other (Dubin, 1956; Dubin & Champoux, 1977). This appears to be offered as a theoretical possibility rather than a model with empirical support (Guest, 2002). This approach has been applied more frequently to blue-collar workers, who have more often unsatisfying and uninvolved jobs (Lambert, 1990). (2) In contrast, a *spillover* model hypothesizes that one world can influence the other in either a positive or negative way. For example, an individual may bring negative (or positive) feelings from work to home (and vice-versa). (3) The third model is the *compensation* model, which proposes that what may be lacking in one sphere, in terms of demands or satisfaction, can be made up in the other. For example, work may be routine and undemanding but this can be compensated for by a major role in local community activities outside of work. On the whole, the spillover model has received qualified support (e.g., Geurts, Rutte & Peeters, 1999; Kabanoff & O'Brien, 1980; Kinnunen & Mauno, 1998), but the compensatory model has received little or none. (4) A fourth model is an *instrumental* model whereby activities in one sphere facilitate success in the other. The traditional example is the instrumental worker who seeks to maximize earnings, even at the price of undertaking a routine job and long work hours, to allow for the purchase of a home. These four models are essentially descriptive models, and to be of value they need to incorporate an analysis of their causes and consequences (Guest, 2002). (5) The final and fifth model is a *conflict* model, which proposes that

with high levels of demands in all spheres of life, some difficult and conflicting choices have to be made and significant overload may occur. In line with spillover and conflict models, role-theory has provided a useful conceptual framework to understand how men and women attempt to balance their many roles (Kahn, Wolfe, Quinn, Snoek & Rosenthal, 1965). Role or interrole conflict is the simultaneous occurrence of two (or more) sets of role pressures, such that compliance with one role makes it very difficult to comply with other. The contemporary literature recognises two forms of interrole conflict: work interference with home/family and home/family interference with work. The distinction between these two forms of conflict has been conceptually (e.g., Greenhaus & Beutell, 1985) and empirically (e.g., Frone, Russell & Cooper, 1992b; Netemeyer, Boles & McNurrian, 1996) supported.

The predominance of the conflict and spillover models has prompted researchers to think in terms of role strain, which has in turn prompted competing hypotheses about the way energy is distributed via roles and domains. The role strain perspective represents the *scarcity* perspective in relation to the notion that people have limited amounts of time and energy, and investing energy in one domain means less for another domain (or role) (see Marks, 1977 for a discussion). In opposition to the role strain hypothesis, a parallel body of theory suggests that participation in multiple roles might provide a greater number of opportunities and resources to the individual that can be used to promote growth and better functioning (Marks & MacDermid, 1996). Empirical evidence for such a view comes from studies which show that employed married mothers experience higher levels of happiness and physical health (minimizing for confounding due to selection effects) compared with unemployed married mothers (Waldron, Weiss, & Hughes, 1998). A good example of such role expansion can be found in Grzywacz and Marks (2000), who found evidence that positive spillover facilitated development (e.g., decision latitude, family support).

On the basis of role theory and consistent with Kahn et al., (1965), this thesis will evaluate two types of interrole conflict: Work-Home Interference (WHI) and Home-Work Interference (HWI). Furthermore, on the basis of of scarcity and expansion theories, this thesis will also distinguish between positive and negative forms of WHI and HWI. This four dimensions distinction to can also be found in recent empirical research of Demerouti, Geurts & Kompier (2001), Grzywacz & Marks (2000) and Wagena & Geurts, (2000). Accordingly, WHI can be either



negative or positive spillover, and HWI can also be either negative or positive spillover. This view posits WHI/HWI as the result of the interaction between both domains, whereby one's functioning in one domain is influenced by one's functioning in another domain (Geurts & Demerouti, 2003).

## **1.6 Work-Home /Home-Work Interference: Whose problem is it?**

Parasuraman and Greenhaus (1999) prompt us to consider the question of who 'owns' the problem of WHI and HWI. Such a question is not unimportant when one considers that beliefs about who 'owns' the problem are likely to influence one's attributions or beliefs about who should bear responsibility for helping individuals manage it. A good place to start is an examination of the myths that surround the incidence of WHI/HWI. Firstly, the line of reasoning that suggests that working is a matter of individual choice is clearly inconsistent with the reality that most people (including women) work out of economic necessity (Powell, 1999). Secondly, the idea that the problem is specifically related to women with children is inconsistent with the accumulated data that strongly suggests that men and women (with and without children), from different occupational positions experience both WHI and HWI to an equal degree (Galinsky, Bond & Friedman, 1993). Indeed, Frone, Russell and Barnes (1996) examining WHI and HWI among two random samples of employed parents found no gender differences in the relation between WHI/HWI and health related outcomes. While the authors didn't report the differences between WHI/HWI according to gender, finer-grained analysis of the WHI/HWI x gender relationship did indicate that interactions did not differ across levels of family status or age of youngest child variables. Consistent with such research, O'Neill and Greenberger (1994) found little difference between men and women in the psychological importance of both work roles and parental roles. Furthermore, while women bear a disproportionate "dual burden" of paid and unpaid work, evidence does suggest that husband's proportion of household work (especially husbands with wives in full-time employment) is continually rising (Gershuny, Godwin & Jones, 1994). Such a process of "lagged adaptation" suggests men and women are nowadays renegotiating their previous assumptions about the division of household labour.





