

Couples and Work and Family Conflict: The Effects of Role Salience Crossover

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ABSTRACT

An examination of work and family conflict literature over the past quarter-century suggests employed individuals in married or *de facto* relationships tend to experience conflict at the couple-level rather than the widely researched individual-level. Yet, there are few available studies investigating work and family conflict at the couple-level. With the aim of addressing this gap within work-family literature, this thesis examines the ‘crossover’ effects between partners in addition to the widely researched individual-level phenomena of ‘resource drain’ and ‘negative spillover’.

Using data from a survey of 94 dual-earner couples, this thesis tests a number of hypotheses generated from *identity theory* and its associate concept of *role salience* (importance). Specifically, the study investigates couple-level crossover effects of work (family) role salience congruence/incongruence between partners on men and women’s experience of work-to-family (family-to-work) conflict. These crossover effects are examined using a polynomial regression technique often associated with assessing congruence/incongruence of different attitudes between individuals within a dyad (for example, a manager and their sub-ordinates).

The results indicate couple-level crossover effects of work role salience congruence/incongruence between partners have a significant impact on the individual-level experiences of work-to-family conflicts. This result was found for both men and women. However, no such results were found in relation to family role salience and family-to-work conflict for either partner. Significant gender differences were nonetheless evident. Compared with men, women’s experience of work-to-family conflict appeared to be more strongly influenced by the crossover effects between their work role salience and their

partners' work role salience. Based on these findings, this thesis proposes a new conceptual framework for work-family research.

These findings have significant theoretical and methodological implications for future research on work and family conflict. Most importantly, in addition to conceptual frameworks based on individual-level antecedents, the thesis demonstrates the necessity to develop frameworks that accommodate couple-level crossover effects on individual-level experiences of work and family conflict. While not examined empirically, these results also suggest that couple-level analysis may also be required to more holistically assess the consequences for how individuals are able to cope with such conflicts. These findings point to new avenues in which work-family research can be conceptualised at the couple- or family-level.

STATEMENT OF AUTHORSHIP

Except with the Research Graduate School Committee's approval, this thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other institution. It is affirmed, to the best of my knowledge, this thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

Lakmal Abeysekera

October 2009

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1 INTRODUCTION

“It [time pressure] is having a huge impact on children. Fundamentally there is less time. People talk about being time poor – it is common, and now you are not only time poor... you are also buggered. We always talked about quality time and now I wonder about the quality of quality time.

My wife and I decided when we were having kids 12 years ago that I would keep working for economic reasons and that my wife would stay at home and that is now a selffulfilling prophecy. Economically we are satisfied but it has placed enormous stress on our relationships both with the wife and children.”

Squire and Tilley (2007, p. 36)

1.1 Introduction

These two quotes, taken from a study commissioned by the Human Rights and Equal Opportunity Commission (Squire and Tilley, 2007), typify the experiences of many working Australians in paid employment. The fundamental changes that have taken place – both in the labour market and workplace, as well as in the family and gender roles – have been associated with high levels of stress due to competing work and family demands for many of working Australians with dependent children. As the second of these two quotes suggest, these stresses are not simply about how an *individual’s* work and family commitments might come into conflict, but are more often than not felt jointly by men and women as a couple. The allocation of time and effort, as well as the importance attached, to work and family roles by one individual within a household are just as likely to *crossover* and influence the extent to which their partner experiences conflicts between work and family.

In many respects, these two quotes also capture the core concern of this thesis. The primary aim of this study is to examine the proposition that the experience of work and

family conflict (at the *individual-level*) is in part the result of interactions between individuals at the *couple-level*. With this in mind, this thesis investigates the extent to which the importance an individual attaches to a life role (role salience) influences the nature and intensity of their partner's experience of work and family conflict.

In addressing this issue, the thesis seeks to contribute to the work and family research literature by drawing on the social-psychological concept of '*crossover*' to explore these couple-level dynamics. Crossover is defined by Westman et al. as an "interpersonal process that occurs when a psychological strain experienced by one person affects the level of strain of another person in the same social environment" (Westman, Vinokur, Hamilton, and Roziner, 2004, p. 769). These crossover effects between individuals within a couple have not been previously examined in the work and family context.

Notwithstanding the enormous growth in interest concerning work and family conflict, much of the research has implicitly assumed that an individual will make work and family choices independently of their partner. Moreover, it assumes that the *experience* of work and family conflict is the product of an individual's own circumstances and does not reflect the potential interactions between their own choices and priorities and those of their partner.

How realistic is this assumption in understanding work and family conflict? Research on other aspects of couples and families suggests that this assumption is problematic.

Individuals who are part of a couple generally do not always make independent choices. Their choices and experiences in different life roles are in part the product of interactions with their partner and couple-level dynamics. For example, research conducted by

Hochschild (1990, 1997) and Duetsch (1999) found that men and women in dual-earner relationships tended to jointly manage their work and family role responsibilities.

The paucity of research that examines the influence of couple-level attributes on work and family conflicts experienced at the individual-level raises a number of questions. For example, to what extent does the importance that an individual places on their work and family roles influence the extent to which their partner experiences work and family conflict? Are these influences the same for men and women? What are the mechanisms through which these effects might be felt? This study seeks to contribute to the work-family literature by investigating these questions.

Before exploring the current state of knowledge on work and family conflict in Chapter Two, the aim of this chapter is to provide an overview of the more general context of this study. Section 1.2 begins by outlining the key developments in the nature of work in Australia over the past three decades. This is followed in Section 1.3 by providing an overview of the significant changes witnessed within family formation in Australia over the same period. These changes in the nature of work and family in Australia have generated what Pocock (2003) has referred to as the '*work/life collision*'. Section 1.4 then describes the evidence relating to the implications of this work/life collision for the experience of work and family conflict. The evidence suggests that, over the last three decades at least, the experience of work and family conflict has grown - in terms of both the proportion of the population that report such conflicts, as well as the intensity in which such conflicts are experienced (Pocock, 2003). This appears to be part of international

phenomena across industrialised economies¹. Section 1.5 then briefly introduces the main research question to be addressed in the study, and outlines the structure of the thesis. Finally, Section 1.6 then draws a number of conclusions from this discussion.

1.2 The Changing Context of Work

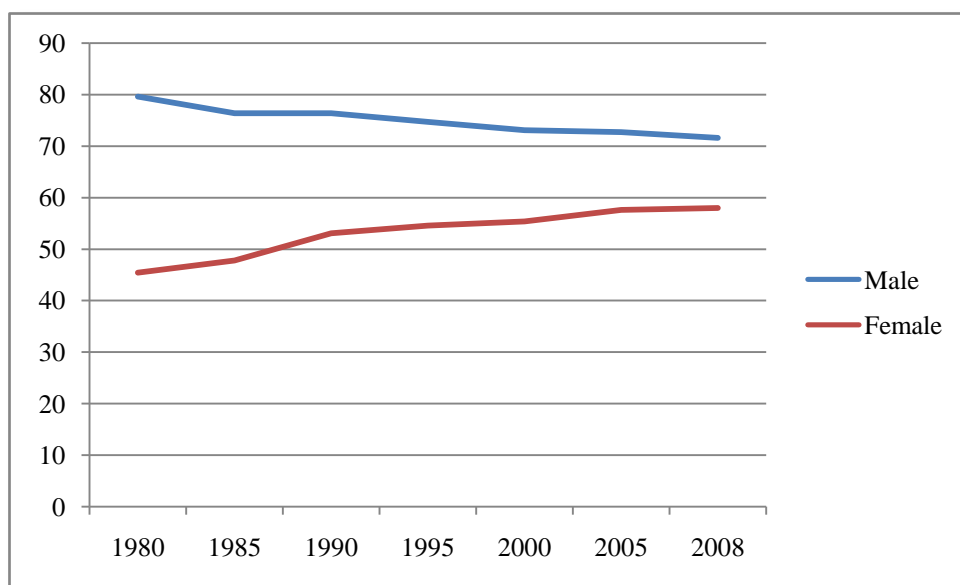
Labour Force Participation

One of the most significant changes in the Australian labour market has been the pattern of labour force participation among men and women. Figure 1.1 charts the proportion of men and women in the labour force over the past three decades. This figure shows that participation in paid employment has changed in a number of significant ways, especially for women. The overall rates of participation of women and men (aged 15 and over) have converged. For women, participation increased from 45.4 percent in 1980 to 58.0 percent in 2008. In contrast, the male participation rate decreased from 79.6 percent to 71.6 percent over the same period (ABS, Various Years-a).

The growth in female labour force participation has been especially prominent among women aged between 25 and 54, when their care responsibility for dependent children is most intense. Figure 1.2 outlines the labour force participation of women by age group in 1978 and 2007. It shows that the increase of women in paid employment during prime childbearing (ages 25-34) and childrearing (ages 25-54) years (ABS, Various Years-b).

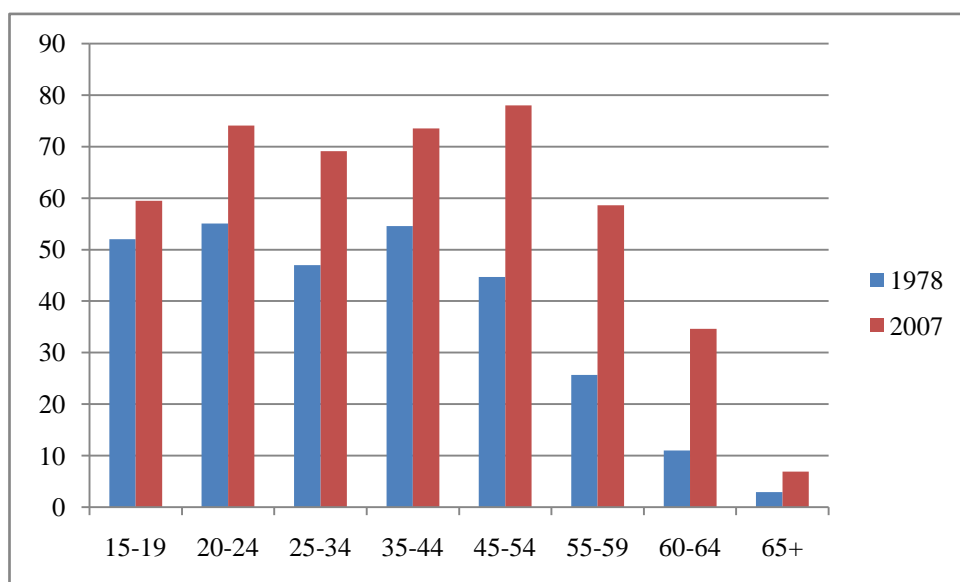
¹ Research carried out within the work-family framework has predominantly been based on North American samples. The majority of this research highlights key changes witnessed within the nature of paid work and family life as significant factors contributing to the increase in the number of individuals experiencing work and family conflict (Eby, Casper, Lockwood, Bordeaux, and Brinley, 2005; Hochschild, 1990, 1997). This study aims to add to this research by exclusively focusing on individuals drawn from Australia.

Figure 1.1: Labour Force Participation 1980 - 2008 (percentage)



Source: ABS Cat. No. 6202.0 – Labour Force Trends.

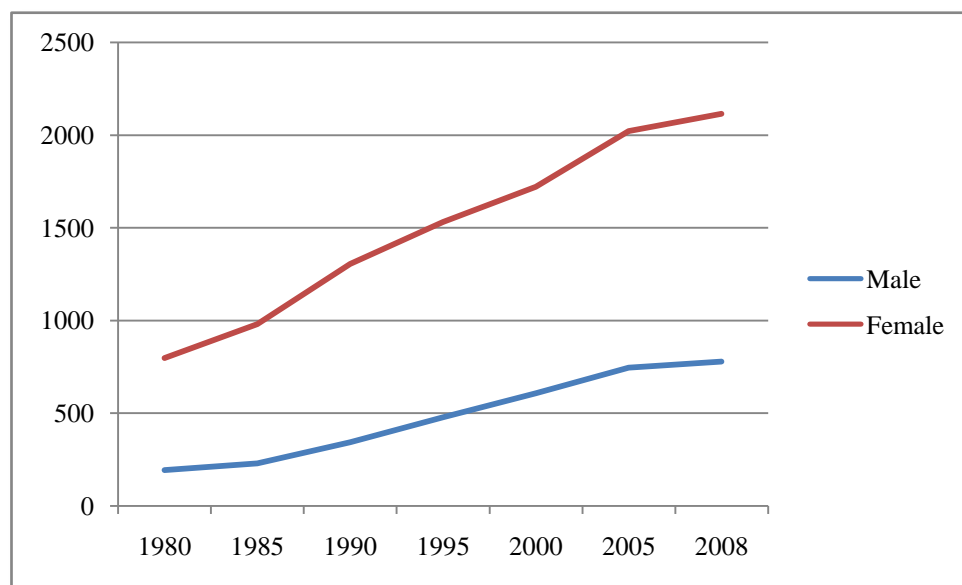
Figure 1.2: Labour Force Participation of Women by Age Group in 1978 and 2007 (percentage)



Source: ABS Cat. No. 6105.0, Labour Force, Australia, Detailed – Electronic Delivery (6291.0.55.001).

The changing pattern of women's participation in paid employment has also been associated with significant shifts in the types of jobs in which people have been employed. Figure 1.3 shows the proportion of women and men working part-time over the last three decades. The data reveal that, over this period, both men and women were increasingly likely to be employed in part-time work. For women, this trend is particularly strong: the proportion of women in the labour force that are in part-time employment has increased nearly threefold between 1980 and 2008. In contrast, the proportion of men in part-time employment has doubled over the same period. At present, women hold three quarters of all part-time jobs in Australia (ABS, Various Years-c).

Figure 1.3: Part-time Employment 1980 - 2008 ('000)



Source: ABS Cat. No. 6202.0 – Labour Force Trends.

Part-time employment in Australia raises a number of challenges to employees, especially women. Two-thirds of part-time employment is casual with very limited rights and entitlements, and no job security. As a consequence, the level of stress of part-time

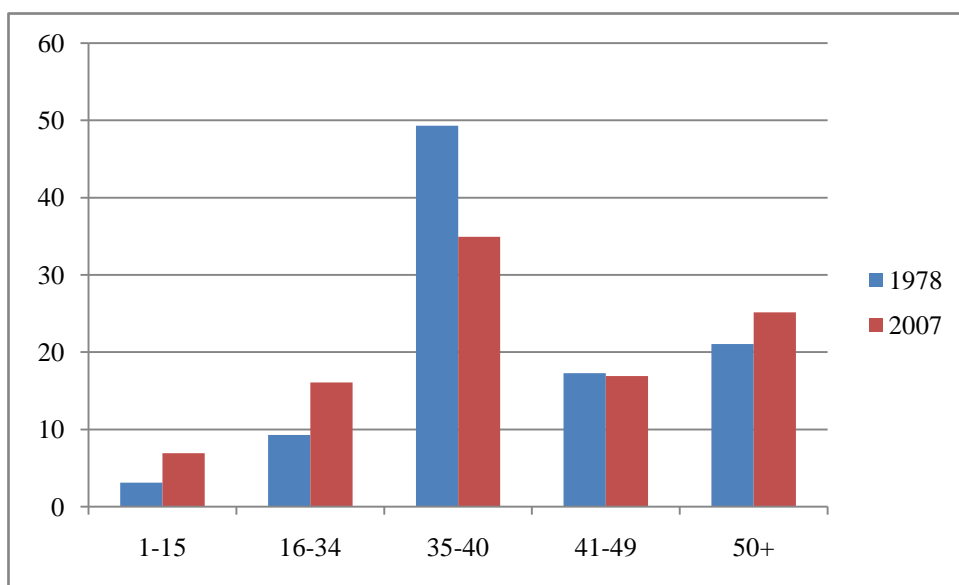
employees has been shown to be significantly greater than those of full-time employees (Edgar, 2005; Pocock, 2003; Watson, Buchanan, Cambell, and Briggs, 2003).

Work Hours and Work Intensity

The increase in part-time workers, especially female part-time workers, has been associated with a shift in the pattern of working hours for both men and women. Figures 1.4 and 1.5 chart the weekly work hours of men and women, respectively, in 1978 and 2007. The data reveal an increase in the proportion of individuals who work short part-time hours (i.e. 1-15 hours) and long part-time hours (i.e. 16-34 hours) (ABS, Various Years-c) . While this increase has predominantly been in short part-time hours for men, the growth in women employed in long part-time hours has been more substantial.

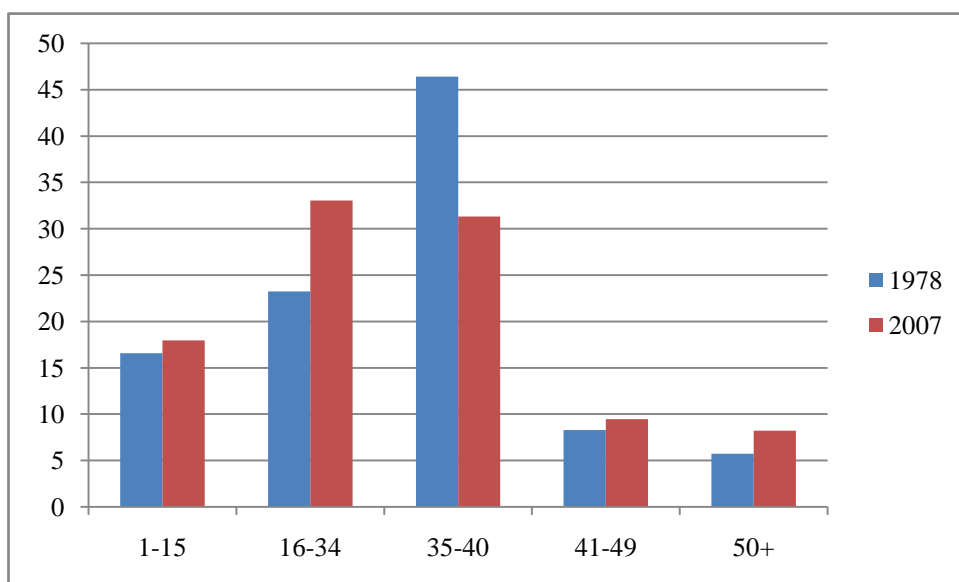
In addition to these changes, Australia has also witnessed a substantial reduction in standard working hours (35-40) and a concurrent increase in long work hours (40 hours or more) for both men and women (Watson et al., 2003). As a consequence of these developments, the proportion of individuals that are faced with fewer hours in the waking day which they can devote to family and other commitments has increased considerably over the past three decades.

Figure 1.4: Weekly Work Hours of Men 1978 and 2007 (percentage)



Source: ABS Cat. No. 6202.0, Labour Force, Australia, Detailed – Electronic Delivery (6291.0.55.001).

Figure 1.5: Weekly Work Hours of Women 1978 and 2007 (percentage)



Source: ABS Cat. No. 6202.0, Labour Force, Australia, Detailed – Electronic Delivery (6291.0.55.001).

In addition to the growth in working hours, the evidence also indicates that there has been a significant increase in work intensity, which is also likely to have contributed towards a decrease in personal resources available for individuals to fulfil family and community responsibilities (Edgar, 2005; Pocock, 2003). While detailed data on work intensity is scarce in Australia, the evidence suggests a substantial increase over the past decade (Watson et al., 2003). For example, large scale surveys undertaken by the Federal Government during the mid-1990s (AWIRS, 1995) and a more recent report commissioned by the Human Rights and Equal Employment Opportunity Commission (Squire and Tilly, 2007), revealed that the number of Australians reporting an increase in work effort, stress levels, and pace of work have all risen. The combination of long work hours and work intensity, these studies suggest, has been associated with an increase in the number of working Australians and their families experiencing conflict between competing work and family demands (Squire and Tilly, 2007).

The growth in work hours and work intensity in Australia has been attributed to two factors. First, in attempting to meet the increasing international and domestic competitive pressures, Australian workplaces have transferred that pressure to employees and their families through longer operational hours and greater workloads. Second, international research (Frank, 1999; Lane, 2000; Schor, 1992, 1998) suggests that rising expectations of what constitutes an acceptable standard of living have created a ‘vicious cycle’ between consumption, debt and work. As expected living standards – or what Hamilton and Denniss (2005) have labelled “affluenza” or conspicuous consumption, has been associated with an alarming growth in the extent to which individuals have financed their spending and consumption through credit and debt (Pocock, 2003). This in turn has been associated with an increasing number of Australian families who rely on longer work hours to finance

their growing debt burden (Pocock, 2003). This has ultimately resulted in a work and family pattern in which paid work increasingly overrides the time available to devote to family and community (Hamilton and Denniss, 2005).