Thirdly, there is an assumption that WHI/HWI is less important in societies that have a large amount of part-time workers (such as the Netherlands)<sup>1</sup>. Such an idea rests on the notion that WHI/HWI is primarily associated with long work hours. However, the belief that part-time work is associated with beneficial effects receives scant empirical support from studies of physical and mental health outcomes (Herold & Waldron, 1985; Wethington & Kessler, 1989; Verbrugge, 1989). Indeed, one might predict that part-time status would be most beneficial among workers under the most acute work/home stress, but Herold and Waldron (1985) in a sample of employed married mothers of preschoolers and mothers with three or more children concluded that “no advantage for part-time workers relative to full-time workers was observed” (p. 411). Evaluation of part-time work versus full-time work is made difficult by the wide variation in the amount of part-time hours worked, and by the anecdotal evidence that the number of hours for which part-time workers are paid seriously underestimates the absolute number of hours they spend on the job (Barnett, 1998). In addition, it is important to control for covariates (e.g., sex, age and marital status) and investigate the nature of non-work activities engaged in (e.g., increased home burden). Finally, selection effects may be an important issue, with people who select to work part-time differing with people who choose to work full-time in ways that relate systematically to their preferences and to their ability to manage work and home demands (Barnett, 1998). In conclusion, we have no definite answers about the relationship between part-time work per se and WHI/HWI, and assumptions that part-time workers will experience such interference at lower levels is unfounded. In effect, the conditions in which part-time work is engaged in will most probably influence the levels of WHI/HWI experienced, not the fact of being part-time per se.

Looking at both North American and European perspective, the decline in the proportion of families with full-time homemakers and the increasing proportion of workers with responsibilities for elder care indicates a heightened potential for both men *and* women to experience WHI/HWI. So the problem of WHI and HWI is a potential issue for anybody who has to consistently integrate a work role (paid and unpaid) with family/home responsibilities. Such a definition presents us with a

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<sup>1</sup> The Social and Cultural Report (2000) indicates that the Netherlands has the highest percentage of part-time workers in the European Union.



considerable amount of people from the working population, in opposition to the idea that this problem is a ‘local’ or ‘mommy-track’ problem. Indeed, the recent study by Frone (2000), among a representative national sample of 2,700 employed adults, found that employees who reported experiencing WHI/HWI often were 2-30 times more likely (depending on the type) than were employees who reported no WHI/HWI to experience a clinically significant health problem. This study adds empirical evidence to already existing anecdotal evidence (Shellenbarger, 1999; Jackson, 2000) suggesting that WHI/HWI is societal problem. Therefore, WHI/HWI and its associated negative consequences is potentially a problem for all employees.

## **1.7 Empirical Overview**

### **1.7.1 Prevalence of WHI and HWI**

A review of the WHI and HWI literature reveals that WHI has been consistently more prevalent than HWI (e.g., Bond, Galinsky & Swanberg, 1998; Burke & Greenglass, 1999; Demerouti, et al., 2001; Eagle, Icenogle, Maes, & Miles, 1998; Frone, Russell & Cooper, 1992a; Kinnunen & Mauno, 1998; Leiter & Durup, 1996). Indeed, Frone et al. (1992) found that WHI was reported three times more frequently than HWI by both male and female employed adults with a spouse and/or with children. Bond et al. (1998) reported similar results for a nationally representative sample of the American working population, with an even greater divergence in the prevalence.

Although, it seems that the impact of HWI is more often felt in terms of positive spillover as opposed to negative. Demerouti, et al., (2001) found that of all the dimensions of work-home interaction, positive influence of the home situation on one’s functioning at work (HWI-positive) was the most prevalent among 715 employees from the Dutch Postal Services (see also Wagena & Geurts, 2000). Using an American sample of over 2,000 employees, Grywacz and Marks (2000) showed that positive spillover from family to work was as equally prevalent as negative spillover from work to family among both male and female workers. So, in conclusion while the overall evidence suggests that WHI is more prevalent than HWI, recent research suggests that HWI may become more significant when we view it from the positive perspective.



### 1.7.2 Antecedents of WHI and HWI

A review of the literature on the antecedents of WHI and HWI reveals a great deal of variety in the variables studied. In addition, and according to the knowledge of the author, no published systematic quantitative review of the antecedents of WHI and HWI is in existence. Therefore, it was decided to examine the literature in a systematic fashion and report a quantitative summary of the studies identified and reported. Relevant articles were identified through manual and computer searches. Computerized searches were conducted through the PsycLIT databases using the key words “work and home/family conflict/interference”. In addition a manual search of articles published between 1990 and 2001 in the following journals; *Journal of Applied Psychology*, *Journal of Organizational and Occupational Psychology*; *Work & Stress*; *Journal of Occupational Health Psychology*; *Journal of Organizational Behavior*; *Journal of Vocational Behavior* and *Journal of Marriage & the Family*. Consistent with the recent meta-analysis of Allen et al. (2000), the criteria for inclusion in the review were three-fold. Firstly, both WHI and HWI had to be a quantitatively measured variable in the study. Secondly, the study had to measure the relationship between WHI/HWI and one or more variables that could theoretically considered to be antecedents of WHI and HWI. Thirdly, only studies that included a zero-order bivariate correlation between WHI/HWI and the antecedent variable/s were included.



**Table 1.1 Summary of antecedents for WHI & HWI**

WHI Antecedents	k	n	r	SD <sub>r</sub>	r <sub>w</sub>	Range
Job Involvement	6	1803	.18	.11	.16	.03 - .28
Workload	4	987	.57	.07	.55*	.47 - .64
Work Schedule	6	1510	.20	.09	.17*	.11 - .36
Job Stress	2	837	.48	.26	.31	.31 - .68
Commitment	2	515	.28	.04	.31	.26 - .31
Supervisor Support	4	1426	.20	.17	.18	-.09 - -.44
Frequency of Stress	1	113	.24	na	na	na
Co-worker Support	1	372	-.08	na	na	na
Career Priority	1	399	.10	na	na	na
Time Commitment to Work	1	111	.51	na	na	na
Organisational Climate	1	779	.37	na	na	na
Managerial Role	1	779	.54	na	na	na
Feeling valued by partner	1	786	-.12	na	na	na
HWI Antecedents	k	n	r	SD <sub>r</sub>	r <sub>w</sub>	Range
Family Involvement	7	2021	.19	.19	.12	.05 - .47
Parental Stress	1	206	.29	na	na	na
Family Stress	1	631	.29	na	na	na
Spouse social support	1	372	-.14	na	na	na
Parenting Overload	1	372	.42	na	na	na
Family Info/emotional support	1	163	.35	na	na	na
Domestic work	1	779	.17	na	na	na
Home Stress	1	779	.45	na	na	na
Time Commitment to Family	1	111	-.06	na	na	na

*Note.* \*Z score > 1.96, k = number of studies, n = total sample, r = unweighted correlation coefficient, SD<sub>r</sub> = standard deviation of correlation coefficients, r<sub>w</sub> = weighted correlation coefficient, na = not applicable

Once located, articles were categorized and multiple studies were compared using the effect size calculations according to the guidelines of Hunter and Schmidt (1990)<sup>2</sup>. An examination of published research (from 1990 to 2001, see Appendix B and C) that specifically conceptualized variables as antecedents of either WHI or HWI revealed a diverse array of variables. Table 1.1 presents a summary of the quantitative review of the antecedents for WHI and HWI.

Firstly, WHI will be examined. WHI has been associated with job involvement (Adams, King & King, 1996; Eagle, Icenogle, Maes & Miles, 1998; Fox & Dwyer, 1999; Frone, Russell & Cooper, 1992b; Hammer, Allen & Grigsby, 1997; Parasuraman, Purohit, Godshalk & Beutell, 1996), increased workload (Frone, Yardely & Markell, 1997; Geurts et al., 1999; Parasuraman, Purohit, Godshalk & Beutell, 1996; Wallace, 1999), work schedule inflexibility (Aryee, 1992, 1993; Eagle et al, 1998; Geurts, et al., 1999; Parasuraman, et al., 1996; Thomas & Ganster, 1995), increased job stress (Bernas & Major, 2000; Frone, et al., 1997), low commitment (Casper, Martin, Buffardi & Erdwing, 2002; Frone, Yardely & Markell, 1997), frequency of stress (Fox & Dwyer, 1999), lack of supervisor support (Fox & Dwyer, 1999; Frone, Yardely & Markell, 1997; Geurts et al, 1999; Senecal, Vallerand & Guay, 2001), co-worker support (Frone, Yardely & Markell, 1997), career priority (Hammer et al., 1997), time commitment to work (Parasuraman, et al., 1996), organisational climate (Swanson et al, 1998), managerial role (Swanson, Power & Simpson, 1998), and not feeling valued by one's partner (Senecal, Vallerand & Guay, 2001). Analyses of some of the more frequently studied antecedents (i.e., job involvement, work schedule inflexibility, supervisor support and workload) indicate mixed results (see Table 1.1). For instance, with regard to job involvement, both Fox and Dwyer (1999) and Frone et al, (1992b) did not find a significant correlation with WHI, and the overall effect size was non-significant, suggesting that the level to which people are involved in their jobs is not consistently associated with increased WHI. However, the most consistent antecedent was workload, with a high effect size across all studies cited (range = .47 to .64). Therefore, the feeling that one is overburdened with work is consistently associated with WHI. With regard to schedule

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<sup>2</sup> Studies with multiple samples were analyzed according to guidelines described in Allen et al. (2000).



flexibility, the effect size was low but significant, but both Aryee (1992, 1993) and Thomas and Ganster (1995) failed to find significant associations for work schedule flexibility suggesting that the overall pattern was mixed. The flexibility of one's schedule is not consistently related to WHI. Supervisor support did produce significant associations in all studies cited, but overall the observed effect size was non-significant. Therefore, support from a supervisor was not consistently related to WHI. Such a surprising result can be explained by closer scrutiny to the studies involved. For example, within the category of supervisor support, Senecal et al. (2001) accounted for the biggest sample size (55% of the total N) and the lowest correlation coefficient ( $r = -.09, p < .05$ ). More detailed analysis of this study indicates that 63% of the sample was professional working women (with at least one child between the ages of 1 and 18 years), and it is reasonable to speculate that the majority of this sample was highly motivated individuals for whom supervisor support was less important. Indeed, Senecal et al. (2001) did find that whereas women experienced less support from their employer (compared to males), they reported higher levels of self-determined motivation towards work than did males. Moreover, in this study no sex differences were found in reported levels of WHI, suggesting that less support was not associated with higher WHI.

The quantitative review shows quite clearly that there were only four variables (i.e., job involvement, workload, work schedule and supervisor support) that provided us with the multiple studies (> 2 studies). It is only with multiple studies that reliable conclusions can be made regarding the overall associations between antecedents and WHI/HWI. Of the four, only workload emerged as the consistently related antecedent. Such consistency is reflective of the way in which too much work can spillover into our home domain. The small amount of studies identified precludes us from reaching hugely substantive conclusion regarding the different types of antecedents of WHI. Studying the antecedents in a more systematic way represents one way to address the call to provide a more sound theoretical rationale to the study of WHI (Lambert, 1990).

While the calculation of an effect size provides a quantitative estimate of multiple studies, this shouldn't preclude the need to also engage in a more qualitative analysis of the collected literature (see Sohn, 1997 for a discussion). A review of the studies measuring job involvement is suggestive of a selection effect with most significant results among the studies involving people who were highly motivated



(individuals attending extra-curricular education and entrepreneurs). Additionally, analysis of the Hammer et al. (1997) study was made more complicated by the fact that the researchers had measured both WHI and HWI, but failed to distinguish between them in the analysis. With regard to the category of work schedule flexibility, inconsistent results were found with the two studies focusing on individuals from Asia (Aryee, 1992, 1993). Comparing across studies that probably have different cultural norms regarding work and work flexibility is problematic at best. Finally, a review of the studies concerning supervisor support suggests that the study by Geurts et al. (1999) may be the ‘outlier’ and the highly significant result may reflect the fact that medical residents are continually evaluated and judged by their superiors (a fact reported by Geurts et al., 1999, in their study). The implication here is that this study may be qualitatively different from the other studies in this category, in that supervisor support was strongly tied up with supervisor evaluation suggesting that these individuals are ‘abnormally’ attuned to their supervisors for this particular juncture of their careers.