1.3 The Changing Context of Family

Concurrent with these developments, family formation in Australia has also undergone considerable change. To begin with, the average household size in Australia has declined markedly over the past century. This has been attributed to a number of factors. In particular, declining fertility rates, increases in women's educational attainment and participation in tertiary education, as well as an increase in the number of *de facto* couples and single parent households, have all contributed to this trend (ABS, 2008; Poole, 2005).

In addition, significant changes have been witnessed in the *roles* allocated to men and women within the family. Most importantly, while the amount of household work undertaken by women remains greater than that performed by men, the relative rigidity of this gender division of domestic labour has decreased over the past three decades. Along with the increase in women's labour force participation, these changes have combined to redefine the roles of men and women within the family, and society more generally (ABS, 2009b; Pocock, 2003).

Household Size

At the turn of the 20th century, the average family was typically constituted by married heterosexual partners, their children, and a number of related individuals who lived together as part of a self-sustaining economic unit (Poole, 2005). That is all members

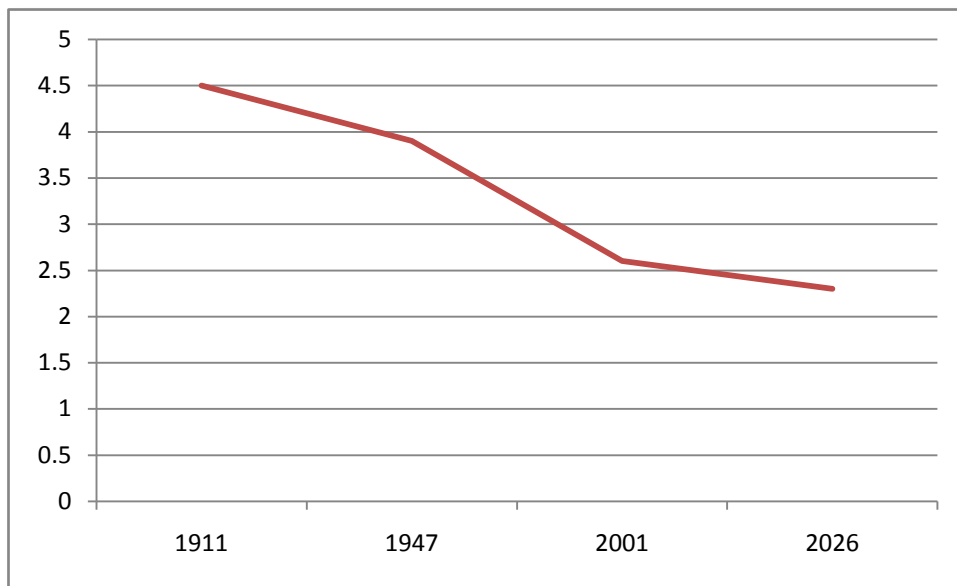
living in the household, including children, undertook responsibility for the wellbeing of the family.

After World War II, however, the growth of the welfare state and paid work in manufacturing and retail industries resulted in significantly reconfiguration of this typical family formation. Economic prosperity created by more jobs allowed a greater number of adults to marry and live separately with their children. As a consequence, the average number of persons to a household declined. These families were generally characterised by a male breadwinner, female carer, and dependent children (Poole, 2005).

Figure 1.6 illustrates the changes witnessed in the average size of an Australian household over the past century. The average number of persons per household declined from a high of 4.5 persons in 1911 (ABS, 2001) to 3.9 persons in 1947 (ABS, 1993). This decline continued in the latter part of the twentieth century and into the early part of the twenty-first century. By 2001, the number of persons per household in Australia was 2.6 in 2001 (ABS, 2005).² It is projected that this trend will continue in the next two decades, with the average size of the Australian household predicted to fall to between 2.2 and 2.3 persons per household by 2026 (ABS, 2004).

² Unfortunately, no publicly available data enable comparison of the average size of households after 2001. Consequently, we rely on ABS projections after this date.

Figure 1.6: Average Household Size 1911-2026



Source: ABS Cat. No. 1301.0, Year Book Australia 2001.

The data on the size of households hides equally important developments in the composition and role of individuals within the family. The most notable of these developments has been the decline in the number of households composed of a traditional nuclear family with a male breadwinner and a female carer with dependents, and a growing number of families composed of dual-breadwinners with dependents. This dual earner family unit represents the most common family formation in Australia today (Pocock, 2003).

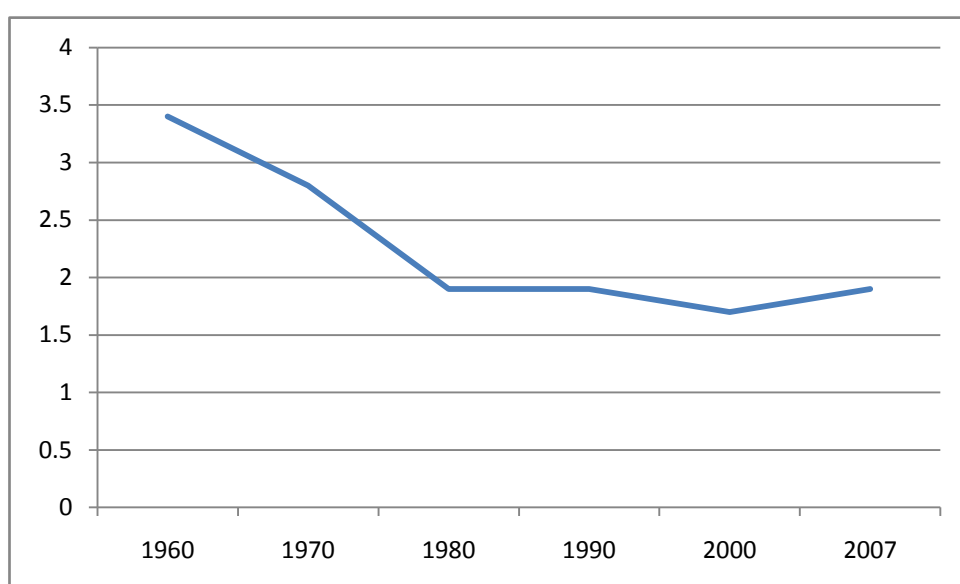
Moreover, smaller households and families imply fewer children. Declining fertility rates, rising female educational attainment, and a general acceptance of birth control has resulted in a greater number of families with a lesser number of children and both partners in paid work (ABS, 2008). Moreover, as women have gained financial independence, they have been less willing to remain in dysfunctional or unsatisfactory relationships, and more

willing to form single-parent households (Pocock, 2003). As Figure 1.6 shows, these changes have collectively contributed towards the continual decline of household size in Australia.

Fertility

The radical social changes that took place during the late 1960s and 1970s challenged existing norms regarding the roles of men and women in society. A combination of the values espoused by the women's liberation movement, the introduction of the contraceptive pill and sexual liberation, together instigated a decline in the number of babies born per woman in Australia (Poole, 2005). Despite recent increases, fertility rates (number of babies born per 1,000 women) remain low. As Figure 1.7 shows, lower fertility rates are likely to reinforce the trend towards smaller families.

Figure 1.7: Fertility Rate 1960 – 2007 (number of babies born per 1,000 women)

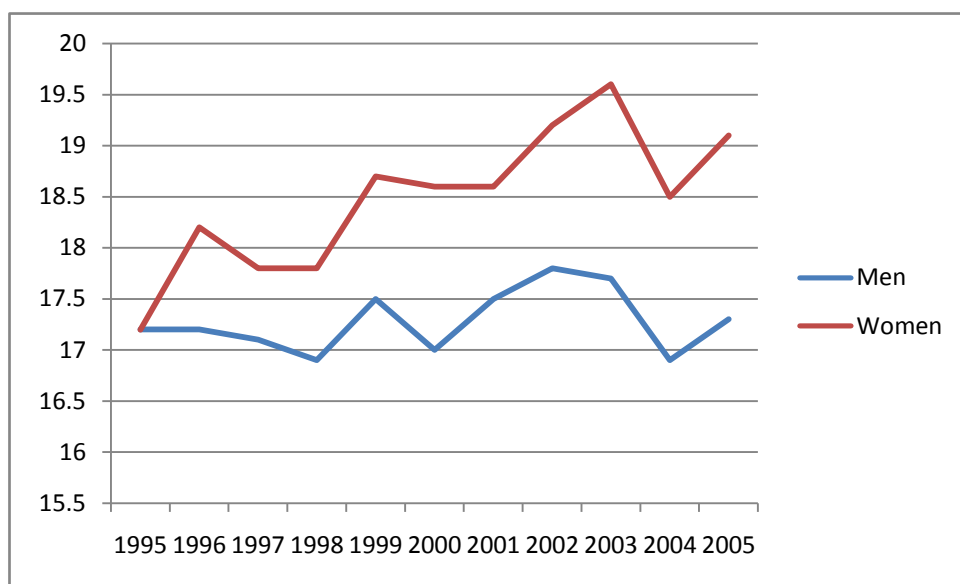


Source: ABS Cat. No. 3301.0, Births Australia, 2003-2007.

Educational Attainment

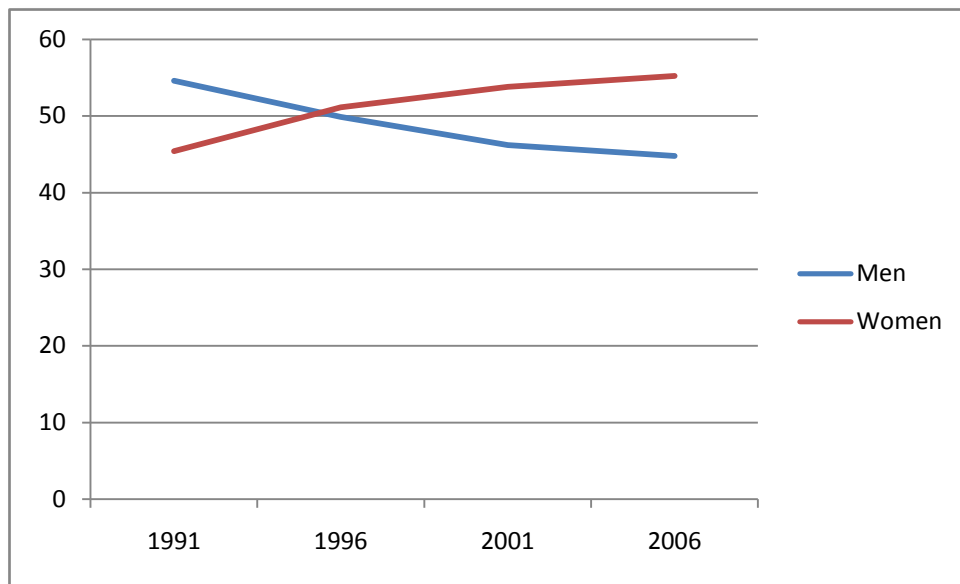
Figure 1.8 charts the participation of men and women in tertiary education over the past decade. It shows that the number of men enrolled in a tertiary course remained largely stagnant, just above 17 percent, while women's participation in tertiary courses increased from 17 percent in 1995 to over 19 percent in 2005 (ABS, 2006). Figure 1.9 shows women comprised less than half (i.e. 45.4 percent) of all persons with an undergraduate degree in 1991. However, this figure had increased to more than half by 2006 (i.e. 55.2 percent) (ABS, 1991-2006). With higher levels of educational qualifications, a greater number of women are opting to enter the labour force and work full-time.

Figure 1.8: Participation in Tertiary Education 1995-2005 (percentage)



Source: ABS Cat. No. 6227.0, Education and Work, Australia, 2006.

Figure 1.9: Educational Attainment (undergraduate degree) 1991 - 2006 (percentage)



Source: ABS Cat. No. 2068.0, Census of Population and Housing, Australia, 1991 – 2006.

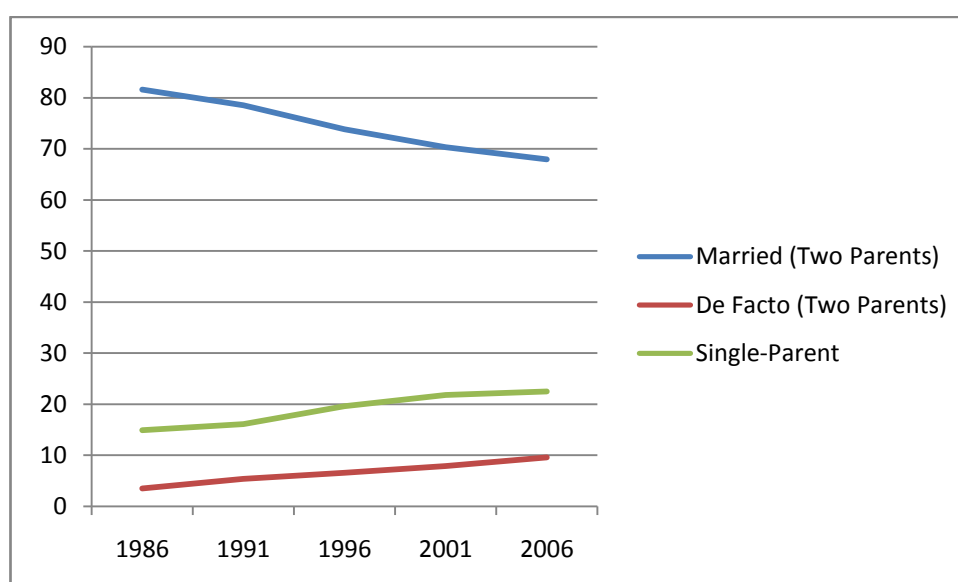
This improved educational attainment of women has been a major factor in driving the changing pattern of labour force participation described above. Moreover, higher educational attainment has been identified as a factor contributing to smaller families as women with greater educational qualification have been found to delay childbirth and chose to have a lesser number of childrens (ABS, 2008).

Family Type

It was noted above that these trends in the fertility rate of women and their participation in education have been accompanied by important changes within family formation in Australia. Most importantly, while remaining the predominant form, the proportion of couples in a registered marriage of all couple families with dependent children has declined over the past two decades (ABS, 2009a). Figure 1.10 charts the distribution of family composition and dependent children by social marital status. It indicates between

1986 and 2006, the percentage of couple families with children in *de facto* living arrangements had increased from just over 3 percent to more than 9 percent. In addition, the number of children growing up in single-parent households also increased from 15 percent to over 22 percent during this period (ABS, 2009a), with the majority being headed by single women (Pocock, 2003).

Figure 1.10: Family Composition and Children by Social Marital Status 1986 - 2006
(percentage)



Source: ABS Cat. No. 2068.0, Census of Population and Housing, Australia, 1986 – 2006.

These changes have combined to significantly alter the landscape of Australian families. In particular, the number of children growing up in traditional households with legally married parents has declined over the past two decades. In contrast, the number children looked after by parents in *de facto* relationships and single-parents have increased over this period. The decline in household size has resulted in reducing the informal social support previously available to working individuals from live in relatives and extended family in fulfilling family duties (i.e. childcare, domestic chores). These changes in family

composition and changes in the nature of work discussed in Section 1.2 have together redefined the roles of men and women within families, and society at large. These are discussed next.

Gender Roles: Women

While women remain the primary carers within families, an increasing number are in paid employment. As a consequence, a significant proportion of women experience conflict between competing work and family responsibilities (Pocock, 2005). The growth in female labour force participation, especially those within prime child rearing ages, has resulted in more women with dependents living in households where both partners are in paid employment. The growth in long work hours and work intensity has also increased the degree to which paid work responsibilities and demands of individuals encroach upon personal resources available to fulfil family role responsibilities. This has been especially significant for women given their traditional carer role within the family.

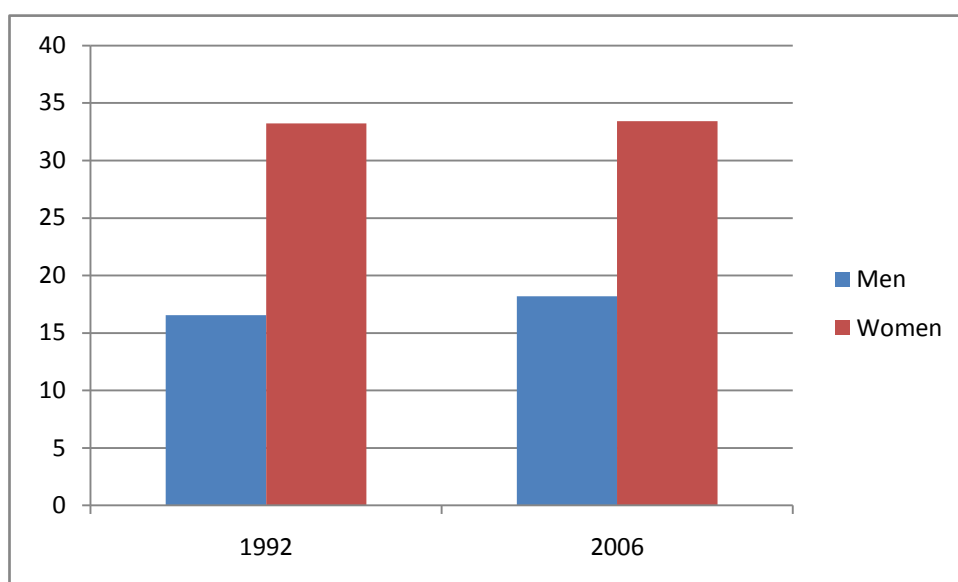
The growth in long work hours and work intensity has adversely impacted on women in two important ways. First, while not being able to spend long hours at work due to dependent care responsibilities, women are nevertheless compared with those who can, increasing pressures placed on them from the workplace. As a consequence, many turn to part-time employment and opt out of full-time employment. Given the precarious nature of part-time employment in Australia, women are likely to experience higher levels of stress due to competing work and family responsibilities (Pocock, 2003).

Second, this expectation disregards the changes taken place in women's lives over the past three decades. That is, it reinforces the traditional model of an 'ideal worker' built on the

normative model of a male breadwinner and female carer family. Women are significantly disadvantaged by this as the traditional model assumes an individual's partner is able to undertake primary responsibility for the fulfilment of all domestic needs, hence enabling the individual to perform work tasks unencumbered by dependents or other domestic responsibilities (Edgar, 2005).

Although men have increased their participation in domestic duties, this still does not equate to the increase in women's participation in paid work. Figure 1.11 charts the distribution of time spent on unpaid household work and paid work by men and women in 1992 and 2006. It shows that while men's participation in household work increased from approximately 17 to 18 hours per week, women continued to spend almost double the amount of time (33 hours) as men on unpaid household tasks (ABS, 2009b).

Figure 1.11: Time Spent on Household Work by Sex (number of hours per week)



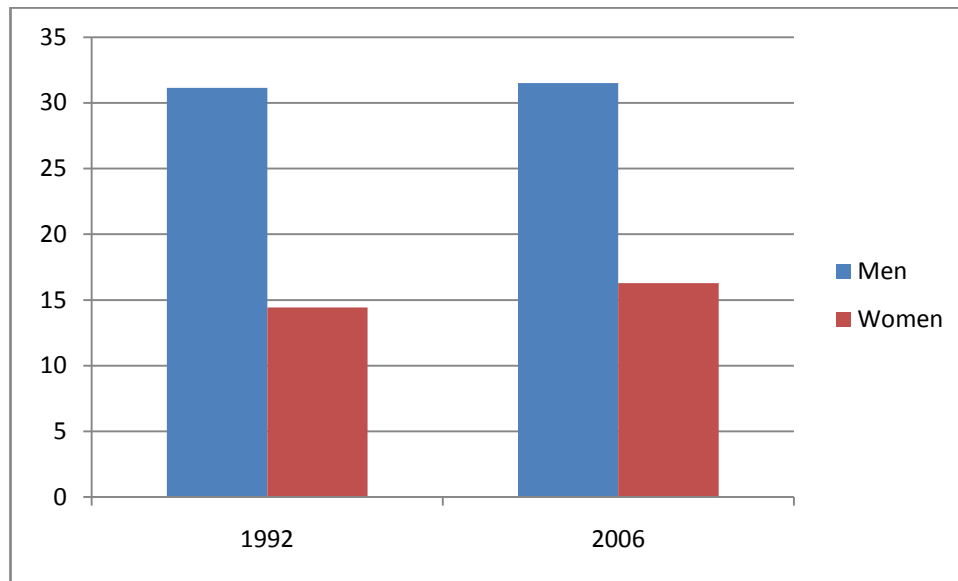
Source: ABS Time Use Survey, 1992 and 2006.