Not surprisingly antecedents of HWI were less well studied, but examination of the research did reveal that HWI was studied with the following variables as antecedents (see Table 1.1): family involvement (Adams et al, 1996; Eagle et al, 1998, Frone et al, 1992; Hammer et al, 1997; Kirchmeyer, 1992, 1993; Parasuraman et al, 1996), parental stress (Bernas & Major, 2000), family stress (Frone et al, 1992b), spouse social support (Frone, Yardley & Markel, 1997), parenting overload (Frone, Yardley & Markel, 1997), information/emotional support (Adams et al., 1996), domestic work (Swanson et al, 1998), home stress (Swanson et al, 1998) and time commitment to family (Parasuraman et al., 1996). Analysis of the antecedent variables for HWI revealed mixed results. Overall, the effect size for family involvement was nonsignificant, suggesting that feelings of involvement with one’s family were not related to HWI. Within these set of studies, the two studies by Kirchmeyer (1992, 1993) are noteworthy in that they focused exclusively on the perceptions of HWI. The more fine grained analysis by Kirchmeyer (1992, 1993) in separating and studying different aspects of our non-work life (parenting, community work and recreation) suggests that looking at a broader picture of the home domain provides evidence that it can impact upon work. Traditionally, the home domain is one that has failed to receive adequate recognition (e.g., Kanter, 1977). Although only single studies, significant associations were found for information/emotional family

support, suggesting that support may play a direct role in reducing the experience of HWI. Indeed, the significant correlations in the Adams et al. (1996) study may be reflective of the fact that the sample were individuals attending extra-curricular education, and as such support from the family could be crucial with extra demands in addition to one's work. As with our review of WHI, the mixed results suggest that we need to approach the measurement of antecedents in a more systematic fashion. Moreover, there is a need to readdress the imbalance in the way in which the work side of the equation has received most attention. Such a need is emphasized by the study of Frone (2000), among a representative national sample of employed adults, who found that the odds of psychiatric disorders was significantly more likely for people experiencing HWI (compared with WHI). Frone (2000) speculates that attributions of responsibility regarding WHI are more likely to be made externally to the demands of their jobs, whereas attributions of responsibility regarding HWI are probably more likely to be made internally, and may be viewed as an inability to manage one's life.

In conclusion, there is a paucity of theorizing and empirical studies concerning the antecedents of both WHI and HWI. Overall, the relatively small amount of studies makes it difficult to be too conclusive. However, such a literature review does suggest the following things: (1) only a small amount of studies were located ( $n = 32$ ) within the twelve years covered by the review, (2) many different antecedents of WHI and HWI are being studied, suggesting that they should be studied in a more systematic fashion, (3) involvement in both work and family was not consistently related to the experience of WHI and HWI, respectively and (4) workload is the most consistent antecedent of WHI.

### **1.7.3 Structural variables**

The following section will review the most commonly studied structural variables: age, marital status, and family structure.

The effect of age on WHI/HWI has not been systematically studied (Geurts & Demerouti, 2003), meaning that it has rarely been the focus of the study. However, the variable age has been consistently included in studies of WHI and therefore we can deduce conclusions on its association with WHI/HWI by reference to the correlation table reported in each study. The conclusion that we can draw from all the studies that we reviewed is rather mixed: on the one hand, some evidence has been



found to support a link between age and WHI/HWI (Burke & Greenglass, 1999; Frone, 2000; Frone, Russell & Barnes, 2000; Kirchmeyer, 1993; Swanson et al., 1998). For example, Grzywacz and Marks (2000) found that, after controlling for work and home factors, younger men reported higher WHI-negative and less HWI-positive than older men, whereas younger women reported more WHI-positive and less HWI-negative than older women. Conversely, a considerable amount of evidence has found age not to be related to any type of negative interaction between both domains (Bernas & Major, 2000; Bruck, Allen & Spector, 2002; Frone, Russell & Cooper, 1997; Kinnunen & Mauno, 1998; Markel & Frone, 1998; Marshall & Barnett, 1994; Milkie & Peltola, 1999; Stoeva, Chiu & Greenhaus, 2002). Unfortunately, regardless of whether an effect was found or not, no substantive theory exists with regard to the relation between age and WHI/HWI.

The impact of whether one has a working partner (i.e., a partner who is gainfully employed) has not been clearly investigated with the WHI/HWI literature. Geurts et al. (1999) found not relationship between being in a dual-career couple and WHI, but did find a positive relationship between having a partner who works overtime and WHI. Similarly, Kinnunen and Mauno (1998) found no relationship between having a working spouse with either WHI or HWI. Rau and Hyland (2002) did find an association between having a working spouse and WHI among a sample of part-time MBA students. However, they treated this variable as a control variable and provided no discussion of what such an association implied. While there is accumulated data on the strategies that dual-earner couples use to deal with the demands and responsibilities inherent in both partners working while trying to fulfill family responsibilities (e.g., Barnett & Rivers, 1996; Becker & Moen, 1999), little research compares dual-earner with “single bread-winner” families in regard to WHI and HWI. Overall, there is scant research or theorizing with regard to the effect of being part of a dual-earner couple (or not) on WHI/HWI, as is evidenced by its non-discussion in the recent review of the area by Geurts & Demerouti (2003).

A more consistently studied variable relates to the number of children one has and its effect on WHI. The number of children at home has been positively related to both WHI and HWI meaning that the demands of a family can contribute to the domains of work and home interfering (Grandey & Cropanzano, 1999; Kinnunen & Manuo, 1998; Netemeyer et al., 1996). Carlson (1999) found that the number of children one had was positively related to three different types of WHI (strain-based,



time-based and behaviour-based). Conversely, Stephens and Sommer (1996), using the same tri-partite classification of WHI, found no relationship between the two variables. Working women with young children (< 12 years) experience more WHI and HWI, compared to both working women with older children and working men (e.g., Crouter, 1984; Duxbury et al., 1994). However, it is important to recognise that some studies have also found no relationship (Berns & Major, 2000; Bruck, Allen & Spector, 2002; Frone, Russell & Barnes, 1996; Frone & Yardely, 1996; Kirchmeyer & Cohen, 1999). So, the evidence with regard to structural variables is quite mixed. A more fine-grained analysis of the effects of these variables is hampered by the fact that most studies treat them as control variables and do not provide a more comprehensive evaluation of why they may be influential.

Overall, the mixed results suggest that the existence of children per se is not directly related to WHI/HWI and it may be speculated that having children may work in two opposite ways. Specifically, having children may increase WHI/HWI by increasing demands on parent/s time or it may actually reduce WHI by prompting parent/s to be more organized within their lives.

#### **1.7.4 Consequences**

The outcomes of WHI can be categorized within two areas; individual and organizational. These outcomes can be further sub-divided into positive and negative outcomes. Research in the WHI/HWI field needs to specify the relationships between work and home, and different outcomes. The meta-analysis of Allen, Herst, Bruck and Sutton (2000) presents the most comprehensive review of the consequences associated with WHI. Conceptually, Allen et al. (2000) divided the consequences into three general areas: work-related outcomes, nonwork-related outcomes, and stress-related outcomes. In the area of work-related outcomes, job satisfaction (in agreement with Kossek & Ozeki, 1988) and organizational commitment decreases as WHI increases indicating that the experience of such interference from work to home can feedback to how we experience work. The results for job satisfaction were mixed and may suggest that satisfaction may vary according to specific job aspects (e.g., supervision or benefits). Increased WHI was related to turnover, albeit not on studies which looked at actual turnover. No significant associations were found between WHI and career satisfaction and absenteeism.

In the area of non-work related outcomes, WHI was most strongly related to life satisfaction. Interestingly, the two studies with the lowest correlations for life satisfaction were conducted in the early 1980s, which may suggest that the fact that WHI has become more important in recent times. Results with regard to marital satisfaction were mixed, and it may be that marital dissatisfaction may prompt individuals to engage in more work and increase WHI, and so on. Allen et al. (2000) call for more diverse measures in the investigation of the non-work domain.

In the area of stress-related outcomes, the meta-analysis revealed that the strongest relationship was between WHI and burnout indicating that such interference has important organizational consequences. Indeed, one could reasonably speculate that the experience of burnout exacerbates feelings of WHI. More longitudinal research was urged by Allen et al., especially given the work of Frone, Russell and Cooper (1997) who found the effects of WHI on depression disappeared over time. The meta-analysis, although comprehensive, concerned itself primarily with WHI. A fuller picture of the relationship between work and home also calls for the measurement of HWI.

In order to determine whether certain outcomes are more debilitating than others, it is important to identify specific effects on specific outcomes. The more diverse the outcome measures, the better able the research is to capture the full range of effects that different processes and their resulting patterns of work/home intersection have on workers and their families (Lambert, 1990). Therefore, the present thesis will examine positive and negative outcomes.

The antecedents and consequences of WHI/HWI have been comprehensively reviewed thus far. The major conclusions of this review indicate that the antecedents have been reviewed in an ad-hoc manner, and the outcomes have been studied from an almost exclusively negative framework. Therefore, the first question of the present thesis will examine the antecedents and outcomes in a more exhaustive manner than previous research.

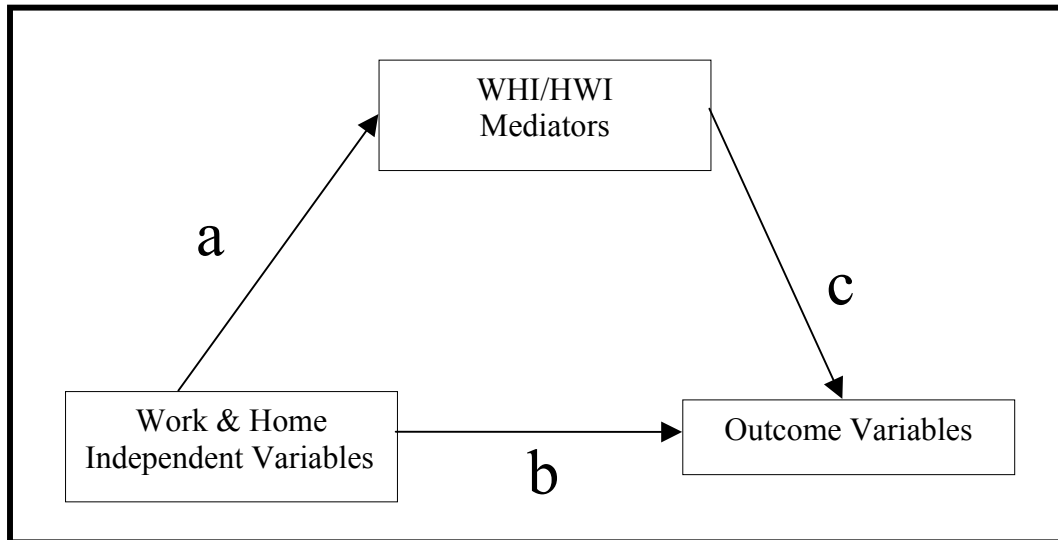
*Research Question One: What are the antecedents and outcomes of WHI/HWI?*



## 1.8 Work-Home /Home-Work Interference as a mediator

Psychologists have long recognized the importance of mediating variables. Woodworth's (1928) S-O-R model, which recognized that an active organism interferes between stimulus and response, is perhaps the most generic formulation of the mediation hypothesis. The central idea in this model is that various transformation processes internal to the organism mediate the effects of stimuli on behavior. Indeed, exploring mediating variables has been the core business of social psychology since the decline of behaviourism (Stroebe, personal communication). However, confusion and misunderstanding with regard to the measurement and conceptualization of mediators in the social sciences literature has been well noted (Baron & Kenny, 1986; Herting, 2002; Holmbeck, 1997). In general, a given variable is said to function as a mediator to the extent that it accounts for the relationship between the predictor and criterion variables.