Figure 1.12 illustrates the average number of hours per week spent on paid work activities by men and women during the same period. While time spent on paid work activities by men remained largely stagnant - at approximately around 31 hours per week on average - , women's participation in paid work activities increased from 14 hours to 16 hours (ABS, 2009b). As women continue to shoulder a larger burden of household duties and, at the same time, faced an increase in their working hours, it should come as no surprise that their experience of conflict between the demands of their work and family roles has been exacerbated (Pocock, 2003).

This problem is further reinforced by what Pocock has referred to as the dissonance between “*behaviour and preference* (what we do and want), and *institutions and cultures*” found within Australia (Pocock, 2005, p. 124). That is, while women's role in society has changed significantly, institutions, such as governments, legislative bodies and policy orientations, as well as attitudes towards gender roles, have remain largely stagnant.

A prime example of this dissonance identified by Pocock is the lack of paid maternity leave for women, with Australia being the only other industrial nation apart from the United States of America (USA) not providing some form of income support for working mothers (Edgar, 2005). Often women are left to their own devices to negotiate such support from their employers. Given that the majority of Australian women are employed in part-time occupations with limited job security and entitlements, and limited access to collective representation through unions, their bargaining power in such negotiations is limited. As a consequence, the stress levels caused by conflicting work and family demands are quite high for employed women with dependent care responsibilities.

Figure 1.12: Time Spent on Paid Work by Sex (number of hours per week)



Source: ABS Time Use Survey, 1992 and 2006.

Note: the number of hours for women is lower than a standard work week due to the number of women who are not employed or employed part-time.

Gender Roles: Men

Consistent with the developments described above for women, the role of men has also undergone considerable change. In the aftermath of World War II, the popular cultural belief of western fatherhood was that of men as breadwinners. In this view, men were expected to be a breadwinner, an adviser, protector, and disciplinarian of children (Singleton, 2005). This also reflected the prevailing traditional family structure of a male breadwinner and female carer found within Australia at the time. As women were expected to fulfil all or the majority of childcare and domestic labour requirements, men were not expected to actively engage in child rearing or contribute to other household activities such as cooking and cleaning (Segal, 1997).

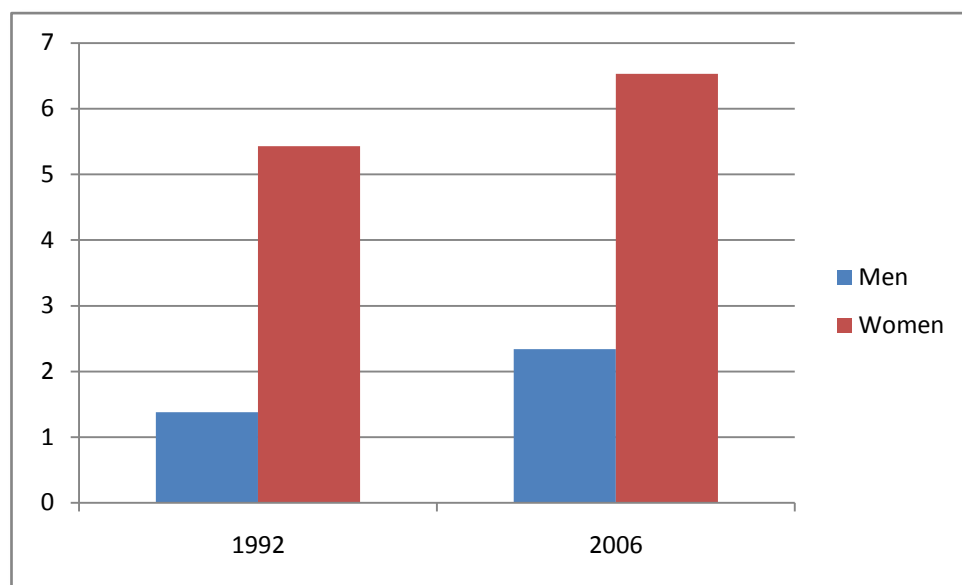
However, the radical social changes witnessed during the late 1960s and early 1970s, especially in relation to women's role in family and society, also significantly altered the expectations placed upon men (Singleton, 2005). These developments have in part been driven by a growing realisation that the traditional father role may be associated with adverse outcomes for families. As a consequence of these changes, men's role within families has been redefined. Employed men with children in today's society are expected to be more caring, approachable, and emotionally involved with their children, and also be able to achieve the necessary balance between competing work and family demands (Coltrane, 1996; Lupton and Barclay, 1997; Marsiglio, 1995a, 1995b). This definition is now ubiquitous in contemporary Australian society and underpins its expectations of men (Holland, 2002; Robinson, 2001).

The changing expectations placed on fathers coincides with two key social changes after the 1960s: the increase in married women's, especially those in prime child bearing ages, participation in paid work, and the second wave of feminism (Lupton and Barclay, 1997). Both of these changes increased the expectations placed on men's contribution to childcare and housework. However, research indicate these raised expectations accompanying the new image of men are often unrealistic and not necessarily feasible (Barclay and Lupton, 1999; Lundberg and Rose, 2002). This has been especially true in relation to childcare responsibilities (Singleton, 2005).

Figure 1.13 charts the amount of time men and women spent on childcare activities in 1992 and 2006. It illustrates that while men's participation in childcare duties doubled during the period, on average, women are found to spend two and a half times as long in childcare duties than men. In addition, men are found to spend a greater proportion of their time in

childcare on play activities that require low emotional involvement compared to women who spent the majority their time on physical and emotional care activities (ABS, 2009b). Research has found that even in families in which both partners are in paid employment, mothers are still responsible for the majority of childcare duties (Edgar, 2005). It appears that despite the significant improvements made by the women's liberation movement towards more egalitarian gender role ideologies, contemporary Australian men remain closer to the traditional norm of the male breadwinner than the new model of the emotionally involved father (Singleton, 2005).

Figure 1.13: Time Spent on Childcare by Sex (number of hours per week)



Source: ABS Time Use Survey, 1992 and 2006.

Despite the limited progress made by men in terms of their participation in childcare and other household activities, the raised expectations placed on them by society, as well as the changes in their own expectations towards parenting (i.e. those men who want to be more

involved in their children's lives), has increased the degree of stress or conflict experienced by men between their work and family responsibilities (Edgar, 2005).

In summary, the changes witnessed within household size, fertility rates, educational participation and attainment rates, and men and women's participation in paid work and unpaid family responsibilities over the past two decades have significantly altered the landscape of family formation in Australia. These changes combined with the trends observed within the workplace (i.e. long work hours and high work intensity) over the same period have resulted in increasing the number of working individuals and their families reporting high work and family conflict in Australia.

1.4 The "Work – Life Collision"

The previous section highlighted the significant changes witnessed within both workplaces as well as households in Australia over the past two decades. In an increasingly globalised and market driven economy, workplaces are now open longer and managers demand more from employees. This has reduced the amount of personal resources available for men and women to spend on their families and communities (Pocock, 2003). Concurrent with changes in the workplace, Australian households have also undergone considerable change (Poole, 2005). Most significantly, the number of households with dependent children in which both parents are in paid employment has increased. This has added to the pressures men and women in couple relationships experience between competing work and life demands. While Pocock (2003) includes community participation and leisure activities in addition to family (i.e. encompassing life) in her definition of work-life collision, this study focuses on the collision between work and family, the latter being only one component of life. The exclusive focus given to work and family domains is justified by the fact that the

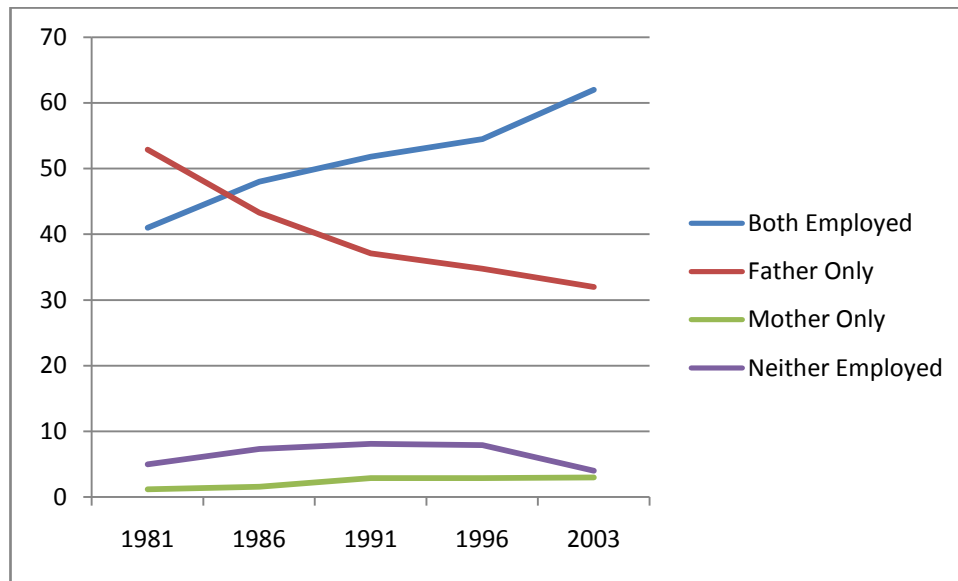
proportion of an individual's personal resources such as time and energy expended in work and family domains has been found to be generally greater than those expended in community participation and other leisure activities (Eby et al., 2005).

Work and Family Conflict in the Australian Context

For a majority of Australians, the above changes witnessed within the workplace and family over the last three decades have significantly altered the landscape of their work and family lives. Most importantly, the convergence of male and female labour force participation has resulted in a shift away from the traditional nuclear family comprising of a male breadwinner and female carer with dependent children to the modern dual-earner family with dependent children.

Figure 1.14 charts the labour force status of couples with children between 1981 and 2003. It shows that the percentage of households headed by a single male breadwinner and a full-time female carer has decreased significantly. In 1981 over half of families approximated this breadwinner model. By 2003, however, less than a third of all couple families with dependent children fell into this breadwinner category. During the same period, however, the percentage of dual-earner families increased from 41 percent to 62 percent of all couple families with dependent children (ABS, 1997, 2003).

Figure 1.14: Labour Force Status of Couple Families with Child(ren) (percentage)



Source: ABS Cat. No. 6203.0, Labour Force Australia, 1997 and 2003.

Note: 1981 – 1996 data include families with children less than 14 years; 2003 data include families with children less than 15 years. Families with other types of dependents (i.e. aged) are not included in the figure.

Therefore, at present, there are twice as many families with both parents in the labour force than those with only the male in the labour force. It should be noted, however, that families tend to move in and out of different family formations over their life cycles (i.e. due to divorce or temporary absence from the labour force) with cross-sectional analysis only representing the percentage of family types at a given point in time (Pocock, 2003).

Furthermore, in many dual-earner families, the high proportion of part-time employment among women means they are effectively one-and-a-half breadwinning families rather than two full-income families. Nevertheless, the widening gap between male breadwinner families and dual-earner families indicate a gradual decline of the traditional nuclear family with clearly demarcated gender roles for men (i.e. breadwinner) and women (i.e. carer).

The growth of dual-earner families, work hours and work intensity, and changing gender role expectations have all combined to increase the pressures men and women experience between competing work and family demands. In a study conducted by the Human Rights and Equal Opportunity Commission, Squire and Tilly (2007) highlighted the growing concerns that, despite more than a decade of sustained economic growth, most Australian families report a decline in the quality of their family life. They identified a lack of time as the primary reason behind rising levels of work and family conflict experienced by working Australians and their families.

A similarly inquiry undertaken by the House of Representatives Standing Committee on Family and Human Services (2006) found inadequate and outdated childcare policies to be a cause of high levels of stress experienced by working families. It further highlighted the economic necessity to ensure better support for families, especially working mothers to satisfy both their work as well as family responsibilities through tax concessions and greater investment in childcare systems. The failure to acknowledge the changes that have taken place within the family institution in terms of gender roles and carer responsibilities at the public policy level has contributed to the increase in the number of women as well as men who report high levels of work and family conflict (Edgar, 2005; Pocock, 2003).

The changes highlighted in the nature of work and family indicate that many individuals in couple dyads are likely to make decisions about work and family roles interdependently, rather than as autonomous individuals. That is, an individual's decisions on the allocation of personal resources in fulfilling work and family responsibilities are likely to be dependent upon those of their partner. Changes in the labour force participation of men and women have resulted in a greater number of individuals in contemporary Australian

society living in dual-earner households. As a consequence, both partners are likely to experience an equal level of conflict in allocating finite personal resources available to them between competing work and family demands.

However, the prevailing focus on men and women's *independent* work and family responsibilities misses the effect of *combined* changes within families. Research examining the effects of couple-level changes to work and family responsibilities on men and women's experiences of work and family conflicts is extremely limited (Eby et al., 2005). In addition to an individual's own work and family responsibilities, those of their partner is also likely to influence the level of work and family conflict experienced by an individual (Pocock, 2003).

For example, does an individual who places a high importance to their work role experience a greater level of work and family conflict if their partner also places an equally high importance to their own work role? What kind of relationships would exist between the degrees of importance each partner within a couple places on their family role and an individual's experience of work and family conflict? Would these experiences differ for men and women given traditional gender norms? This study seeks to address these unanswered questions found within work-family research.

1.5 Study Aims and Design

At the beginning of this chapter, it was noted that, notwithstanding the growth in the number of studies investigating the antecedents and consequences of work and family conflict, the majority of these studies have conducted analyses at the individual-level (Barnett, 1998; Parasuraman and Greenhaus, 2002). However, conceptual models proposed

within the work-family interface suggests a research focus on work and family conflict at the individual-level carries a false assumption that partners in couple-dyads make decisions regarding their work and family roles independent of each other (Parasuraman and Greenhaus, 2002). Moreover, the evidence indicates that, largely as a consequence of the greater number of work and family role interactions, individuals part of a dual-earner dyad are likely to experience work and family conflict more intensely than single income couples (Greenhaus and Parasuraman, 1986; Gupta and Jenkins, 1985). That is, an individual's work and family experiences are not only determined by his/her own domain specific variables, but also by those of the partner's (Kenny and Cook, 1999; Malloy and Albright, 2001).

Past research has found role salience (i.e. importance attached to a particular life role) to be significantly related to the level of personal resources an individual commits to the performance of that role (Rothbard and Edwards, 2003). It was previously noted that decisions pertaining to an individual's work and family roles are generally made in conjunction with their partner rather than independently. Therefore, it is possible for the importance an individual's partner places on their own work and family roles to influence an individual's ability to satisfy competing work and family responsibilities (i.e. the level of work and family conflict experienced).

The main research question for this study is derived from this relationship:

“To what extent does the importance couples’ attach to their work and family roles influence their experience of work and family conflict?”

This study aims to develop a conceptual framework based upon *identity theory* and its associated concept of *role salience* in deriving a number of hypotheses to examine this research question. To empirically test these hypotheses, the study will attempt to gather data from a sample of matched pairs of dual-earner couples on the salience each partner attaches to their respective work and family roles, the degree of work and family conflict experienced by each partner, and a range of demographic information. It is hoped that useful conclusions and implications for both theory and practice of work and family relationships can be derived from the results of these couple-level analyses.

The thesis comprises of five further chapters. **Chapter Two** reviews theories that offer an explanation of the relationship between the work and family role saliences of couples and their experience of work and family conflict, and outlines the key hypotheses to be considered in empirical analysis. **Chapter Three** describes the methodology and research design used to conduct the study. In addition, the chapter presents a detailed outline of the analytical procedure used to test the hypotheses. **Chapter Four** presents the results of the statistical analyses undertaken to test the hypotheses derived in Chapter Two. In addition, the chapter outlines the preliminary data screening procedures undertaken to test multivariate assumptions. **Chapter Five** highlights the theoretical and practical implications drawn from the results of Chapter Four. Finally, **Chapter Six** provides an overall summary and conclusion for the thesis.

1.6 Conclusion

The nature of work and family in Australia has undergone considerable change over the past three decades. The modern workplace is characterised by more women, long work hours and greater work intensity. Two thirds of all couple families with dependents today

consist of both partners in paid-employment as opposed to the traditional male breadwinner and female carer family. As a consequence of these changes, men and women's experience of work and family conflict in Australia has increased steadily over this period.

Public policy implications of issues concerning work and family conflict in Australia have received considerable attention of late. A number of inquiries and reports have been commissioned by both State and Federal Governments aimed at investigating methods to reduce the high levels of conflict and stress reported by working Australians and their families. However, often public policy relating to work and family conflict have been found to be based on men and women's independent work and family patterns rather than on the combined effects of couples' work and family patterns.

While research is replete with individual-level analysis of work and family conflict (i.e. antecedents, outcomes etc.), only a limited number of studies have examined couple-level effects (Eby et al., 2005). This holds especially true within the Australian context. This study aims to address this gap.

The next chapter will provide an extensive review of research undertaken in relation to work and family conflict, its definition, types, and the bi-directional nature. It will also consider how identity theory and the concept of role salience can contribute to developing a number hypothesis to be considered for empirical analysis.

2 THEORETICAL BACKGROUND AND DEVELOPMENT OF THE CONCEPTUAL FRAMEWORK

2.1 Introduction

The significance of work and family conflict as a feature of contemporary Australia was highlighted in Chapter One. This was attributed to a number of developments in both work and family domains. In particular, changes in work arrangements and the nature of family in Australia were highlighted. The decline of the traditional nuclear family – comprising of a male breadwinner and female carer with dependent children – and the growing significance of the dual-earner family were identified as significant trends observed within family formation in Australia. The transformation in the pattern of labour force participation for women and the growth in longer work hours and higher levels of work intensity were identified as significant trends witnessed within the workplace. Given these changes to both work and family domains, the issue of work and family conflict has become important to employees, organisations, and governments.

Chapter One also observed that the recognition of work and family conflict as a major part of contemporary working life has resulted in an explosion of research conducted within the work-family framework over the past two decades (Eby et al., 2005). Despite the abundance of research published on work and family conflict, most of this work implicitly assumes the experience of conflict to be a consequence of an *individual's* own work and family choices, and largely ignores the potential interactions between their own choices and those of their partner. However, research undertaken on other aspects of couples and family life suggests that it is often inappropriate to assume that an individual who is part of a

couple-dyad makes independent decisions over work and family roles (Deutsch, 1999; Hochschild, 1990). Based on this observation, the aim of this chapter is to provide a more comprehensive review of the work and family research that investigates the antecedents and consequences of work and family conflict.

There are two purposes in doing so. First, it will provide the basis on which the significance of this study can be established. In Chapter One, it was noted that the majority of existing research on work and family conflict has been conducted at the individual-level, with little attention paid to the possible effects of couple-level attributes on work and family conflict experienced at the individual-level. Redressing this issue is a major concern of this study. Second, a review of the work and family literature is used to generate the conceptual framework for this study. Although there is a well established general theoretical framework for understanding linkages between work and family domains (Greenhaus and Beutell, 1985), and the mechanisms by which each influences the other (Edwards and Rothbard, 2000), this framework implicitly assumes individuals within a couple-dyad do not influence the decisions and experiences of each other. That is, empirical research has predominantly examined individual-level linkages of *resource drain* and *negative spillover* in determining the antecedents of work and family conflict (Casper, Eby, Bordeaux, Lockwood, and Lambert, 2007; Eby et al., 2005). In addition to these individual-level linking mechanisms, this study extends this general framework to investigate the relationship between the importance couples attach to their work and family roles, and their experience of work and family conflict. Specifically, the study uses the concept of *crossover* effects to examine the extent to which the relative importance an individual attaches to their work and family roles is likely to influence (crossover) their

partner's experience of work and family conflict. It is then used to generate a number of hypotheses that are to be tested using data collected for this study.

The remainder of this chapter consists of four sections. Section 2.2 provides a detailed review of the conceptualisation and dimensionality of work and family conflict. In Section 2.3, the empirical research exploring the antecedents, consequences, and mediators of work and family conflict is revealed. Then, in Section 2.4, the conceptual framework developed for this study is described, along with the hypotheses to be tested. The final section, Section 2.5, draws conclusions.