To clarify the meaning of mediation, we introduce a diagram (see Figure 1.1). A variable functions as mediator when its inclusion in the analysis (paths a + b) result in a significant reduction in the relationship between the independent and outcome variable (c). According to Baron and Kenny (1986), a variable functions as a mediator when it meets the following conditions: (a) variations in levels of the independent variable significantly account for variations in the presumed mediator (i.e., path a), (b) variations in the mediator significantly account for variations in the dependent variable (i.e., path b), and (c) when paths a and b are controlled, a previously significant relation between the independent and dependent variables is no longer significant, with the strongest demonstration of mediation occurring when path c is zero (i.e., full mediation). When path c is reduced to zero, we may have strong evidence for a single dominant mediator. If the residual path of c is not zero, this indicates the operation of multiple mediating factors (i.e., partial mediation).



**Figure 1.1 Mediation Model**

In addition to this, Baron and Kenny (1986) recommend the use of Sobel's (1982) equation for the standard error to test the significance of the indirect effect. However, Sobel (1988) cautions us to use this formula when the sample size is greater than one hundred. Indeed, the use of Sobel's formula has been superseded somewhat by the recommendations of Holmbeck (1997) who advocates the use of structural equation modeling (SEM) to ascertain mediated effects. The use of SEM vastly simplifies the modeling of mediation-allowing one to incorporate measurement error-and provides modeling of non-recursive structures (Brown, 1997). At a practical level, the problem of full versus partial mediating effects can be tackled by following the recommendations of Brown (1997) and MacKinnon and Dwyer (1993), and calculate the ratio of the indirect effect to the direct one. The conclusion to the foregoing is that when partial mediation is present, the ratio of the indirect to the direct effect is a reliable indicator.

An additional consideration in using SEM to assess mediation is the important distinction between indirect and mediated effects (Holmbeck, 1997). Assuming a big enough sample size, SEM allows us to compare different models and distinguish between indirect effects and mediated effects. In essence, it is possible to find a SEM relationship from predictor to mediator, from mediator to criterion and from predictor

to criterion (even without a direct relationship between predictor and criterion)<sup>3</sup>. So, although there is evidence for an indirect effect between predictor and criterion, the mediator cannot account for the relationship between predictor and criterion. Therefore, the results fit the criteria for an indirect effect, but not a mediated one. Indeed, Holmbeck (1997) points out that it is not uncommon for “good” statistical textbooks (e.g., Tabachnick & Fidell, 1996) to use “mediational pathway” and “indirect pathway” interchangeably. The case for a SEM approach has been made even stronger by a recent paper (Herting, 2002), which directly challenges the Baron and Kenny (1986) approach on the grounds that it does a poor job in accounting for the correlated error between the mediator and the outcome. Herting (2002) presents a convincing case that the Baron & Kenny (1986) approach can lead to the rejection of mediation when it is in fact present.

The role of WHI (and consequently HWI) as a mediator has been *suggested* by various studies (Frone et al., 1992; Bakker & Geurts, 2002; Geurts, Rutte & Peeters, 1999; Kinnunen & Mauno, 1998; Parasuraman, Purohit, Godschalk & Beutell 1996; Stephens, Franks, & Atienza, 1997). However, a review of the literature indicates that studies have not done an adequate job in either assessing mediation or distinguishing between full and partial mediation (see Holmbeck, 1997, for a review of assessing mediation). For example, Geurts et al. claim that WHI “plays a perfect mediating role”, (1999: 1144), but an adequate effort was not made to distinguish between partial and full mediation. Kinnunen and Mauno (1998) and Parasuraman et al. (1996) don’t actually assess the mediating role of WHI, except to report that WHI was related to various antecedents and outcomes. Most recently, research by Clark (2002) examining the mediational role of sense of community between personal/work factors and WHI is particularly noteworthy in that Clark (2002) claims to have found support for mediation but doesn’t present any systematic procedure beyond claiming that “the overall good fit of the model to the data...and the significance of the paths between the variables lend support to these hypotheses.” (Clark, 2002:104). Clark seems particularly at fault when one examines the correlation table and finds non-significant correlations between the hypothesized mediational paths. So, social psychologists

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<sup>3</sup> Holmbeck (1997) presents an analysis of this via the research of Capaldi, Crosby and Clark (1996).



have been interested in mediation for quite some time, but the need to actively consider the associated conceptual and statistical problems has not kept pace with that interest.

Theoretically, the definition of WHI/HWI implies mediation, as there will be no WHI when there are no demands at work. Conceptually, WHI fits the characterization of a response variable as suggested by Holmbeck (1997). In essence, variables such as WHI cannot exist in isolation. One cannot experience WHI if there are no job demands in the first place. It is important to distinguish between full and partial mediation, as there are strong grounds for believing that WHI may only play a partially mediating role. Firstly, given the fact that some demands are contextual (e.g., dealing with colleagues/supervisors at the workplace, conducting oneself in a professional manner) it is less likely that all work demands will interfere with home and vice-versa. Secondly, there is accumulating evidence to suggest that job demands have a strong and direct relationship with outcomes such as burnout (see meta-analysis of Lee & Ashforth, 1996). Thirdly, anthropological studies of the way that people separate work and home suggest that some people separate and compartmentalize aspects of their work and home domains (Nippert-Eng, 1996), arranging their lives so that aspects of one domain do not interfere with the other. An innovation of the present thesis will be to distinguish both empirically and theoretically between full and partial mediation effects.

Therefore, the present research will contribute to the literature by examining both full and partial mediational effects. Additionally, such effects will be considered both conceptually and theoretically.