2.2 Work and Family Conflict: Definitions and Theoretical Foundations

From its inception, the study of work and family conflict has derived its theoretical framework from the theory of *inter-role* conflict (Greenhaus and Beutell (1985), associated most closely with Kahn, Wolfe, Quinn, Snoek, and Rosenthal (1964). Kahn et al. (1964, p. 19) defined inter-role conflict as a form of role conflict in which the “simultaneous occurrence of two (or more) sets of pressures such that compliance with one would make more difficult compliance with the other”. According to this definition, when demands and expectations arising in one role are incompatible with demands and expectations arising in another role, inter-role conflict is experienced.

Kahn et al.'s (1964) definition of inter-role conflict has been widely utilised in the work and family conflict literature. For example, in one of the earliest and most widely cited studies within the work-family literature, Greenhaus and Beutell (1985, p. 77) define work and family conflict as “a form of inter-role conflict in which the role pressures from the work and family domains are mutually incompatible in some respect”. This definition has,

in turn, been used by many researchers to explore the dimensionality of work and family conflict, its antecedents, and outcomes (Carlson and Perrewé, 1999; Frone, Russell, and Cooper, 1992; Gutek, Searle, and Klepa, 1991; Huang, Hammer, Neal, and Perrin, 2004). The remainder of this section will provide an overview of the key elements of work and family conflict and how it has informed this study of couple-level conflict. Before doing so, a brief discussion of core definitions and assumptions is presented. This provides the foundation for outlining the concepts used to examine dimensions of work and family conflict, and the bi-directional nature of such conflicts. This discussion is then used to contextualise the extended review of the work and family conflict literature presented in Section 2.3.

Defining Work and Family Roles

According to inter-role conflict theory, work and family conflict occurs when participation in one role (e.g. work) is made more difficult by the mere participation in another role (e.g. family). Yet, ‘work’ and ‘family’ are problematic concepts. For example, while work is often assumed to refer to paid work, there is a growing acceptance that ‘work’ can reasonably encompass non-paid activities, such as volunteering (Windebank, 2008), while ‘family’ can refer to a broad range of interpersonal relationships beyond ties of marriage or blood (Parasuraman and Greenhaus, 2002; Rajadhyaksha and Bhatnagar, 2000).

For the purpose of this study, the basic definitions of work and family follow those proposed by Edwards and Rothbard (2000). Edwards and Rothbard (2000, p. 179) define work as any “instrumental activity intended to provide goods and services to support life”. Although work activities have been found to provide intrinsic rewards to individuals (Deci and Ryan, 1985; Edwards and Rothbard, 2000), it is generally understood that its primary

objective is to acquire extrinsic rewards (Edwards and Rothbard, 2000; Locke and Latham, 1990). This definition excludes consideration of non-paid forms of work, such as volunteering. It also implicitly assumes that work undertaken as part of household production is not conceived as falling within its scope.

Edwards and Rothbard (2000, p. 179) define family as including “persons related by biological ties, marriage, social custom, or adoption”. Although this definition of family shares the notion of individual membership of a social organisation with the definition of work described above, it differs in that its primary purpose is not to acquire goods and services but to ensure harmony between members of the family and their well-being. While this definition includes same-sex couples and their families (i.e. young and elderly dependents), for the purpose of this study it is only applied to heterosexual couples and their families (i.e. with or without young/elderly dependents)³.

It should also be emphasised that these definitions inherently assume that work and family are conceptually distinct and non-overlapping domains of life. This assumption has two important implications. First, it excludes certain work and family conflicts from analysis on the grounds that *distinctive* work or family dimensions of the relationship are not identifiable. For example, it intentionally excludes family-run business situations in which the work and family roles are too closely intertwined to be considered separate (Burke and Greenglass, 1987; Edwards and Rothbard, 2000; Zedeck, 1992). Second, this definition excludes other life roles and their interaction with either the work or family roles. For

³ The majority of research carried out within the work-family framework has concentrated on individuals in heterosexual relationships (Eby et al., 2005). This study followed this norm as the time and resource constraints made it difficult to reach a large enough sample of homosexual couples to conduct any meaningful analysis. Only one couple was found to be in a homosexual relationship and thus, was excluded from all analysis. A manual check of the gender of partners within couple-dyads was utilised in ascertaining whether they were in a homosexual or heterosexual relationship.

example, in addition to their work and family roles, individuals may allocate time and other personal resources to performing additional life roles such as developing and maintaining friendship networks, meeting obligations as a member of a religious group or social club (Rothbard and Edwards, 2003; Stryker and Serpe, 1982). The definitions of work and family used in this study do not take into consideration the relationship these life roles have with an individual's work and family roles.

Work and Family: Linking Mechanisms

Research within work-family literature has conceptualised a wide array of mechanisms linking work and family roles. This study draws upon two such mechanisms in *spillover* and *resource drain* to build its conceptual framework⁴. Spillover “refers to the effects of work and family on one another that generate similarities between the two domains” (Edwards and Rothbard, 2000, p. 180). Such spillovers between work and family domains can be both negative as well as positive.

However, given the focus of this study is on the conflict between work and family roles, the transfer of ‘negative’ moods and behaviour from one role (i.e. work) to another (i.e. family) that hinders an individual's performance in the latter domain is explored.

Demerouti, Bakker, and Schaufeli (2005, p. 267) define negative spillover as the “*intra-individual* transmission of stress or strain from one domain [work] to another domain”

⁴ Edwards and Rothbard (2000) identify six general categories of linking mechanisms: compensation, resource drain, congruence, spillover, segmentation, and work-family conflict. *Compensation* and *resource drain* reflects a shift of time or attention between domains. However, the former is a conscious response to dissatisfaction in one domain whereas the latter can occur irrespective of an individual's intentions. *Congruence* and *spillover* are analogous to each other in that both result in similarities between work and family. However, a common third variable causes similarity according to congruence, whereas spillover attributes similarities due to effects of one domain on another. The separation of work and family domains so the two do not interact is referred to as *segmentation*. Given this study's focus on the negative effect work demands has on family and vice versa irrespective of an individual's intentions, linking mechanisms of compensation, congruence, and segmentation were considered not appropriate for analysis.

[family]. The majority of work-family research conducted at the individual-level has found work and family conflict to be an outcome of intra-person negative spillover between work and family domains (Carlson, 1999; Carlson and Perrewe, 1999; Doby and Caplan, 1995; Greenhaus, Bedeian, and Mossholder, 1987; Matsui, Ohsawa, and Onglatco, 1995; Rothbard, 2001; Sumer and Knight, 2001; Williams and Alliger, 1994).

In contrast, resource drain refers to “the transfer of finite personal resources, such as time, attention, and energy, from one domain to another” (Edwards and Rothbard, 2000, p. 181). That is, an individual’s personal resources such as time, attention, and energy are finite and, as a consequence, once used in one role are unavailable for the other role. However, this transfer of personal resources between work and family roles is imperfect. As noted earlier in drawing the conceptual boundaries of work and family, other life roles pertaining to leisure, volunteer work, and religion may also absorb the finite personal resources available to an individual. Therefore, it is possible for an individual to fulfil competing demands and expectations from both work and family roles simultaneously by reducing the amount of personal resources expended on other life roles. In such cases, resource drain occurs in a life role other than work and family (Edwards and Rothbard, 2000). For the purpose of this study, the focus is on the resource drain that occurs between an individual’s work and family roles. Like the concept of negative spillover, the concept of resource drain has been central to majority of research undertaken on work and family conflict (Carlson, Kacmar, and Williams, 2000; Mallard and Lance, 1998; Martins, Eddleston, and Veiga, 2002; Netemeyer, Boles, and McMurrian, 1996; Thomas and Ganster, 1995; Yang, Chen, Choi, and Zou, 2000).

Types of Work and Family Conflict

In their seminal review of the work and family literature, Greenhaus and Beutell (1985) identified three major ‘types’ of work and family conflict: time-based conflict; strain-based conflict; and behaviour-based conflict. This conceptualisation of the three types has been consistently used by researchers over the past two decades to assess various antecedents and outcomes of work and family conflict (Edwards and Rothbard, 2000; Frone et al., 1992; Frone, Yardley, and Markel, 1997; Gutek et al., 1991; Martins et al., 2002; Netemeyer et al., 1996; Parasuraman, Purohit, Godshalk, and Beutell, 1996; Voydanoff, 1988; Wallace, 1999; Williams and Alliger, 1994). This study follows this distinction in that it seeks to explore how couple-level dynamics (crossover of importance attached to work and family roles from one partner to the other) impact on time-based, strain-based and behaviour-based work and family conflicts experienced at the individual-level. It should, however, be noted that the majority of research within the work-family framework has tested and found support for only time-strain and strain-based conflict. Limited research has explicitly examined behaviour-based conflict (Dierdorff and Ellington, 2008; Eby et al., 2005; Ford, Heinen, and Langkamer, 2007). Therefore, despite its conceptual foundations, the testing of behaviour-based conflict represents an exploratory empirical investigation within this study.

Time-based Conflict

The application of inter-role conflict theory in relation to work and family roles is based on the assumption of resource scarcity: because personal resources such as time, energy, and attention are finite, the use of more resources in one role (e.g. work) will inevitably result in a reduction of the amount of resources (i.e. resource drain) available for other life roles

(e.g. family) (Edwards and Rothbard, 2000; Greenhaus and Powell, 2003). Understanding the conditions under which individuals would experience conflicts over the allocation of time between work and family roles typified many of the early studies of work and family conflict. For example, Staines and O'Connor (1980) found that competing demands for time were one of the most commonly cited sources of conflict between work and family roles. Although subsequently researchers have identified other dimensions of work and family conflict, time-based conflicts have remained central to the study of work and family conflict.

Greenhaus and Beutell (1985), identify two primary situations in which time-based conflict generally occurs: where it is physically impossible to satisfy time demands of one role due to time pressures involved with another role; and where one is mentally preoccupied with one role despite being physically present and attempting to meet the demands of another.

Strain-based Conflict

Research on inter-role conflict also indicates that where the demands associated with one life role are excessive, the capacity to perform other roles may be inhibited due to strain in the form of dissatisfaction, tension, anxiety or fatigue (Edwards and Rothbard, 2000; Greenhaus and Beutell, 1985; Rothbard, 2001). In reviewing Greenhaus and Beutell's (1985) explanation of strain-based conflict, Edwards and Rothbard (2000) emphasise the depletion of personal resources as a result of physical and psychological strain, which is, in turn, needed for role performance. From this perspective, strain-based conflict does not insinuate competing demands *per se* but, rather, represents a situation in which participation in one role can result in either physical or psychological strain that hinders performance in another role (Edwards and Rothbard, 2000). For example, investment of

time in a given life role has been found to be positively associated with the degree of unpleasant experiences. That is, individuals have been found to invest greater time in painful or dissatisfying life roles as a coping strategy to overcome unpleasant experiences (Rothbard and Edwards, 2003). A negative psychological strain can thus result in an increase in time spent in one role and, consequently, reduce the amount of time available for role performance in another. In other words, competing time demands can produce both *time*-based as well as *strain*-based conflict. Despite being conceptually distinct, both types of conflicts have been found to share a number of common antecedents within work and family roles (Greenhaus and Beutell, 1985).

Strain-based conflict is consistent with what a number of studies in work-family literature have referred to as ‘negative spillover’ (Bartolome and Evans, 1980; Eckenrode and Gore, 1990; Edwards and Rothbard, 2000; Frone, Yardley et al., 1997; Greenhaus and Beutell, 1985). Edwards and Rothbard (2000) argue that spillover would result in work and family conflict only if mood, value, skill or behaviour developed in one role hinder performance in the other role. For example, when a work construct such as fatigue inhibits the capacity of an individual to effectively perform responsibilities associated with their family role, negative spillover can be said to have occurred, creating strain-based conflict between work and family roles.

Behaviour-based Conflict

The third type of work and family conflict identified by Greenhaus and Beutell (1985) is behaviour-based conflict. Behaviour-based conflict refers to cases where the behaviours expected and rewarded in one role are incompatible with behaviour expectations in another. Where such behaviours are then carried from one role to the other, it may result in

conflict (Greenhaus and Beutell, 1985). For example, a competitive, confrontational and assertive approach to problem solving, which may be desirable in a work setting, is likely to be inappropriate in a family setting where a warm, nurturing and collaborative approach is expected (Eckenrode and Gore, 1990; Edwards and Rothbard, 2000; Greenhaus and Beutell, 1985). Just as the spillover of negative mood from one role to another can result in strain-based conflict, behaviour-based conflict reflects a negative spillover from one role to another. Specifically, behaviour-based conflict occurs when behaviour desired and developed in one role influences behaviour in the other whilst simultaneously inhibiting role performance in the latter (Edwards and Rothbard, 2000). Behaviour-based conflict is similar to strain-based conflict in which it does not require opposing role demands *per se*, rather the incompatibility of behaviour developed in one role with behaviour desired in another.

The Bidirectional Nature of Work and Family Conflict

Role pressures can derive from both the work and family domains, suggesting that both resource drain and negative spillover can occur in either direction. Moreover, it is feasible that these effects can occur simultaneously, both in terms of the type of conflict experienced and its direction (Edwards and Rothbard, 2000; Greenhaus and Beutell, 1985). That is to say, the experience of work and family conflict needs to distinguish between the experience of work-to-family (W-F) and family-to-work (F-W) forms of conflict. Conflict between work and family roles thus comprises of the combined effects of W-F and F-W conflict experienced by an individual (Greenhaus and Beutell, 1985; Gutek et al., 1991; Netemeyer et al., 1996).

Notwithstanding the fact that a conceptual distinction between W-F and F-W forms of conflict has been widely made in the theoretical literature for some time, the majority of empirical research up to the mid-1990s focused its attention on investigating primarily W-F conflict (Netemeyer et al., 1996). Although some studies earlier in the decade had (Frone et al., 1992; Gutek et al., 1991) empirically tested for the bi-directional nature of work and family conflict, this has been a significant shortcoming in much of the empirical research.

In making the distinction between the different directions of conflicts between the work and family roles, Greenhaus and Beutell (1985) highlight the importance of examining the interactive effects of work and family role demands to arrive at a more conclusive understanding of the dynamics of overall work and family conflict. Consistent with Greenhaus and Beutell's (1985) conceptualisation and the works of Frone et al. (1992) and Gutek et al. (1991), most researchers working within the work-family framework, have, over the past decade, tested and proven the bi-directionality of conflict between work and family domains (Bakker, Demerouti, and Dollard, 2008; Edwards and Rothbard, 2000; Frone, Yardley et al., 1997; Greenhaus and Powell, 2003; Huang et al., 2004; Mallard and Lance, 1998; Netemeyer et al., 1996).

Nonetheless, differentiating between these two effects may be difficult to do in practice, particularly where a negative spillover from one role to the other creates a subsequent spiral in the capacity of an individual to cope in all roles (Frone et al., 1992). In a study examining the antecedents and outcomes of work and family conflict, Frone et al. (1992) found support for a positive reciprocal relationship between W-F and F-W. That is, as work interfering with family increased, family interfering with work also increased. These findings have been subsequently extended in a study conducted by Frone et al. (1997) who

found an indirect mediating relationship between W-F and F-W conflict. Specifically, F-W conflict was found to have an indirect influence on W-F conflict via work distress (i.e. frequency of negative emotional reactions to daily work experiences) and work overload. Similarly, W-F conflict was found to indirectly influence F-W conflict through increased parental overload. Based on these relationships, Frone et al. (1997) argue that factors reducing W-F (i.e. supervisor support) would in turn reduce F-W and vice versa.

Concluding Comment

In this section the aim was to outline working definitions of key concepts and the theoretical foundations for work and family research. Of particular importance was an appreciation of the different types of work and family conflict and bi-directional flow of pressures from one role to the other. Central to making these distinctions were two key concepts deployed by work and family researchers, namely *resource drain*, and *negative spillover*.

2.3 Work and Family Conflict Research: An Overview

Having established the key definitional and theoretical elements used by work and family researchers, the purpose of this section is to provide a more detailed overview of the key theoretical and empirical developments in the field. In reviewing this literature, it is useful to keep in mind the main purpose of this study; namely, to investigate the relationship between role salience and the experience of work and family conflict at the *couple-level*. One key purpose of reviewing the literature is to identify the available evidence on the nature of this relationship.

There has now been almost two decades of sustained research examining the antecedent, outcome, and mediator effects of work and family conflict on individuals. While this has culminated in a clear theoretical framework which identifies the main mechanisms linking work and family roles (Edwards and Rothbard, 2000), it is nonetheless evident that a number of important issues are yet to be adequately addressed. Many of these gaps have been identified in three major reviews of the work and family literature (Casper et al., 2007; Eby et al., 2005; Parasuraman and Greenhaus, 2002). Two of the more significant gaps identified in each of these three studies include: the paucity of research which considers the couple as the unit of analysis; and the limited understanding of possible couple-level effects of work and family role salience (i.e. importance) on an individual's experience of work and family conflict.

Work and family conflict has been measured through a variety of inconsistent measures over the past two decades. Early research often measured W-F conflict under the broad concept of work and family conflict (Netemeyer et al., 1996). Although the majority of recent research has measured W-F and F-W conflict as separate constructs (Bakker et al., 2008; Greenhaus and Powell, 2003), a number of studies have measured work and family conflict as a single construct despite including items relating to both W-F and F-W conflict (Carlson and Perrewé, 1999; Parasuraman and Simmers, 2001). Therefore, unless specifically noted as either W-F or F-W conflict, instances in which the term 'work and family conflict' is used in this section refers to a form of conflict encompassing measures of both W-F and F-W conflict. Generally, role-specific antecedents and outcomes (e.g. work overload, job distress: W-F conflict; parental workload, family distress: F-W conflict) have been found to be more closely associated with conflict originating from a given role (Frone et al., 1992).

Notwithstanding the use of these inconsistent measures of work and family conflict within existing literature, the review identifies a number of important insights that are to be incorporated into the theoretical framework outlined in Section 2.4 and the empirical design of this study.

Work and Family Conflict: Individual-level

Antecedents

Work and family conflict has been found to be a consequence of a range of factors that derive from both the work and family roles (Eby et al., 2005), although the majority of studies have investigated characteristics of the work role as predictors of work and family conflict. In an early study conducted by Pleck, Staines, and Lang (1980), work and family conflict was found to be positively related to the number of hours spent in paid work, inflexible work schedules and irregular shift work. Similarly, working weekends or rotating shifts (Shamir, 1983) and work variability (Fox and Dwyer, 1999) have been found to be positively related to work and family conflict.

Frone et al. (1992) found job stressors such as work pressure, lack of autonomy, role ambiguity and job involvement (i.e. degree to which an individual's job is central to his/her self identity) to be positively related to W-F conflict. A number of other studies lend support to Frone et al.'s (1992) findings where high involvement (Carlson and Perrewe, 1999; Parasuraman and Simmers, 2001; Tenbrunsel, Brett, Maoz, Stroh, and Reilly, 1995) and time investment (Carlson and Perrewe, 1999; Greenhaus et al., 1987; Grzywacz and Marks, 2000; Parasuraman and Simmers, 2001) in paid work has been found to promote greater work and family conflict.

Finally, the presence of a supportive organizational culture, supervisor, or mentor has been found to reduce work and family conflict. Research carried out by Carlson and Perrewe (1999), Greenhaus et al. (1987), and Thompson, Beauvais, and Lyness (1999) found organisational support and the availability of family supportive benefits reduced work and family conflict. In addition to family supportive benefits, having a supportive supervisor who possesses similar work and family values has also been found to reduce work and family conflict (Clark, 2002; Nielson, Carlson, and Lankau, 2001).

Although the majority of work-family research has investigated work role predictors, a number of studies have also examined characteristics of the family role as predictors of work and family conflict (Eby et al., 2005). Responsibility for children (Carlson, 1999; Grzywacz and Marks, 2000), especially young children (Beutell and Greenhaus, 1980; Greenhaus and Kopelman, 1981; Pleck et al., 1980) has been found to be positively related to work and family conflict. Frone et al. (1992) found family stressors such as parental workload, extent of children's misbehaviour, lack of spousal support, the degree of tension or conflict in the relationship, and family involvement (i.e. degree to which an individual's family is central to his/her self identity) to be positively related to F-W conflict. The findings of Frone et al. (1992) have been confirmed by later research where individuals reporting disagreements with their spouse and a high level of family involvement were found to experience greater F-W conflict (Grzywacz and Marks, 2000; Williams and Alliger, 1994), and overall work and family conflict (Carlson and Perrewe, 1999; Parasuraman and Simmers, 2001).

Outcomes

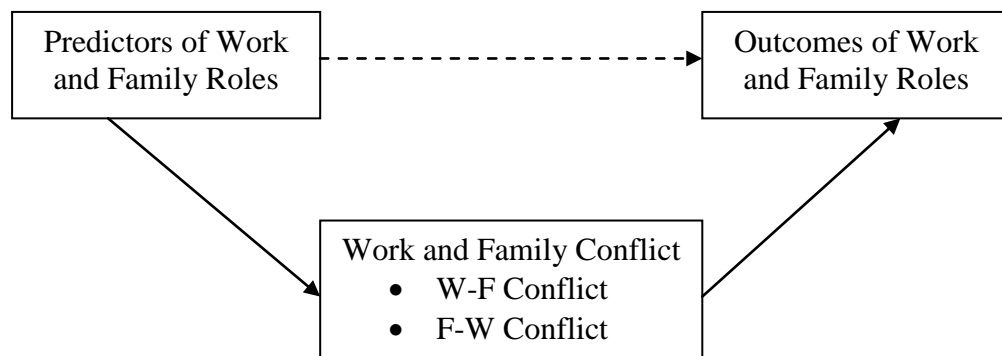
A great deal of attention has also been paid to identifying the consequences of work and family conflict for individuals. Studies have found work and family conflict to be related to a diverse number of physiological and psychological health outcomes (Eby et al., 2005). In a longitudinal study of employed parents, Frone, Russell and Cooper (1997) found W-F conflict to predict greater depression, physical health complaints, and hypertension while F-W conflict was positively related to greater alcohol consumption. Frone (2000) found both W-F and F-W conflict to be positively related to anxiety disorders, mood disorders, and substance abuse disorders. In addition to the findings of Frone and colleagues, work and family conflict has been found to be related to greater psychological distress (Burke and Greenglass, 1999), greater stress (Kelloway, Gottlieb, and Barham, 1999; Parasuraman and Simmers, 2001), and lower life satisfaction (Bedeian, Burke, and Moffett, 1988; Parasuraman, Greenhaus, and Granrose, 1992; Perrewe, Hochwarter, and Kiewitz, 1999). Work and family conflict has also been found to be related to lower family satisfaction (Bedeian et al., 1988; Parasuraman et al., 1992).

In addition, work and family conflict has also been found to have a number of consequences for organisations (Eby et al., 2005). A number of studies have found work and family conflict to be related to lower job satisfaction (Bedeian et al., 1988; Burke and Greenglass, 1999; Parasuraman and Simmers, 2001; Perrewe et al., 1999), greater turnover intentions (Greenhaus, Parasuraman, and Collins, 2001; Kelloway et al., 1999), and less career success (Martins et al., 2002; Parasuraman and Simmers, 2001).

Mediators

Finally, several studies have examined work and family conflict as a mediator between work and family variables and a number of outcomes. In this context, an individual's experience of work and family conflict have been explored as influencing the relationships between a number of predictor and outcome variables within their work and family roles. Given early research within the work-family framework viewed work and family conflict as unidirectional (i.e. W-F conflict), some studies have investigated overall work and family conflict as a mediator while others have conceptualised both W-F and F-W conflict as separate mediators (Eby et al., 2005). These mediator effects are illustrated in Figure 2.1.

Figure 2.1: Work and Family Conflict as a Mediator



In an early study conducted by Kopelman, Greenhaus, and Connolly (1983) the overall work and family conflict was found to mediate the relationship between both work conflict and family conflict and life satisfaction. That is, conflict 'within' work and family roles lead to greater levels of 'overall' work and family conflict which in turn was related to lower life satisfaction. Higgins, Duxbury, and Irving (1992) found work and family conflict to mediate relationships between work expectations, work conflict, job

involvement, and family involvement with quality of work and family life. In particular, individuals who reported higher work expectations, higher levels of work conflict and work and family involvement, also reported greater work and family conflict. The quality of both work and family life in turn was reduced by higher levels of work and family conflict. The relationships between supervisor support and individual outcomes such as job satisfaction and depression have also been found to be mediated by work and family conflict. Thomas and Ganster (1995) found greater supervisory support to reduce work and family conflict which in turn increased job satisfaction, reduced depression, somatic complaints, and cholesterol levels. Furthermore, in a study of public accountants, Greenhaus, Collins, Singh, and Parasuraman (1997) found work and family overload to be positively related to work and family conflict which in turn increased stress levels and intentions to quit.

In addition to these studies, several studies have conceptualised W-F and F-W conflict as separate mediators between work and family domains (Eby et al., 2005). O'Driscoll, Ilgen, and Hildreth (1992), for example, found W-F conflict to mediate the relationship between job demands and psychological strain. F-W conflict was also found to mediate the relationship between off-job demands and psychological strain where greater off-job demands lead to greater F-W conflict which in turn increased psychological strain. Supporting the findings of O'Driscoll et al. (1992), Parasuraman et al. (1996) found longer time spent in paid work to significantly increase W-F conflict, which, in turn, lead to greater life stress. Furthermore, greater job involvement resulted in high levels of F-W conflict, which increased life stress and lowered career satisfaction. Adams, King, and King report similar results to Parasuraman et al. (1996). They found the negative influence of job involvement on both job and life satisfaction was mediated by W-F conflict.

Two studies undertaken by Frone and colleagues also lend further support to the meditational role played by W-F and F-W conflict on work and family outcomes. Specifically, Frone et al. (1992) found family stress was associated with higher levels of F-W conflict, which was associated with a greater likelihood of depression. In a later study, Frone et al. (1997) found those individuals who reported greater family time commitments also reported high levels of F-W conflict which in turn was associated with poorer job performance. Similarly, they found those who reported greater work time commitments to also report greater W-F conflict, which in turn lead to lower family role performance. Finally, in a study examining the effects of family supportive organizational benefits on work and family conflict, Anderson, Coffey, and Byerly (2002) found lower managerial support to be associated with a higher level of W-F conflict reported. Higher W-F conflict was, in turn, associated with lower job satisfaction, increased stress and intentions to quit the job. Similarly, greater levels of family responsibilities lead to higher levels of F-W conflict, which, in turn, increased stress and absenteeism.

Work and Family Conflict: Couple-level

In her seminal works on work and family conflict, Arlie Hochschild (1990, 1997) highlighted the interdependent nature of decision-making between individuals within a couple, particularly in relation to the allocation of work and family responsibilities. She reported empirical evidence of progressive dual-earner couples who collectively reassess work and family role expectations they hold of each other due to changes to their parental or employment status (Hocshchild, 1997). Similarly, Deutsch (1999) found that working class dual-earner couples with family responsibilities employed in shiftwork sought to arrange their work hours to ensure one parent was always present at home to look after children. She attributes this arrangement of alternate shiftwork as an alternative coping

mechanism for working class dual-earner couples who were otherwise unable to afford paid childcare.

These qualitative studies highlight a significant issue for the majority of work and family studies reliant on individual-level data, which implicitly assume that an individual makes decisions over the allocation of time and other personal resources independently.

Surprisingly few studies within the work and family literature have explored the consequences of this assumption (Parasuraman and Greenhaus, 2002). Of particular importance is the potential transfer of strain and stress experienced by one partner to the other, suggesting a further mechanism explaining work and family conflict.

Although largely unexamined within the work and family literature, this potential transfer between couples has been conceptualised by researchers within marital and organisational dyads literature as an interpersonal *crossover* effect (Bakker et al., 2008; Hartel and Page, in press). Westman, Vinokur, Hamilton, and Roziner (2004, p. 769) define crossover as an “interpersonal process that occurs when a psychological strain experienced by one person affects the level of strain of another person in the same social environment”.

In a study examining the spillover and crossover of work-related exhaustion and life satisfaction among dual-earner parents, Demerouti et al. (2005) highlight the distinction between ‘within-person’ linking mechanisms of resource drain and negative spillover and the ‘couple-level’ (between person) crossover of stress and strain from one partner to the other. That is, individual-level linking mechanisms of resource drain and negative spillover concerns transmission of stress or strain from an individual’s work role to the family role or vice versa. In contrast, crossover refers to the transmission of stress and strain

experienced by one partner in the dyad to the other partner within the same role. The conceptual distinction between spillover and crossover made by Demerouti et al. (2005) has been empirically confirmed in a recent work-family study undertaken by Bakker et al. (2008). They found individuals within dual-earner relationships experienced both an *intra-individual* transmission of stress or strain (i.e. resource drain and negative spillover) as well an *inter-individual* crossover of stress and strain from one partner to the other due to conflicting work and family demands.

The limited available evidence suggests that the assumption of independent decision-making on the allocation of time and other resources to work and family domains is particularly questionable in relation to dual-earner couples. In particular, the degree to which an individual's partner is involved (i.e. commitment and importance attached to) in their work and family roles has been found to have significant implications for a number of individual-level outcomes, including the experience of work and family conflict (Eby et al., 2005).

For example, in one of the earliest studies to employ couple-level analysis, Greenhaus, Parasuraman, Granrose, Rabionowitz, and Beutell (1989) found that the relationship between men's job involvement and their partners' job involvement, predicted their experience of time-based W-F conflict. Specifically, men's time-based conflict was found to be low when both partners were highly involved in their respective jobs. They found the relationship between the levels of priority attached to their own career by each partner to predict men's experience of strain-based W-F conflict. However, in this instance, men's strain-based conflict was high when both partners regarded their own career as having greater priority than that of their partner. Greenhaus et al. (1989) did not find any

significant effects of a male partners' job involvement or career priority on their (female) partner's time-based or strain-based W-F conflict.

In a later study undertaken by Karambayya and Reilly (1992) also found partners' level of work and family involvement to influence individual-level outcomes. In particular, couples in which both partners were high on family involvement and moderately low on work involvement were found to report greater levels of marital satisfaction and lower levels of stress. Based on the same sample utilised by Greenhaus et al. (1989), Parasuraman et al. (1992) found crossover effects of stress experienced by one partner to influence the other partner's well-being. Specifically, women's family role stress was found to be negatively correlated with their partner's family satisfaction.

In contrast to the unidirectional (i.e. women to men) findings of Greenhaus et al. (1989), Hammer, Allen, and Grigsby (1997) found strong support for both men and women's work and family variables to influence their partner's work and family conflict. That is, the level of work and family conflict experienced by an individual was found to be a significant predictor of their partner's level of work and family conflict. While Hammer et al. (1997) did not explicitly examine couple-level effects of work role salience crossover on an individual's experience of work and family conflict (as proposed in this study), they found women's work role salience (work involvement and career priority) to influence men's experience of work and family conflict. However, consistent with the findings of Greenhaus et al. (1989), no such effects were found for women. Hammer et al. (1997) report the variance explained in an individual's work and family conflict by couple-level crossover effects to be above and beyond the variance explained by individual-level effects

of negative spillover, lending support to the importance of examining couple-level crossover effects to better understand the predictors of work and family conflict.

Although somewhat different from the studies reviewed so far, Yogev and Brett (1985) provides further insight into the interdependence of decision making between dual-earner couples. In a study of 136 dual-earner and 103 single-earner couples, Yogev and Brett developed a typology of couples based on the work and family involvement of individuals within a couple-dyad. They found that, in the case of dual-earner couples, an individual's attitudes and behaviour towards work and family roles was systematically related to the work and family attitudes of their partner. This was not found to be the case for single-earner couples. They conclude that, over time, men and women in dual-earner relationships develop a coordinated pattern of routines and responsibilities to adequately manage the competing work and family responsibilities of both partners. The degree to which each partner is involved in their respective work and family roles is a reflection of these patterns. For example, men in dual-earner relationships undertook greater responsibility for family responsibilities (i.e. their family involvement) when their partner's work involvement was high. However, no such systematic relationships were found within single-earner couples. The authors suggest that these findings to be a consequence of the greater need for individuals belonging to dual-earner couples to coordinate their work and family lives, compared to single-earner couples where each partner is primarily responsible for only one role (i.e. traditionally: men-work and women-family).

More recent work examining the relationship between marital role quality and psychological distress provides further support for the proposition that work and family research needs to pay greater attention to the role of joint decision-making in influencing

work and family conflict of individuals. In a study of male and female physicians in dual-earner relationships, Gareis, Barnett, and Brennan (2003) found that a key determinant of both marital role quality and psychological distress was the extent to which couples were able to achieve a 'fit' between their respective work schedules. That is, each partner's work-role experiences (i.e. the degree to which the amount and distribution of time an individual spends in their work domain satisfies both own and partner needs) were found to affect and be affected by the other partner's work-role experiences.

A number of other studies also provide strong support for the proposition that the interdependent nature of decision making within couples is likely to shape their attitudes towards work and family roles. Moen, Huang, Plassmann, and Dentinger (2006), for example found that the degree to which women planned for their retirement was shaped by the degree to which their partner planned for retirement. In addition to their own W-F conflict, Streich, Casper, and Salvaggio (2008) found men and women in married or *de facto* relationships to be highly aware of their partner's experience of W-F conflict. Streich et al. (2008) argue that individuals in dual-earner relationships use communication to share with their partner the degree to which their work responsibilities interfere with family responsibilities. As a consequence, men and women are likely to adjust their level of involvement in work and family roles to minimise the level of W-F conflict experienced by their partner. Finally, in a study of 168 dual-earner parents, Bakker et al. (2008) found those who reported work overload and emotionally demanding interactions at work to act unpleasantly and in anger towards their partners. This in turn was found to indirectly increase the family role demands placed on their partner.

The findings of the studies discussed above indicate a strong interdependence between men and women in dual-earner relationships regarding their work and family roles. In particular, the degree to which an individual is involved in their work and family roles appear to be significantly influenced by their partner's work and family involvement. This crossover relationship between men and women is in turn likely to influence an individual's experience of work and family conflict. The consistency of such effects indicates that crossover effects may prove to be an important determinant of the extent to which an individual experiences work and family conflict, and represents a major gap in the existing research.

Concluding Comment

As noted at the outset, much of the research on work and family conflict have generally utilised the *individual* as the *unit of analysis*. In particular, individual-level linking mechanisms of negative spillover and resource drain have been widely used as conceptual grounds to examine men and women's experiences of work and family conflict. However, research conducted within crossover and early work-family literature suggests in addition to individual-level effects, couple-level effects also contribute towards an individual's experience of work and family conflict. That is, an individual's experiences relating to work and family roles are likely to be influenced by their own work and family variables as well as by those of their partner. A research focus on work and family conflict at the individual-level therefore, carries the false assumption that men and women in dual-earner relationships make decisions on their work and family roles independent of each other. This study aims to address this gap found within the work-family literature by investigating couple-level crossover effects of role salience (i.e. importance and involvement) on work and family conflict experienced at the individual-level.

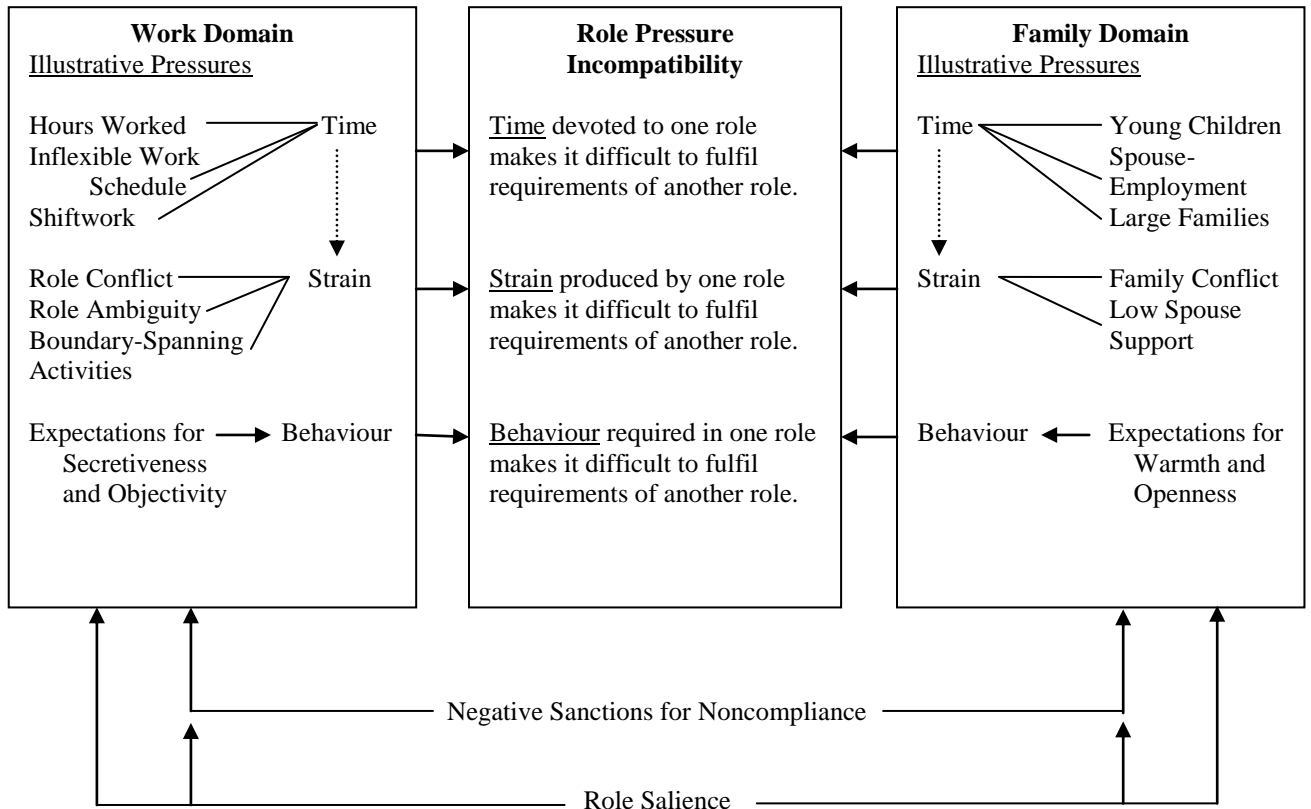
The relative importance (i.e. salience) individuals attach to their respective work and family roles have been found to influence the allocation of personal resources to each. As noted above, these saliences in turn are found to both influence and be influenced by their partner's role saliences through a process of crossover. Therefore, the experience of work and family conflict for those individuals in dual-earner relationships is likely to be influenced by their own role saliences (i.e. through individual-level negative spillovers and resource drain) as well as by the crossover effects between their role saliences and those of their partner. The conceptual framework presented in the next section is founded on these crossover effects of work (family) role saliences between partners on men and women's experience of W-F (F-W).

2.4 Couples and Work and Family Conflict: A Conceptual Framework

Having now outlined the key findings of the existing work and family research, the purpose of this section is to outline a theoretical framework that provides the basis to generate testable hypotheses concerning the determinants of work and family conflict at the couple-level. From the discussion of the work and family conflict research outlined in Section 2.3, it should be clear that a starting point for doing so is the proposition that the available literature does not adequately account for couple-level choices over the allocation of time and effort to work and family roles. The conceptual framework proposed by Greenhaus and Beutell's (1985) in their seminal study has been the dominant model used by work-family researchers to explore the different types of work and family conflict and the bi-directional nature of such conflicts addressed in Section 2.2. This model is found to implicitly assume work and family choices are made at the individual-level. This assumption, it was further noted, is evident in much of the empirical work so far

undertaken. Figure 2.1 depicts the theoretical framework proposed by Greenhaus and Beutell (1985).

Figure 2.2: Work-Family Role Pressure Incompatibility



Source: Greenhaus and Beutell (1985, p. 78)

Greenhaus and Beutell (1985) identify role salience as a significant predictor of work and family conflict. As illustrated in Figure 2.2, the degree to which work or family roles are central to an individual's concept of self (i.e., the *salience* of that role) are generally viewed as having a substantial bearing on the level of conflict experienced due to competing role demands. The concept of role salience was originally developed within *identity theory* associated with the work of Stryker (1968), Burke (1980), and McCall and Simmons (1978). These researchers were concerned with the importance of different life

roles such as work and family in shaping an individual's identity (i.e. concept of self).

According to these researchers, the importance attached to a given life role is hypothesised to predict the investment of personal resources in satisfying demands emanating from that role. As a consequence, as the salience of one life role increases, resources available for other roles diminish, resulting in conflict.