### *Research Question Two:*

*Do WHI/HWI play a full or partially mediational role between work and home characteristics/demands and their respective consequences?*



## 1.9 Gender differences

In general, research on gender differences and stress has produced three different views. Firstly, some literature on stress differences between men and women has concluded that males are under greater stress, relative to females, at least partly because of gender role stereotypes for males in western culture which emphasis achievement, competency and competition (Eisler & Slidmore, 1987; Goldberg, 1987). For example, employed men report that they work more hours and encounter more concrete deadlines than do employed women, and the positive association between reported stress and work hours and number of children is stronger for males than for females (Sorenson, Pirie, Folsom et al., 1985). Secondly and alternatively, some researchers have argued the opposite view, and suggest that the stress in lives of women is more intense and persistent than it is in the lives of men (Bernard, 1971; Gove & Tudor, 1973; Netterstrom, Kristensen, Damsgaard, Olsen & Sjol, 1991). Such a view cites the fact that because of gender role stereotypes, women are more likely to feel obliged to be available to meet the demands of the family and home, resulting in a higher workload and less time to attend to their needs compared to men (Barnett & Baruch, 1985; Mortimoer & Sorenson, 1984). A third perspective argues that males and females experience stress at similar levels but in different life domains by virtue of differing social roles (Aneshensel & Pearlin, 1987; Wethington, McLeod & Kessler, 1987).

A recent meta-analysis by Davis, Matthews and Twamley (1999), reviewing 119 studies, found that women reported significantly greater levels of stress in the workplace compared to men. However, the studies failed to control for important differences. For example, men frequently are older, have been on the job longer, and make more money than women, even when they occupy similar positions (McDonald & Korabik, 1991; Murphy, Beaton, Cain & Pike, 1994; Scott, 1992). In another meta-analysis by Martocchio and O'Leary (1989), which examined 15 studies on sex difference in occupational stress as reflected by psychological markers (e.g. emotional strain, depressive symptoms, Type A behavior) and physiological markers (e.g., systolic blood pressure, coronary heart disease) of stress, no differences between men and women were found. Together, the findings across these two meta-analyses indicate that although women experience somewhat more stress in the workplace than do men, the sexes have similar levels of psychological and physiological symptoms





associated with their work environments. The fact that differences emerge for work stress, but not for symptoms argues against the notion that sex differences in work stress are due to women over reporting negative experiences.

In contrast to the evidence regarding general stress differences in men and women, gender-specific hypotheses have been formulated on the basis of gender role expectations. The basic idea consists of the notion that gender role expectation means that work will be more important for men, and family life for women (Pleck, 1977). So, although most men and women report that they value their family more than their work, different gender roles can prescribe different emphasizes for men and women: Work is for men; family responsibility and home maintenance is for women (Gutek, Nakamura & Nieva, 1981). Despite the many changes in gender roles over the last number of years, this idea persists. Furthermore, it is entirely plausible that such gender roles will affect men and women's perceptions of WHI and HWI. However, the empirical evidence consistently shows that no (or hardly any) differences exist between females and males with regard to either WHI or HWI (Burke, 1988; Demerouti et al., 2001, Eagle et al., 1997; Frone et al., 1992; Grzywacz & Marks, 2000; Kinnunen & Mauno, 1998; Kirchmeyer, 1993). Indeed, women often report no more WHI than men, despite the fact that women spend more hours in housework than men (Denmark, Shaw & Cialli, 1985) and sometimes experience the home domain as a 'second shift' (Berk & Berk, 1979; Hochschild & Machung, 1989). Maybe the most conclusive evidence comes from Frone (2000) who, using a representative national (USA) sample of 2,700 employed adults, found that gender didn't moderate the relation between WHI and psychiatric disorders. Thus, there is growing body of evidence to show that WHI is equally deleterious to the health of both male and female employees.

The contemporary approach to the issue of gender and WHI/HWI needs to recognize that the social and economic landscape is changing (Alvesson & Billing, 1997). The traditional family model -the husband as breadwinner and the wife as homemaker- is becoming a vestige of past society (Hall & Hall, 1980; Parasuraman & Greenhaus, 1997; Piotrkowski, Rapoport & Rapoport, 1987). The economic pressures of inflation (Lee & Kanungo, 1984) and the social psychological need to "develop one's self-identity" (Nieva, 1985) are encouraging women to take a more active role outside the home and pursue full-time careers, and to participate in society more generally (Cooper, 1981). The increase in the number of families with working



parents has made the old models of coordinating work and home life inappropriate for the majority of the workforce. Indeed, men are becoming more involved with their families, and their priorities are shifting away from work (Gerson, 1993; Michelson, 1983; Pleck, 1985). Together, such trends are resulting in increased levels of WHI and HWI as both men and women try to balance the conflicting demands of work and home. Therefore, the present thesis will examine gender differences in WHI/HWI, and examine whether reported levels are higher in domains inconsistent with the gender role expectations.

### *Research Question Three:*

*Do gender differences exist with regard to WHI/HWI? Do such differences reflect gender-role differences with regard to the domains of work and home?*

#### **1.10 Crossover**

Crossover is defined as the reaction of individuals to the job stress experienced by those with whom they interact with regularly. At a more specific level, Westman and Etzion (1995) note that while the spillover of experiences from one domain of a person's life to another has been documented extensively, the phenomenon of how stress and strain of one person affect other individuals has been less exhaustively investigated. Theoretical discussions of how work and home are linked have been dominated by reference to models such as segmentation, compensation and spillover (Zedeck, 1992). Westman (2001), in a recent review of the crossover, has argued that the crossover model adds another level of analysis to previous approaches by adding the intra-individual level and the dyad as an additional focus. Additionally, Westman (2001) argues that crossover research should be integrated into role theory (Kahn et al., 1964). According to role theory, work and home are involved in elaborate interchanges across time and situations. As such, this suggests a mechanism whereby family members and home demands are reciprocally connected to the workplace. Thus role episodes (e.g., interference) can influence the focal person, the role senders and the relationship between them.