Greenhaus and Beutell (1985) postulate high role salience in one role is only likely to result in conflict if there are strong negative sanctions for noncompliance of demands in other roles. For example, if an individual is unable to adequately satisfy family role demands as a consequence of their high work role salience, W-F conflict will only occur if there are negative sanctions from other role senders (i.e. spouse, children) or from the focal person themselves (i.e. guilt) due to noncompliance. While acknowledging the influence of other role senders in determining the influence of role salience on an individual's work and family conflict, the conceptual framework proposed by Greenhaus and Beutell (1985) fails to explicitly recognise the dynamic nature of role salience. Most importantly, their framework does not recognise the continuous negotiation individuals engage in with significant others such as their spouse or work supervisor in determining the importance (i.e. salience) they place on respective work and family roles. As a consequence, Greenhaus and Beutell's (1985) model does not provide a framework in which couple-level crossover effects of role salience on work and family conflict can be empirically examined.

Based on Greenhaus and Beutell's (1985) model, this section then seeks to outline a modified framework that accounts for couple-level interactions. Drawing on identity theory, this modified framework proposes that the interactions between individual-level

role salencies within a couple are likely to influence choices and the experience of conflict due to *crossover effects* between individuals within a couple. That is to say, work (family) role salience congruence/incongruence between partners is likely to influence the extent to which each experiences W-F (F-W) conflict. In setting out this modified framework, a key objective of this section is to derive a number of hypotheses that can then be tested empirically.

Identity Theory

The origins of *identity theory* can be traced back to *symbolic interaction*, first proposed by Mead (1934). According to this perspective, the relationships an individual has with other role actors in society (e.g. spouse, work supervisor) will significantly shape their concept of self, and through self determine their social behaviour. That is, the interactions an individual has with other role actors will significantly shape their behaviour in various social settings (i.e. work and family). Individuals are found to be active agents who are free to interpret a situation in any way they want with the consequence that society is always in a state of flux, lacking real organisation or structure (Stets, 2006).

Stryker (1980) extended the work of Mead (1934) by introducing a ‘structural’ approach to symbolic interaction, in which society is not perceived as in a constant state of fluctuation, but possessing structure and organisation as evidenced through the patterned behaviour within and between individuals (e.g. employers-employees; husbands and wives). That is, according to Stryker (1980), identity theory hypothesise role performance (i.e. investment

of personal resources) and behaviour enactment will be a function of role salience (Stets, 2006; Stryker, 1980).⁵

Three separate, but associated, views on identity theory have been put forward by the works of Stryker and Serpe (1968, 1980, 1987) (Stryker and Serpe, 1982, 1994), Burke and colleagues (1980, 1991) (Burke and Reitzes, 1981, 1991; Burke and Stets, 1999; Cast, Stets, and Burke, 1999; Stets and Burke, 1996, 2000), and McCall and Simmons (1978).

Role Salience and the Influence of Classified Relationships

In the first of these perspectives, Stryker (1968) posited that human behaviour – invoked through different life roles – was the result of named or classified relationships (e.g. husband-wife, parent-child, supervisor-subordinate etc.) that an individual has with others. Stryker believed that, through interacting with others, individuals learn how to classify relationships they have and the expected standards of behaviour. Individuals are found to both name one another as well as themselves, which together results in invoking expectations of behaviour in relation to each other. The meaning of these classifications lie in the shared behavioural expectations that an individual has with relevant others. These classified relationships consist of positions usually known as ‘roles’. A role is said to be external and linked to positions an individual holds within the social structure. An ‘identity’, in contrast, represents internalised meanings and behavioural expectations

⁵ An alternative approach to conceptualising individual identity and role behaviour is offered by *social identity theory* Tajfel (1959), Tajfel and Turner (1985), and Hogg (1992). Social identity theory posits that the development of human identity can be seen as the product of group membership, group processes, and intergroup relations (Hogg, 2006). From this perspective, an individual’s concept of self (i.e. social identity) is developed and dependent upon a social category or categories (i.e. nationality, ethnic group, political affiliation, gender) to which they belong (Hogg, Terry, and White, 1995). Given the main focus of this study is at the dyadic-level rather than larger in-group or out-group level, the conceptual framework presented is based on identity theory. Furthermore, social identity theorists do not consider a dyad as a group as the latter requires the presence of at least three people (Hogg, 2006). Hence, the focus placed on identity theory is justified.

associated with a given role (Stryker and Burke, 2000). For example, an individual may perform a variety of identities with their family role: parent, spouse, daughter/son, and so on. Similarly, within the work role, identities in the form of a supervisor, subordinate or colleague can be performed.

From this perspective, individuals can be seen as possessing multiple identities, which are based on the numerous networks of relationships they occupy and the life roles they perform. These multiple identities are, in turn, found to be organised in a ‘salience hierarchy’ which reflect the relative importance of each identity to the individual’s concept of self. Identity salience is defined as the “probability that an identity will be invoked across a variety of situations, or alternatively across persons in a given situation” (Stryker and Burke, 2000, p. 286). Thus, the hierarchy of salience becomes important in predicting behaviour in situations where diverse role expectations (i.e. work and family) are in direct conflict to each other. In such circumstances, Stryker (1980) postulates a positive relationship between identity salience and behavioural choice, where greater the salience of an identity relative to others, greater the probability of behavioural choices consistent with that identity. However, it should be noted that whether or not an individual is able to enact behaviour consistent with the identity of higher salience is dependent upon the degree to which a particular situation allows alternative identities to be enacted (Stryker and Serpe, 1982).

The salience attached to a given identity is found to be a product of the degree of ‘commitment’ an individual has to that identity. Commitment is defined as the “degree to which the person’s relationships to specified sets of others depends on his or her being a particular kind of person, i.e., occupying a particular position in an organised structure of

relationships and playing a particular role” (Stryker and Serpe, 1982, p. 207). From this perspective, commitment is hypothesised to be determined by two factors: the number of persons an individual is related to through an identity (extensiveness), and the strength or depth of ties to others based on a particular identity (intensiveness). Salience of an identity is predicted to increase as either or both of these factors increase (Stets, 2006).

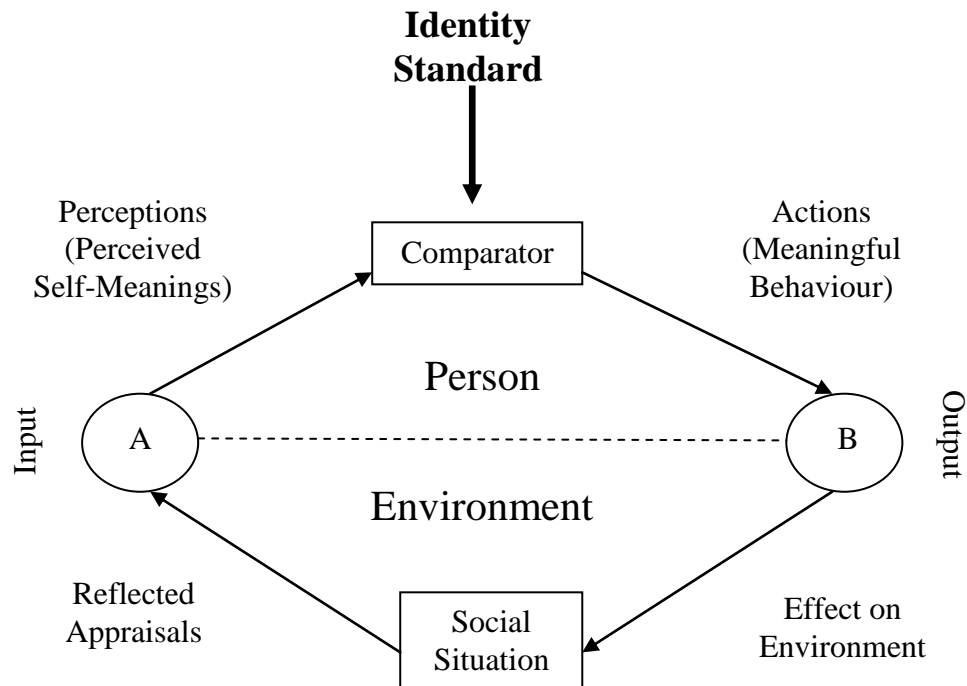
Role Salience and the Feedback Loop

In contrast to Stryker’s focus on behaviour enactment as a consequence of identity salience and commitment, Burke and colleagues (1980, 1991) (Burke and Reitzes, 1981, 1991) propose that identity salience will predict behaviour only when the meaning of the identity corresponds with the meaning of the behaviour. According to Burke (1991), when an identity is activated in given situation, a feedback loop consisting of four components needs to be established before it likely to have behavioural consequences: the identity standard (meanings which define an individual’s role identity in the situation); perceived meanings attached to the situation based on how an individual perceives himself and on feedback obtained from others; the comparator (process of comparing perceived meanings with the identity standard meanings); and individual behaviour or output to the environment (a function of the comparator). This process is illustrated in Figure 2.3 below.

This feedback process of behaviour enactment works through an individual’s ability to continuously adjust their perceptions of a given situation to the meanings of an identity standard. When situationally perceived meanings are congruent with those held in the identity standard, self-verification exists and there is no need to change identity-relevant behaviour. Identity-relevant behaviour is invoked due to an individual’s attempt to achieve self-verification. Thus, behaviour is a function of the difference between the meanings

perceived by an individual in a given situation and the self-meanings held through the identity standard (Burke, 1991; Stets, 2006; Stryker and Burke, 2000).

Figure 2.3: The Feedback Loop in the Identity Process



Source: Burke (1991, p. 838)

Consistent with Stryker's conceptualisation of identity, Burke (1991) highlights the role played by the situational context (i.e. degree to which the situation allows a specific behaviour to be enacted) and personal emotion in determining the activation of the feedback loop. Burke argues that a lack of self-verification would result in negative emotion which will activate the feedback loop. Once self-verification is achieved, positive emotion is said to exist. The relative strength of emotion is found to be influenced by the frequency and the source of identity disruption. Frequent disruptions are found to cause

intense negative emotion than infrequent disruptions. In addition, interruption from a significant other (i.e. husband/wife) with whom an individual has built mutually verified behavioural expectations that supported the identity standard in the past, would also cause greater negative emotion, thereby activating the feedback loop. This process is found to be particularly acute where an identity is higher in importance and commitment (Stets, 2006).

Role Salience and the Influence of Significant Others

The third and final perspective, provided by McCall and Simmons (1978), views identity behaviour and performance as a product of an individual's attempt to relate their identities with those of others with whom they interact within a given situation (Stets, 2006).

According to McCall and Simmons (1978, p. 65) a role identity is an individual's "imaginative view of himself as he likes to think of himself being and acting as an occupant" of a particular social position.

This perspective highlights two dimensions of role identities: a conventional (expectations tied to social positions that individuals try to meet), and an idiosyncratic dimension (unique interpretations individuals integrate to their life roles) (Stets, 2006). While Stryker and his colleagues focus on the first of these dimensions, McCall and Simmons tend to concentrate on the second. In addition to the salience hierarchy advocated by Stryker, McCall and Simmons introduce another identity hierarchy they label as the 'prominence' hierarchy of identities. McCall and Simmons note that while the salience hierarchy is temporary and short-term in nature (i.e. some identities become salient temporarily), the prominence hierarchy is stable and long-term (Stets, 2006). The latter hierarchy represents how individuals prefer to view themselves given their ideals, what they desire, or what is important to them. The placement of an identity in this hierarchy is dependent upon the

degree to which an individual: obtains support from others for an identity; is committed and values an identity; and accrues extrinsic or intrinsic rewards by performing the identity.

According to McCall and Simmons (1978), the capacity to successfully enact any life role is dependent on the ability to negotiate with other actors in a given situation. That is, for every identity (i.e. wife) enacted by an individual within a life role (i.e. family), there is always a corresponding counter-identity of another (i.e. husband). Each person interacting with another has a perception of the other's identity in addition to their own. In the attempt to enact a role identity that corresponds with the other, individuals are found to experience conflict and enter into negotiation and compromise. As a consequence, behaviour choices made by an individual in performing a given identity may be subject to their ability to negotiate with a relevant other enacting its counter-identity. When the interaction runs efficiently without conflict, the prominence hierarchy of individuals is found to stabilise. For example, if an individual is unable to successfully negotiate with their partner on the greater investment of personal resources in their work role (i.e. due to the high salience attached to their work role), he or she is more likely to experience a greater level of W-F conflict than an individual whose partner supports the greater investment of personal resources by the individual in his/her work role (i.e. due to successful negotiation).

Common Themes of Role Salience

Although providing varying views on behaviour enactment based on identity theory, Stryker, Burke, and McCall and Simmons share a number of similarities in their interpretations.

First, the importance of role salience in determining role behaviour is highlighted by all three: role salience is predicted to shape role behaviour choice. That is, the greater the importance of a given life role to an individual's concept of self, the greater the amount of personal resources invested in enacting behaviours consistent with that role. For example, if an individual values their work role more than the family role, the amount of personal resources invested in fulfilling demands from the work role is hypothesised to be significantly greater than those expended in satisfying family role demands.

Second, the impact of a significant other, such as a spouse, with whom an individual has spent considerable time and energy in defining behaviour expectations of each other is hypothesised to have a far greater impact on role behaviour than any other role actor an individual might interact with. That is, within a couple-dyad, partners are likely to spend considerable time negotiating the roles and responsibilities of each other in relation to their respective work and family roles. When these negotiated role standards (i.e. identity standards) are threatened due to changes in the environment initiated by the other partner, an individual is hypothesised to experience a high level of stress. For example, if a man within a couple-dyad negotiated his role within the family to be the primary breadwinner within the family and the wife was responsible for fulfilling family responsibilities, any changes to this arrangement as a result of the wife entering the workforce (reducing personal resources available to her for the family role, and hence, increasing demands placed on the man) will cause significant stress to the man.

Third, while all three perspectives suggest a relationship between role salience and role behaviour, this relationship is found to be subject to situational circumstances. That is, when in conflict, the enactment of role behaviour consistent with an identity of greater

salience than one of lower salience is dependent upon the degree to which the situation allows an individual to do so. For example, despite attaching a higher salience to their family role, an individual might be unable to attend a child's birthday party due to being overseas on a work assignment. This does not mean the individual attaches a greater importance to their work role than family role. The situational circumstances in this instance, prevents the individual from enacting role behaviour that is consistent with the life role (i.e. identity of the father within the family role) of greater importance to their concept of self.

Fourth, an individual's concept of self is found to be developed through his/her interaction with relevant others. Role actors are found to engage in ongoing negotiation and compromise in reaching a consensus on expected behaviour standards.

The conceptual framework and hypotheses postulated in this study are derived from these scholars' interpretations of identity theory and role salience.

The Relationship between Role Salience and Work and Family Conflict

In Section 2.2, it was noted that conflict between work and family roles primarily takes one of three forms: time-based, strain-based, and behaviour-based (Greenhaus and Beutell, 1985). Furthermore, conflict was found to be bidirectional in that work demands was found to conflict with family demands and vice versa (Netemeyer et al., 1996). In the discussion relating to identity theory, role salience was identified as the most significant predictor of individual role behaviour. When two or more role identities of an individual are found to be in conflict, the selection of which role to perform is dependent upon the relative importance of each role to the individual's concept of self, subject to situational

constraints. Furthermore, salience attached to different identities by an individual is found to be a result of negotiation and compromise undertaken by an individual with relevant others on expected behaviour standards (i.e. investment of personal resources). This section combines the previous two discussions on work and family conflict and identity theory in proposing the conceptual framework used in this study. Specific hypotheses to be empirically tested and reported in Chapter Four are also derived and presented from this proposed framework.

As noted at the beginning of this section, Greenhaus and Beutell (1985) identified role salience as a significant predictor of work and family conflict (see Figure 2.1). Subsequent research undertaken by a number of scholars within this framework has provided empirical support for this hypothesised relationship (Frone, Russell, and Cooper, 1995; Greenhaus et al., 2001; Greenhaus and Powell, 2003; Rothbard, 2001; Rothbard and Edwards, 2003). However, this framework was found to erroneously assume role salience to be an individual-level construct and not one influenced by significant others (e.g. wife) an individual interacts with in performing life roles (e.g. husband).

The discussion on identity theory indicated that the presence of a significant other, such as a spouse, is critical in determining an individual's concept of self and their identity standards (Burke, 1991; McCall and Simmons, 1978; Stets, 2006; Stryker, 1968, 1980; Stryker and Burke, 2000). That is, individuals are found to continuously negotiate and compromise on mutually expected role behaviours when interacting with other role actors, especially with those who they share an intensive relationship (Stryker and Burke, 2000). For example, Greenhaus and Powell (2003) found an individual's ability to participate in either a work or family role to be dependent upon the relative salience he or she attached to

each role as well as on the pressures from his/her partner. Thus, it is possible to assume that an individual's ability to successfully perform a given life role (i.e. work or family) is dependent upon both their own role salencies as well as those of their partner. Similarly, it is possible to infer that couple-level patterns of work (family) role salencies between partners would have a significant influence on an individual's experience of W-F (F-W) conflict.

Previous research has found a higher salience attached to a given role identity is associated with individuals making greater investment of time and energy in that role (Lobel, 1991; Wiley, 1991). However, a person may attach varying degrees of importance to work and family roles. Consequently, a person may simultaneously have high salience in both the work and family spheres (Thompson and Bunderson, 2001). For example, one person might have high work role salience and low family role salience whilst another might attach a similar importance to both roles (Rothbard and Edwards, 2003). Greater investment in roles which are of higher salience to a person is suggested by the identity theory as it provides the person with a source of self-esteem and an avenue for self-actualisation (Kanungo, 1979; Rothbard and Edwards, 2003; Saleh and Hosek, 1976). As a consequence, time and other personal resources invested in a particular role would rise with the increase in the importance attached to that role (Rothbard and Edwards, 2003; Stryker and Serpe, 1982, 1994).

It was noted above that any interruptions in the ability of an individual to perform a role of higher salience would cause greater conflict and stress than interruptions in the ability to perform roles of lesser salience (Thoits, 1991). This insight suggests that, at the individual-level, role salience may generate work and family conflict in two ways. First, conflict may

occur between work and family roles when an individual places a high and equal importance on both their work and family roles (Wiley, 1991). Where equal salience is found across two or more life roles, considerable conflict and stress is generated as an individual attempts to meet the demands of all role requirements with the finite amount of time and other personal resources available to them (i.e. resource drain and negative spillover). For example, an individual who places an equal value on being a father (i.e. family identity) and being a responsible manager (i.e. work identity) has to decide between being present at a child's birthday party, or flying overseas on an important business assignment, could be expected to experience work and family conflict more intensely than an individual who values one of these two roles more than the other.

Second, when holding unequal work and family role saliences, conflict is more likely occur when the performance in a role of higher salience is unsatisfactory due to personal resources invested in a role of lower salience (Wiley, 1991). As noted by Burke (1991), individuals strive to achieve self-verification by continuously adjusting their investment of personal resources in life roles to meet their identity standards. When situationally derived meanings are not consistent with the identity standard, conflict is hypothesised to exist, activating the feedback loop. For example, an individual who values being a good father (i.e. a role of higher salience) experiences dissatisfaction of not being able to attend his/her child's school play due to work commitments (i.e. a role of lower salience) would experience greater conflict than an individual who does not attach a greater importance to their family role. According to Stryker and Burke (2000) in situations of unequal role saliences, the role with the greater salience would prevail. The level of conflict or stress experienced by an individual is found to be limited in such circumstances.

Role Salience and Work and Family Conflict at the Couple-level

These insights however, concern the relationship between role salience and work and family conflict at the *individual*-level. Given that individuals involved in family relationships are likely to negotiate and compromise with their partner in allocating personal resources to their work and family roles (Stets, 2006), it is conceptually pertinent to develop hypotheses to be tested at the couple-level (Parasuraman and Greenhaus, 2002). Time and other personal resources devoted to a life role was hypothesised to increase with the salience attached to it (Burke, 1991; Stryker, 1968).

It was also noted that the degree to which this occurs is dependent upon the situational context and other role actors an individual interacts with (Burke, 1991; McCall and Simmons, 1978; Stryker, 1968). According to Burke (1991) conflict and stress results when the process of negotiating with relevant others interrupts the ability to satisfy an individual's identity standards (i.e. expected behaviours). The research hypotheses presented below are derived from these observations.

Research Hypotheses

Two critical questions can be raised from the discussion so far:

- (1) *Is an individual most likely to experience work and family conflicts when congruence occurs at a high or low level of role salience for a particular role?*

That is to say, are crossover effects between partners more or less likely when they attach an equal importance to their respective work (family) roles at a high or low level of salience (i.e. importance)?

(2) *Is an individual more or less likely to experience work and family conflict when their work and family role salencies are incongruent with those of their partner's?* That is to say, are crossover effects between partners more or less likely when they attach differing levels of importance to their respective work and family roles?