Few studies of crossover have been studied in the WHI literature (Barnett & Barauch, 1985, Greenhaus, Parasuraman, Rabinowitz & Beutell, 1989; Parasuraman,



Greenhaus & Granrose, 1992; Hammer, Allen & Grigsby, 1997). For example, the study conducted by Greenhaus et al. (1989) indicated that men's WHI (strain-based) was highest when both partners placed higher priority on their own careers. Additionally, the study by Hammer et al. (1997) found that a partners' WHI was a significant predictor of their spouses' level of WHI. The few existing studies seem to indicate a lack of cross-pollination when one considers the similarities between the mechanisms involved in both spillover and crossover. This situation seems the more lamentable when one considers the theoretical problems identified within models of work-home processes. Indeed, models have been criticized as being either atheoretical (Barnett, 1998; Zedeck, 1992) or badly integrated (Lambert, 1990). Westman (2001) suggests that crossover should be theoretically anchored to role theory (Kahn et al., 1964), and as such can provide a new and dynamic way to look at WHI/HWI. Accordingly, the usefulness of role theory is that it underscores the interrelations between the focal person and his/her role senders in the different settings (work/home) where the individual finds his/herself.

Therefore, the present thesis will examine whether WHI and HWI can crossover from an individual to their respective spouse.

*Research Question Four: Can WHI and HWI crossover  
from one partner to another?*

### **1.11 Multiple Methods and Quasi Triangulation**

Triangulation is defined by Denzin (1978; 291) as “the combination of methodologies in the study of the same phenomenon”. The triangulation metaphor is taken from navigation and military strategies that use multiple reference or citing points to locate an object's exact position (Jick, 1983). In the behavioral sciences, the notion of triangulation can be traced back to the notion of multiple operationism (Campbell & Fiske, 1959). The between (or across) methods form of triangulation is the most popular. For example, this would involve the use of biomedical and behavioral methods to examine the stress response. Triangulation can have other meanings and uses as well, and can also signify the use of different approaches (e.g.,

qualitative/quantitative, crossover/longitudinal) within the same method (e.g., self-report and interview techniques).

A review of the organizational literature indicates that while triangulation methodology has been highly recommended (Ivancevich & Matteson, 1988), it has been underutilized in organizational research (Handy, 1997). One of the few studies to use triangulation in organizational research was conducted by Paul (1996), who used a 'between-method' approach (i.e., interviews, systematic observation, archival data) in the organizational diagnosis of a pharmacy department in a non-profit hospital. Additionally, between-method approaches have been used successfully in others areas of psychology, such as in the evaluation of widow support groups (Margarita et al., 1993) and the relationship between newspaper readership and crime (O'Connell, Invernizzi & Fuller, 1998). Therefore, enough evidence exists to support the efficacy of a between methods approach.

The present thesis will employ the between-method type, which uses multiple techniques to collect and interpret data. More specifically, the present thesis will use the following methods to investigate the phenomena of interest; quantitative review, Internet methodology, cross-sectional methods, crossover methodology and longitudinal data analysis. The use of triangulation offers stress researchers something more than reliability and convergent validity checks, it can capture a more complete portrayal of the phenomena to be studied (Ivancevich & Matteson, 1988).

Denzin (1978) has distinguished between different types of triangulation; the data, investigator, theory and methodological forms of triangulation. Although these refer to different aspects of research, they all have the same function of "testing" the reliability, validity and generality of findings. The present thesis will use a multi-strategy or quasi triangulation approach consistent with researchers who advocate the use of different research methodologies and different data sources to study a specific phenomena (Layder, 1993; Sheppard, Newstad, DiCavcavo & Ryan, 2001). Thus, the present approach is also consistent with a classic on the issue, Campbell and Fiske (1959), who commented, "when a hypothesis can survive the confrontation of a series of complementary methods of testing, it contains a degree of validity unattainable by one tested within the more constricted framework of a single method". In this sense, the essence of triangulation is to prompt us to view a phenomenon from different angles and in doing so further prompt us to consider the future steps that need to be taken.



Therefore, the final aim of this thesis will be to evaluate the accumulated empirical studies and consider the overall implications of the results.

*Research Question Five: What is the best way forward in elucidating the work-home nexus? Where do we go from crossover and longitudinal research designs?*

## **1.12 Outline of the Thesis**

**Chapter 2** examines the mediational role of WHI/HWI between job/home demands and burnout, using a sample from the Internet. This paper results in two major innovations: (1) it examines the role of WHI as a partial mediator and adds to the debate regarding the conceptualization and measurement of mediation and (2) it develops and introduces a richer set of both job and home demands.

**Chapter 3** progresses from chapter 2 by examining a more exhaustive model of WHI/HWI among a sample of Newspaper managers. This research examines both demands and resources of WHI/HWI, in terms of both antecedents and outcomes. This chapter further established the role of WHI as a mediator. This chapter shows the need to examine both the positive and negative aspects of WHI/HWI to get a broader picture of the phenomenon.

**Chapter 4** examines the crossover of job stress and WHI/HWI between information technology professionals and their partners. This is an extension of the chapters three and four, which examined WHI/HWI within-individuals, as opposed to between-individuals (via crossover). The aims of this research were two-fold: (1) It evaluates how stressors from one partner can crossover to the strains of another, and (2) It explores the importance of WHI in predicting outcomes, even after controlling for negative affectivity.

**Chapter 5** presents a longitudinal analysis of a demands and resources model of WHI. This is a logical extension of chapters 2, 3, and 4 that have examined WHI processes at the cross-sectional level. Longitudinal models were examined among a sample of employees working in the financial industry. Using the theoretical framework of the Job-Demands-Resources (JDR) model (Demerouti et al, 2001), it examines a job resources and job demands model, with burnout and engagement as

the respective outcomes. Causal and reversed causal effects are examined across two points. The role of WHI as a mediator is also explored.

Finally, **Chapter 6** recapitulates the findings of the previous chapters and discusses important theoretical, methodological, and practical issues. Furthermore, it identifies the main limitations of the research presented in the thesis and makes suggestions for future studies in the area of WHI and HWI.