At the individual-level, the amount of personal resources committed to the performance of a given role is analogous to the importance (i.e. salience) attached to it. Therefore, in the event that the levels of importance attached to a given role (work or family) by partners within a couple are congruent, it is likely that each partner will expend similar amounts of personal resources in the performance of that role.

In contrast, where individuals who are involved in a significant family relationship attached different levels of importance to a given role (i.e. role salience incongruence), each partner is likely to expend different degrees of personal resources in the performance of that role. The hypotheses presented below are based on the effects of these couple-level patterns of congruent/incongruent role salencies between partners and the investment of personal resources on their experience of work and family conflict.

Hypothesis One: Work Role Salience Congruence and W-F conflict

Given that an individual's personal resources are found to be finite (Edwards and Rothbard, 2000), where the work role salencies of two individuals within a couple are congruent, both would experience a depletion of resources available at the couple-level to fulfil shared family responsibilities, such as childcare and housework. However, if the

salience attached is very low then, according to identity theory, the depletion of personal resources would also be low.

It is, therefore, possible to hypothesise that both partners' experience of W-F conflict would also be low. In contrast, if both partners are found to attach a very high salience to their work role, it is possible that their use of personal resources would also be high and result in a greater depletion of resources available to fulfil family responsibilities for both. In this instance, the level of W-F conflict experienced by both partners would be greater than when both attach a lower salience to their respective work roles. Based on this rationale, it is possible to hypothesise that:

H1: When the work role saliencies of couples are congruent, W-F conflict would be greater at higher levels of congruence than at lower levels of congruence.

H1a: When the work role saliencies of couples are congruent, time-based W-F conflict would be greater at higher levels of congruence than at lower levels of congruence.

H1b: When the work role saliencies of couples are congruent, strain-based W-F conflict would be greater at higher levels of congruence than at lower levels of congruence.

H1c: When the work role saliencies of couples are congruent, behaviour-based W-F conflict would be greater at higher levels of congruence than at lower levels of congruence.

Hypothesis Two: Work Role Salience Incongruence and W-F conflict

Based on the positive relationship hypothesised between role salience and investment of personal resources in role performance, an individual's experience of W-F conflict would be expected to be lower when their partner's work role salience is greater than their own. That is, if an individual values his/her work role less than their partner, he or she is expected to invest a lesser amount personal resources in fulfilling work responsibilities than their partner. As a consequence, the individual would possess sufficient personal resources to fulfil family demands and hence unlikely to experience high levels of W-F conflict.

Where an individual's work role salience is greater than their partner's his/her experience of W-F conflict would increase (i.e. due to greater depletion of personal resources available to perform the family role). However, where an individual's work role salience is substantially greater than their partner's, it is possible that each individual within the couple will allocate personal resources in fulfilling demands in the life role that is most important to their concept of self. That is, if an individual's partner places a lesser importance on their work role, then the partner is likely to possess greater personal resources to fulfil shared family responsibilities. As a consequence, the expectations and demands placed on an individual from their family role would diminish, reducing his/her experience of W-F conflict. Based on this rationale, the following hypotheses can be proposed:

H2: When the work role salencies of couples are incongruent, W-F conflict would increase as one's own work salience increase towards the partner's work role salience, decreasing when one's own work role salience exceeds the work role salience of the partner substantially.

H2a: When the work role salencies of couples are incongruent, time-based W-F conflict would increase as one's own work role salience increase towards the partner's work role salience, decreasing when one's own work role salience exceeds the work role salience of the partner substantially.

H2b: When the work role salencies of couples are incongruent, strain-based W-F conflict would increase as one's own work role salience increase towards the partner's work role salience, decreasing when one's own work role salience exceeds the work role salience of the partner substantially.

H2c: When the work role salencies of couples are incongruent, behaviour-based W-F conflict would increase as one's own work role salience increase towards the partner's work role salience, decreasing when one's own work role salience exceeds the work role salience of the partner substantially.

Hypothesis Three: Family Role Salience Congruence and F-W conflict

Most of the early work-family studies were exclusively concerned with investigating W-F conflict (Netemeyer et al., 1996). More recent work, it was noted above, has recognised the bi-directional nature of work and family conflict (Bakker et al., 2008; Greenhaus and Powell, 2003). In this context, the boundaries of work and family have been found to be

asymmetrically permeable (Eby et al., 2005; Rothbard and Edwards, 2003). That is, an individual will typically have greater flexibility and elasticity in demands and responsibilities arising from their family role compared with their work role. Given the relative rigidity of work boundaries, and the flexibility of family boundaries, where these two roles come into in conflict, individuals are more likely to sacrifice a family responsibility for a work responsibility than vice versa (Gutek et al., 1991).

Although empirical evidence supports W-F conflict to be greater than F-W conflict, again, the majority of these studies have been conducted at the individual-level. Consequently, these studies do not as yet provide a clear foundation on which relevant hypotheses can be generated at the couple-level. It is possible that crossover effects of family role salience on an individual's F-W conflict would not be as significant as crossover effects of work role salience on W-F conflict due to the asymmetric permeability of work and family boundaries. However, our limited knowledge of the relationship between family role salience and F-W conflict does not provide a clear basis to predict how these crossover effects might influence a couple's experiences of F-W conflict.

The following hypotheses (i.e. H3 and H4) in the F-W direction are, therefore, tentatively based on the positive correlation between role salience and the investment of personal resources in role performance utilised to generate H1 and H2.

H3: When the family role saliencies of couples are congruent, F-W conflict would be greater at higher levels of congruence than at lower levels of congruence.

H3a: When the family role salencies of couples are congruent, time-based F-W conflict would be greater at higher levels of congruence than at lower levels of congruence.

H3b: When the family role salencies of couples are congruent, strain-based F-W conflict would be greater at higher levels of congruence than at lower levels of congruence.

H3c: When the family role salencies of couples are congruent, behaviour-based F-W conflict would be greater at higher levels of congruence than at lower levels of congruence.

Hypothesis Four: Family Role Salience Incongruence and F-W conflict

Where an individual attaches less importance to their family role than their partner, it is likely that the individual's experience of F-W conflict will be lower than when the opposite holds true. That is, if an individual values his/her family role less than their partner, he or she is expected to invest a lesser amount personal resources in fulfilling family responsibilities than their partner. As a consequence, the individual would possess sufficient personal resources to fulfil work demands and hence unlikely to experience high levels of F-W conflict.

Where an individual's family role salience is greater than their partner's family role salience, then their experience of F-W conflict would be expected to increase due to the lack of personal resources to fulfil work demands. However, where an individual's family role salience is substantially greater than their partner's, it is possible that each partner

allocates personal resources to fulfil demands in the life role that is most important to their concept of self. In this instance, a couple is readily recognisable as the traditional breadwinner family, in which one of them is free to place a greater emphasis on their work, while the other is free to place a greater emphasis on family, without causing a heightened conflict between family and work. In this instance the higher family role salience of one individual, and the lower family role salience of their partner, provide a complimentary set of work and family demands in which the allocation of personal resources results in no crossover effects. Based on this rationale, the following hypotheses can be proposed:

H4: When the family role salencies of couples are incongruent, F-W conflict would increase as one's own family role salience increase towards the partner's family role salience, decreasing when one's own family role salience exceeds the family role salience of the partner substantially.

H4a: When the family role salencies of couples are incongruent, time-based F-W conflict would increase as one's own family role salience increase towards the partner's family role salience, decreasing when one's own family role salience exceeds the family role salience of the partner substantially.

H4b: When the family role salencies of couples are incongruent, strain-based F-W conflict would increase as one's own family role salience increase towards the partner's family role salience, decreasing when one's own family role salience exceeds the family role salience of the partner substantially.

H4c: When the family role salencies of couples are incongruent, behaviour-based F-W conflict would increase as one's own family role salience increase towards the partner's family role salience, decreasing when one's own family role salience exceeds the family role salience of the partner substantially.

Gender Differences in the Experience of Work and Family Conflict

Over the past three decades, a considerable effort has been directed towards investigating the relationship between gender and various aspects of work and family conflict. This body of work has, however produced inconsistent results (Lyness and Kropf, 2005). While some researchers have found no gender differences in the antecedents of work and family conflict (Duxbury and Higgins, 1991; Frone et al., 1992), other studies have reported significant differences (Gutek et al., 1991; Wallace, 1999).

Given a common perception that work and family conflict is largely a 'female problem', early research focused primarily on direct or main effects of gender on work and family conflict (Parasuraman and Greenhaus, 2002). A number of later studies, however, found significant effects of gender on work and family conflict when combined with spousal employment status (Gareis et al., 2003; Hochschild, 1990; Parasuraman, Greenhaus, Rabionowitz, Bedeian, and Mossholder, 1989), and parental status (Beatty, 1996; Friedman and Greenhaus, 2000). Based on these findings, Parasuraman and Greenhaus (2002) highlight the importance of investigating gender differences in conjunction with other established antecedents (i.e. role salience) of work and family conflict.

The basic premise of the hypotheses postulated above is that, at the individual-level, there exists a simple, main-effect relationship between role salience and work and family conflict. At the couple-level, however, an individual's experience of work and family conflict was hypothesised to be dependent on his/her own work and family role salencies, *and* those of the partner. These couple-level effects of work (family) role salience congruence/incongruence on W-F (F-W) conflict are expected to be different for men and women for three reasons: stagnant gender role expectations; differences in the permeability of work and family boundaries for men and women; and differences in the influence of their partner on men and women's work and family roles.

Stagnant Gender Roles

In Chapter One, it was noted that, notwithstanding significant changes in gender relations and women's participation in paid work, women are still generally found to be primarily responsible for the family role (Biggs and Brough, 2005; Frone and Yardley, 1996; Pocock, 2003; Streich et al., 2008). Although research has consistently found men and women both report placing a greater value on family roles, traditional gender role expectations continue to perpetuate traditional work and family roles for men and women (Gutek et al., 1991). Deeply entrenched norms around gender differences in work and family priorities have resulted in men and women being socialised, at least subconsciously, to attach a greater salience to their work and family roles, respectively (Frone and Yardley, 1996; Hochschild, 1990; Major, 1993; Streich et al., 2008). Consequently, women – especially those with childcare responsibilities – devote, on average, more time and other personal resources to their family role than men. Similarly men expend more of their personal resources in fulfilling work responsibilities than do women (Deutsch, 1999; Frone and Yardley, 1996; Gutek et al., 1991; Pocock, 2003). Even where men report placing a

relatively higher importance to their family role, the evidence indicates that they still devote less time and other personal resources in fulfilling family duties than do women (Biggs and Brough, 2005).

As noted in Chapter One, the number of women in paid work has increased significantly over the past three decades. In addition, working hours and the intensity of paid work has also increased considerably (Watson et al., 2003). These changes in paid work have increased the pressures placed on all workers with dependents, especially women. Despite not being able to meet work requirements of long hours and high workloads due to care responsibilities, women are measured against those who can, increasing the pressures placed on them to forgo family responsibilities in favour of work demands (Pocock, 2005). Due to the reciprocal nature of work and family conflict, at the individual-level, this increase in W-F conflict would in turn increase their experience of F-W conflict.

At the couple-level, men and women are expected to share responsibilities relating to both work and family roles. The degree to which an individual's partner contributes to fulfilling family responsibilities (i.e. a product of the importance attached to the family role) therefore, has a significant influence on an individual's experience of work and family conflict. However, men and women's investment (i.e. importance attached) in work and family roles have been found to be distinct. Due to their traditional breadwinner role, men's participation in fulfilling family responsibilities is expected to be significantly lower than that of women, who have been traditionally socialised into prioritising their carer role over the breadwinner role. Men are, therefore, expected to have greater personal resources at their disposal to meet increased demands from paid work than women (Hocshchild, 1990; Pocock, 2003). In addition, compared to women, men have also been found to

possess greater personal resources for life roles other than work and family (i.e. leisure) (Rothbard and Edwards, 2003). Men are, therefore, able to draw upon resources invested in other life roles to cope with changes in the demands placed on them by their family role compared to women. Traditional gender roles and the availability of personal resources for other life roles is expected to result in men being less reliant on their partner to cope with changes in their work or family roles. As a consequence, couple-level crossover effects of work (family) role salience on W-F (F-W) conflict are likely to be greater for women than men. This difference in the availability of personal resources between men and women are likely to influence the degree to which their work and family boundaries are permeable.

Permeability of Work and Family Boundaries

It was noted above that a number of researchers suggest that work and family boundaries are asymmetrically permeable (Rothbard and Edwards, 2003). The empirical evidence also indicate this maybe gender specific. For example, it has been shown that, highly educated women to undertake majority of the household and childrearing responsibilities, even when working in senior managerial positions (Burke and McKeen, 1994; Linehan and Walsh, 2000). Moreover, these women often attributed these conflicts to societal expectations of them as women and mothers, not their work role.

In a more recent study, Rothbard and Edwards (2003) report distinct gender differences in the permeability of role boundaries: women who reported an increase in the amount of time invested in their family role were also likely to report a decrease in time invested in their work role. However, no such effects were evident for men. Rothbard and Edwards suggest this reflects social norms of gender appropriate behaviour. That is, men appear to find the work boundary rigid and confer to the larger societal norm of paid work being

instrumental for satisfying material needs of an individual's family. However, they are less likely to sacrifice personal resources invested in paid work to accommodate changes in their family role (i.e. due to their traditional breadwinner role) (Hochschild, 1997; Zedeck, 1992). In contrast, women appear to find both the family and work boundaries to be equally flexible (i.e. due to their traditional carer role). As a consequence, women are more likely to reduce or reallocate personal resources invested in their work role to accommodate changes in the family role or vice versa. That is, women appear to treat work and family boundaries as *symmetrically* permeable (i.e. equal W-F and F-W conflict), while men are more likely to treat it as *asymmetrically* permeable (i.e. greater W-F than F-W conflict) (Rothbard and Edwards, 2003). Gender differences therefore, are found to be critical in determining how men and women allocate time and other personal resources between their work and family domains.

Influence of Partner on Work and Family Roles

Research conducted on a number of work and family outcomes have consistently found women to be more significantly influenced by their partner's work and family characteristics than are men (Eby et al., 2005). For example, marital status and spousal employment status have been found to influence women's career outcomes such as pay, promotion, and career satisfaction more so than men's. Furthermore, women in high managerial positions are found more likely to be in dual-earner relationships while their male counterparts are more likely to have a non-working spouse (Kirchmeyer, 1998; Lyness and Thompson, 1997; Therenou, 1999). As a consequence, women do not have the luxury of a full-time carer to fulfil childcare and other domestic responsibilities and experience greater levels of stress from competing work and family demands.

Lambert (1991) found that women's job satisfaction was positively influenced by their partner's job security, while no such results were found for men. Furthermore, she found women's job involvement to decrease as their partner's work hours increased while men's job involvement was positively related to their partner's work hours. Early studies undertaken by Beutell and Greenhaus (1982, 1983) found women to report greater levels of conflict if their work role salience was significantly different from their partner's work role salience. Furthermore, the number of children, partner's work role salience and traditional sex role attitudes were all found to be positively related to the number of conflicts experienced by women. In a later study, Beatty (1996) found spousal support to be negatively related to inter-role conflict, and positively related to both personal well-being and marital functioning for women.

Further evidence of gender differences in the effect of a partner's characteristics on an individual's experience of work and family conflict is found within *crossover research*. A number of studies conducted on crossover effects between partners have found crossover to be unidirectional than bidirectional (Hartel and Page, in press). For example, Westman et al. (2004) found husband's marital dissatisfaction to directly influence the wife's marital dissatisfaction, but no such effects were found in the other direction. In a sample of 60 working couples, Jones and Fletcher (1993) found that husbands' job demands and anxiety has a significance influence on their wives' anxiety and depression. Once again, no such relationship was found from the wife to the husband. Additional studies undertaken within the crossover research have found wives' burnout to be predicted by husbands' job insecurity (Westman, Etzion, and Danon, 2001), women to be more distressed due to issues relating to their husbands (Kessler and McLeod, 1984), and women's life satisfaction to be dependent upon their husbands' life satisfaction (Demerouti et al., 2005).

Centuries of deeply ingrained beliefs about the priority attached to women's carer roles and men's breadwinner roles may still determine the process in which dual-earner couples arrive at decisions on how they allocate time and other personal resources to their respective work and family roles (Major, 1993) and hence, their experience of work and family conflict. Based on the available evidence discussed above, couple-level crossover effects of role salience are likely to have a greater influence on women's work and family conflict than men's work and family conflict. From this observation, the following hypothesis can be posited:

H5: Couple-level crossover effects of work (family) role salience congruence/ incongruence between partners on W-F (F-W) conflict would be greater for women than men.

2.5 Conclusion

The extensive literature review undertaken in this chapter indicates that the existing knowledge on work and family conflict is considerable, but remains significantly limited due to the paucity of research undertaken in understanding couple-level effects. Based on the theoretical framework proposed by Greenhaus and Beutell (1985), the majority of work-family researchers have concentrated on individual-level linking mechanisms of *resource drain* and *negative spillover* to explore an individual's experience of work and family conflict. While this has provided a clear framework in understanding the different types of work and family conflict and the bi-directionality of it, the assumption of individuals as autonomous decision makers appears to be problematic. In particular, research carried out within marital dyads and crossover literature suggests an individual's decisions on the allocation of personal resources to work and family roles to be

significantly dependent upon their partner. That is, an individual's work and family values (i.e. allocation of personal resource for role performance) are found to both influence and be influenced by their partner's work and family values.

Based on this observation, the primary aim of this chapter was to extend the theoretical framework proposed by Greenhaus and Beutell (1985), by accommodating the effects of couple-level attributes on individual-level experiences of work and family conflict. In particular, a series of hypotheses were developed by applying the concept of *crossover* to predict the effects of both equal levels of role salencies (high and low congruence) and different levels of role salencies (incongruent) between partners within a couple on an individual's experience of work and family conflicts.

Originally developed within identity theory, the concept of role salience was defined as the level of importance an individual attaches to a given life role. While previous research has examined the influence of role salience on work and family conflict, these studies fail to acknowledge the true complexity surrounding the importance individuals place on their work and family roles. In particular, the majority of existing work-family research examine role salience as an individual-level construct rather than one that is influenced by significant others (i.e. partner) an individual interacts with.

An empirical examination of the hypotheses proposed in this chapter will contribute to existing work-family knowledge in two ways. First, it provides a more realistic assessment of the work and family conflict experienced by individuals in dual-earner relationships. Second, the influence of the importance an individual attaches to work and family roles on their experience work and family conflict can be understood at a more holistic-level.

In addition, this study makes a further contribution to work-family literature by hypothesising a gender effect on the relationship between crossover effects of work (family) role salience congruence/incongruence and an individual's W-F (F-W) conflict. While work-family researchers have consistently examined the effect of gender on the experience of work and family conflict, the majority focus on direct or main effects of gender. As a consequence, the role of gender in work and family conflict is not clearly understood. Rather than purely examining main effects of gender, this study hypothesise a gender effect on work and family conflict in conjunction with the higher order psychological construct of role salience. By doing so, the study enables work-family researchers to improve their knowledge on the complex role played by gender in determining an individual's work and family conflict.

The following chapter provides a discussion on the research design, methodology and analytical technique used in empirically testing the hypotheses proposed in this chapter.

3 METHODOLOGY

3.1 Introduction

In Chapter One, the growing importance of conflicts between work and family was identified as a major issue of concern for individuals, organisations and public policy. The reasons for the growing importance of this issue reflected changes in both the work and family domains witnessed in Australia over the past three decades. Having established its significance, Chapter Two then sought to place this study in the context of the existing research on work and family conflict. In doing so, a number of critical shortcomings were identified, most notably the paucity of work examining the experience of work and family conflict at the couple-level and the potential crossover effects of individual-level role saliences from one person to the other within a couple or dyad. Based on these shortcomings the theoretical framework generally deployed by work-family researchers was extended to account for couple-level crossover effects of the importance placed on work and family roles by individuals on their experiences W-F (F-W) conflict.

The aim of this chapter is to provide an overview of the study design and methodology used to test the research hypotheses established in Chapter Two. As discussed in more extensive detail below, the study design involves gathering survey data from individuals in a dyadic relationship (couples) with work and family responsibilities. For the purposes of analysis, these individual-level survey responses are matched at the couple-level. As will become apparent, this study designed presented significant challenges for the procedure of gathering data. The most significant of these problems was procuring a large enough sample of couples willing to complete matched surveys. Although the final sample size

was less than desirable, a sufficient sample of matched survey responses was gained to allow a detailed statistical analysis to be undertaken. Notwithstanding these issues, the study design allows for the use of polynomial regression analysis to test the hypotheses. While this technique has been used by organisational researchers for some time, it has not previously been used to explore the influence of couple-level attributes on work and family conflict experienced at the individual-level, making this study unique.

This chapter proceeds in four further sections. Section 3.2 outlines key aspects of the study design, including the procedure employed to collect data, and characteristics of the sample of couples completing the survey instrument. Section 3.3 provides a description of the measures used in the survey. Section 3.4 then provides an outline of the method of analysis, outlining the statistical properties of polynomial regression analysis and implications for interpreting the results. Finally, Section 3.5 provides a brief conclusion.

3.2 Study Design

Although the use of couple-level analysis is not widely found in the work and family literature, the need for such studies is well recognised by work and family researchers (Casper et al., 2007; Gareis et al., 2003; Parasuraman and Greenhaus, 2002; Yogeve and Brett, 1985). It should also be noted that the use of couple-level analyses is found more commonly in a number of related areas of research, such as marital dyads research (Fitzpatrick, 1988; Spanier, 1976); and person-environment (P-E) fit research (Colbert, Kristof-Brown, Bradley, and Barrick, 2008; Edwards and Parry, 1993; Edwards and Rothbard, 1999, 2005). Research from these fields highlight some unique challenges for the researcher seeking to gather quantitative data for the purpose of hypothesis testing on dyadic relationships. For example, it only requires one partner in a marital dyad to be

unwilling to participate to render the data invalid (Fitzpatrick, 1988). This is found to be especially true for dual-earner couples (Jones and Fletcher, 1993).

In order to redress the general lack of studies that explore work and family conflict at the couple-level, this study utilises a design that allows for an assessment of the degree of differences in role salience and the potential crossover effects of role salience from one member of a couple-dyad to the other. However, all of the data to be collected will be at the individual-level, including information about individual work arrangements, role salencies, family life, and so on. It will be recalled, the interest is in looking at the extent of congruence or incongruence in role salencies between individuals in a couple, and the extent to which these salencies crossover from one individual to the other and create work and family conflict. Thus while the unit of analysis is the couple-level, data are to be collected at the individual-level.

To do so, this study adopts a design that allows for the collection of data from individuals about themselves, and their work and family arrangements, which can then be *matched* at the couple-level. The aim of this section is to outline the procedure followed for the purpose of collecting the data and how a number of critical challenges in this process were addressed to ensure an adequate sample was achieved, both in terms of size and comparability.

Study Method

The overwhelming majority of studies on work and family conflict adopt a cross-sectional research design (Cinamon, 2006; Frone et al., 1992; Martins et al., 2002; Yang et al., 2000). The shortcomings of this approach are well known within the research methods

literature (see, for example, (Podsakoff, MacKenzie, Lee, and Podsakoff, 2003; Singleton and Straits, 2005; Spector, 2006; Tharenou, Donohue, and Cooper, 2007). Of critical importance is the inability to assert a cause-effect relationship where significant relationships are found in the data. A more specific concern for work and family researchers is the need for a longitudinal design to test the varying importance individuals place on their work and family roles at different stages of the life cycle (Kossek, Colquitt, and Noe, 2001).

While less than ideal, a number of researchers have recommended that this later concern can be minimised by collecting data on the number of children and the age of the youngest child for which a couple has responsibility. These variables, combined, provided an estimate of a couple's family cycle stage (Staines and Pleck, 1984; Yogev and Brett, 1985). This study also utilised a cross-sectional study design, in which both antecedent and outcome data are collected simultaneously. As recommended, the study design includes measures of the number of children and age of youngest child as proxies for life-cycle stage.

The data used in this study were gathered from a self-administered survey questionnaire. This was the most appropriate method of data collection for a number of reasons. At a practical level, a self-administered questionnaire was favoured as it presents the least expensive form of data collection; in the case of web-based electronic questionnaires, this holds especially true (Singleton and Straits, 2005). More importantly, the use of a survey questionnaire provides a number of important methodological advantages over other forms of data collection. First, it provides greater accessibility to a larger number of participants than other forms of survey methods, such as focus groups or one-on-one interviews, thus

ensuring a wider coverage of a sample population (Singleton and Straits, 2005). Second, self-administered survey questionnaires are more suited to research collecting sensitive information such as marital/relationship satisfaction (Jackson, 2008). Moreover, the greater assurance of anonymity and privacy provided by survey questionnaires has been found to encourage respondents to provide more honest responses rather than face-to-face forms of data collection (Chadwick, Bahr, and Albrecht, 1984). Third, the inclusion of established measures within a survey that have been more widely used allows for improved comparability with the findings of other work-family research. Specifically, the research design allows comparisons to be drawn on variables, correlations, and the level of significance reported in other work-family research.

Procedure

The survey for this study was distributed to potential participants in either paper form or via email, which then gave participants access to a web-based survey for completion. In both cases, participants were provided with an explanatory statement, which included a statement of the purpose of the study, an assurance of confidentiality and anonymity and details about how participants could access further information or voice concerns about the study (see Appendix A). In the case of paper-based surveys, participants were also provided with a replied paid envelope for the return of completed surveys. Prior to the administration of the survey, ethical approval from the Standing Committee on Ethics in Research Involving Humans (SCERH) of Monash University was obtained (see Appendix B).

Gathering data through matched surveys from couples is difficult for a host of reasons (Fitzpatrick, 1988). Gaining an adequate sample size from matched couple surveys is of

particular concern given the many ways in which the final sample can be reduced. First, a less than perfect response rate from the primary target person in the couple dyad (say, employees in a workplace) will reduce the final sample. It is expected that the response rate from a couple survey might be reduced where sensitive information is to be collected. Issues of relationship quality and conflict over work and family roles may present some degree of sensitivity, particularly for dual-earner couples working long hours. I therefore expected a lower response rate than might be otherwise achievable. This problem is then further exacerbated where a proportion of partners fail to complete the companion survey. Issues of time-pressure and sensitivity may again contribute to a reluctance to complete the survey. It was expected that the final response rate for matched surveys might be compromised due to this problem. Finally, where a partner is the first to complete the survey, but the primary target individual does not, it is again not possible to match the data and use that completed survey. All three of these problems proved to be an issue in this study.

Given these difficulties in collecting data from matched pairs of couples, it was decided to attempt to gather data from a number of sites, using different procedures to suit the context. Data was collected from four sources: from employees in a large Australian law firm; from parents within a school community; from parents with children attending a child care centre, and a convenience sample of individuals domiciled in Melbourne, Australia.

Law Firm Sample

Following an initial approach to the Law Firm via a senior employee in the firm, permission was gained from the Chief Executive Officer to distribute the survey to all employees. At the request of the firm, the data were to be collected using an on-line

survey, with the option of participants being sent a paper survey upon request. A draft survey containing all items to be included in each of the two surveys was provided to a representative of the firm assigned to liaise with the researchers involved in the administration of the survey. The firm was invited to review the draft and contribute further items of interest to the organisation. Some measures, such as job categories and income scales, were also finalised with the assistance of a firm representative assigned to liaise with the researcher. The firm representative also provided input into the final design of the on-line web site interface for collecting data.

Prior to inviting employees and their partners to participate in the study, copies of the two survey instruments, the explanatory statement, and a project proposal were provided to the firm's Executive Committee for approval. Once final approval was gained, the senior partner with responsibility for Equity and Diversity distributed a promotional email containing information about the survey and an endorsement from the Chief Executive Officer. Employees were then invited in a second email to participate in the study, along with their partners, by completing the on-line survey instruments or, if requested by completing and returning paper-based surveys. While employees were informed that the survey concerned work and family conflict and involved matching data from employees and their partners, individuals without partners were also encouraged to complete the survey.

Access to the on-line surveys was gained via a hyperlink contained in the body of the email. Once an employee or their partner gained access to the survey website, they were asked to read the explanatory statement prior to gaining access to either the employee or partner surveys. The first participant in each dyad was required to generate a 'unique

identifier', which would then be provided to their respective partner for survey completion. This unique identifier was utilised to match survey responses from employees and their partners. Each person was asked to complete a separate survey independently of their partner. In addition to the online survey, participants who preferred to complete a paper based version of the same online questionnaire were provided with hard-copy surveys on request. Reply paid envelopes were also provided with these paper based questionnaires.

The data collection from the Law Firm was conducted over a six week period in October/November, 2007. Surveys (both online and paper-based) were first made available to all staff on October 8, 2007, with an intended deadline of October 31. To maximise participation a number of reminder e-mails were sent out to all staff on the Monday of each week leading up to October 31. Due to the less than expected number of responses received, a decision was taken to extend the deadline of the survey by two weeks, in the hope of encouraging further responses. The closing date for both the online survey and paper based surveys was then re-set to November 16, which provided a six-week time period for the submission of completed questionnaires. The response rate remained low. Responses were received from 109 employees (out of 885), representing a response rate of approximately 12.32 per cent. Of these 109 employees, 40 responses were also received from their partners. From the 149 responses, only 24 resulted in 'matched pairs' of couples where both the employee and partner had completed the respective questionnaires completely. As such, the overall response rate was low, vindicating the decision to collect data from multiple sources.

Childcare Centre Sample

A Melbourne-based Childcare Centre was also approached to participate in the survey. Management of the Childcare Centre was provided with a project proposal, a copy of the survey and the explanatory statement. The information provided in these documents were similar to comparable documents provided to the Law Firm. As was the case with the Law Firm, the Childcare Centre was provided with an opportunity to add items of interest to the survey instrument.

Once the Centre's management was happy with the structure, length of the questionnaire and the overall project proposal, the method to distribute the questionnaires was addressed. In consultation with management, it was decided that the best method for collecting data from this group was using a paper based survey questionnaires. Management further advised that the best method to elicit a higher response rate is for the researcher to physically be present at the Childcare Centre and handout the questionnaire to parents as they attended to collect their child(ren).

Once the final form of the survey was determined, the researcher spent five weekday evenings distributing survey packs to parents willing to participate in the study. Each survey pack included two identical surveys, an explanatory statement, and a single reply paid envelope for return of the surveys. In addition to the reply paid envelope, a sealed drop-in box was placed at the childcare centre for parents to return completed surveys.

Data collection for the childcare centre commenced at the beginning of February 2008, with a four week period for the return of completed surveys. The survey packs were distributed in the first week of the month. Once again, to encourage participation and to

minimize the problem of non-respondents, parents were reminded to complete and return the questionnaires through distributed flyers and by the childcare centre staff. A final reminder note was sent out to all parents on the last Monday of February. Altogether 15 (out of 31) completed surveys were returned at a response rate of 48.39 percent. Of these, however, 3 of the returned surveys were either incomplete or contained only one survey.⁶

School Sample

A private primary school located in Melbourne was approached to participate in the study. The approach was made via a member of the research team with children attending the school. The school principal was provided with a project proposal, a copy of the questionnaire, and an explanatory statement, and asked to allow for the distribution of the survey and encourage parents to complete the survey. The school was offered the option of administering the survey as either a web-based survey (as in the case of the law firm), by distributing the surveys in survey packs (as in the case of the Childcare Centre), or, alternatively by distributing and returning the surveys electronically via email. On the advice of the School Principal, the surveys were distributed in paper form, using a similar procedure to that used to collect data in the Childcare Centre.

Once consent was obtained from the school principal to administer the surveys, parents were informed of the study through the inclusion of an item in the school's weekly newsletter, one week prior to distributing the survey packs. Parents were encouraged to contact the researcher regarding any questions about the study. Survey packs containing

⁶ When the childcare centre was initially approached it was made known to the researcher that the potential sample would be in excess of one hundred couples. However, a large majority of these couples did not want to participate in the study and hence did not even pick up a survey pack. As a consequence, the final sample pool was 31. A decision was made to include this rather small pool as they represented a demographic group (i.e. dual-earner couples with young children) who have been found to experience the most intense levels of conflict between competing work and family demands (Eby et al., 2005).

two copies of the survey, an explanatory statement, and a reply paid envelop were sent home to all parents through their child. Where a family had multiple children enrolled at the school, survey packs were distributed through the youngest child in each family.

Data collection for the school commenced in early April 2008, with a four week period for surveys to be returned. To encourage participation, reminder notices were distributed to all parents on the Monday of each week leading up to the final cut-off date. In contrast to the pattern of responses in each of the other two sites described above, a surge in the number of responses was recorded in the days immediately after the reminder notices were distributed. For this reason, a decision was taken to extend the deadline of the survey by a further week. The adjusted closing date for the survey provided a five-week time period for the submission of completed surveys. Altogether, the weekly reminders and the one-week extension resulted in 56 (out of 272) responses, representing a 20.6 percent response rate. Of these, only 41 were usable due to missing data or partner surveys.

Snowball Sample

By the end of data collection at this point, the overall sample stood at 77 pairs of matched couples, representing an aggregate response rate of 6.5 percent. The differences in response rate using the online version of the survey and the paper based surveys was considerable (12.32 percent compared with 23.4 percent, respectively). Given the low overall response rate and small sample size, a decision was taken to utilise a snowball sampling approach to augment the data already collected. Although not ideal, it should be noted that a number of work and family studies have used snowball sampling, either exclusively or combined with some other sampling techniques, to recruit participants (Allen and Armstrong, 2006; Blair-Loy, 2003; Jones and Fletcher, 1993; Lo, 2003; Martins

et al., 2002; Rajadhyaksha and Bhatnagar, 2000; Westman, Etzion, and Gortler, 2004).

Allen and Armstrong (2006) argue that, compared with targeting a single organisation, a snowball sample may provide a sample that is more representative of the target population as there is a greater probability of recruiting participants from a variety of occupations and organizations.

Following a procedure similar to that employed by Allen and Armstrong (2006), the social network of individuals known to the researcher were contacted and asked to distribute survey packs on to any friends or associates who were part of a couple with family responsibilities, and with at least one member in paid work.

Data collection for this group was conducted between February and May, 2008. Due to the lack of formal access, any reminders sent were verbally made through colleagues who distributed the survey packs. Altogether, 100 survey packs were distributed using the snowball sampling technique. Of these, 17 matched surveys were returned representing a response rate of 17.0 percent.

Sample Characteristics

The use of a variety of sample techniques was employed to enable an adequate sample to be compiled for statistical analysis. Although an adequate sample size was achieved, doing so may be at the expense of other characteristics of the sample. As a number of researchers have noted, utilising varied forms of non-random sampling (such as snowball sampling) has a number of potential disadvantages, including selection bias, unrepresentativeness, all of which limit the generalisability of any inferences drawn from that sample (Chadwick et al., 1984; Zikmund, 2003). However, both convenience and snowballing sampling is

expedient, cost effective, and less time consuming compared to other random sampling techniques. Moreover, in social science research convenience sampling is common, and more prominent than random sampling (Bryman, 2001).

Given these potential issues, a more detailed comparison between each of the subsamples was undertaken. It will be recalled above that this study relied on four sub-samples: employees from a large Australian law firm and their partners; parents with children at a Melbourne-based childcare centre; parents with children at a Melbourne-based school community; and respondents gained from a snowball sample. The demographic characteristics of each sub-sample are summated in Table 3.1.

The Law Firm Sample

The first sub-sample was recruited from employees of one large Australian law firm and their respective partners (N = 24). Research conducted by Wallace (1997, 1999, 2005, 2006) identifies lawyers as a group of workers who work long extended hours, usually more than 50 hours a week on average. Not surprisingly, Wallace found extended hours and high work demands were significant predictors of high levels of work and family conflict.

A number of other researchers have also highlighted an increase in the levels of work and family conflict reported by single- and dual-earner couples working in a range of other professional groups, such as accountants, consultants, architects, journalists and medical practitioners (Ahmad, 1996; Aryee, 1992; Bedeian et al., 1988; Lo, Wright, and Wright, 2003). Similarly, research which focuses on individuals in dual-earner relationships with parental responsibilities are generally found to experience higher levels of work and family

conflict compared with single-earner couples, irrespective of profession or occupation (Frone and Yardley, 1996; Greenhaus and Beutell, 1985; Rothbard, Phillips, and Dumas, 2005).

Following these researchers, a key motivation in surveying employees in the law firm was to gather data from both single and dual-earner couples employed in professional vocations.

The matched surveys of law firm employees and their partners were gained from 24 couples. On average, men from this group were 37.58 years old ($SD = 6.72$) and had completed an undergraduate degree. Women on average were 35.33 years old ($SD = 6.92$) and had also completed an undergraduate degree. Eighty-three percent of couples were married with the remainder in *de facto* living arrangements. All couples were responsible for at least one child; while on average a couple was responsible for two children. Thirty-seven percent of couples were responsible for at least one child under the age of 5 years.

Ninety-six percent of men and forty-six percent of women were employed on a full-time basis. On average, the men in the sample worked 51.69 hours per week ($SD = 11.56$ hours), compared with 30.25 hours per week ($SD = 17.15$ hours) for women in the sample. On average, men reported spending 20.35 hours per week ($SD = 18.40$ hours) on the domestic tasks of childcare, household chores, maintenance and grocery shopping, compared with 47.11 hours per week ($SD = 39.93$ hours) for women. Finally, the men in the sample reported an annual salary (before tax) of \$115,000 per year ($SD = 1.44$), compared with \$91,000 per year ($SD = 1.73$) for women.

Table 3.1: Demographic Characteristics by Sub-Sample

Characteristic	Law Firm (n = 24) Mean (SD)	Childcare Centre (n = 12) Mean (SD)	School (n = 41) Mean (SD)	Snowball (n = 17) Mean (SD)	TOTAL (n=94) Mean (SD)
<i>Age</i>					
<i>Men</i>	37.58 (6.72)	42.17 (7.61)	47.83 (8.11)	39.00 (6.69)	42.89 (8.65)
<i>Women</i>	35.33 (6.92)	38.42 (5.58)	45.00 (6.84)	35.35 (7.29)	39.95 (8.11)
<i>Education</i>					
<i>Men</i>	7.38 (2.14)	6.92 (1.44)	6.88 (2.20)	6.29 (2.62)	6.90 (2.18)
<i>Women</i>	7.21 (1.96)	7.17 (1.99)	7.07 (1.95)	7.88 (1.96)	7.27 (1.95)
<i>Work Hours</i>					
<i>Men</i>	51.69 (11.56)	43.42 (8.79)	44.82 (13.93)	47.50 (6.57)	46.92 (11.93)
<i>Women</i>	30.25 (17.15)	23.25 (13.67)	30.05 (18.19)	36.06 (14.72)	30.33 (16.90)
<i>Family Hours</i>					
<i>Men</i>	20.35 (18.40)	28.95 (14.02)	23.54 (25.88)	19.18 (18.70)	22.52 (21.39)
<i>Women</i>	47.11 (39.93)	52.35 (22.84)	48.72 (29.42)	39.41 (31.06)	46.91 (31.92)
<i>Income</i>					
<i>Men</i>	5.42 (1.44)	4.25 (1.54)	4.44 (1.93)	4.41 (1.58)	4.66 (1.74)
<i>Women</i>	3.96 (1.73)	3.17 (1.95)	2.74 (1.74)	2.50 (1.10)	3.08 (1.74)

Table 3.1: Demographic Characteristics by Sub-Sample (Cont...)

	Law Firm (<i>N</i> = 24)		Childcare Centre (<i>N</i> = 12)		School (<i>N</i> = 41)		Snowball (<i>N</i> = 17)		TOTAL (<i>N</i> = 94)	
Number of Children	<i>Frequency</i>	(%)	<i>Frequency</i>	(%)	<i>Frequency</i>	(%)	<i>Frequency</i>	(%)	<i>Frequency</i>	(%)
<i>None</i>	0	0.0	0	0.0	0	0.0	8	47.1	8	8.5
<i>One</i>	8	33.3	2	16.7	13	31.7	1	5.9	24	25.5
<i>Two</i>	6	25.0	9	75.0	20	48.8	7	41.2	42	44.7
<i>Three</i>	9	37.5	1	8.3	6	14.6	0	0.0	16	17.0
<i>Four</i>	1	4.2	0	0.0	2	4.9	1	5.9	4	4.3
Employment Status	<i>Frequency</i>	(%)	<i>Frequency</i>	(%)	<i>Frequency</i>	(%)	<i>Frequency</i>	(%)	<i>Frequency</i>	(%)
Men										
<i>Full-Time</i>	23	95.8	12	100.0	31	75.6	16	94.1	82	87.2
<i>Part-Time</i>	1	4.2	0	0.0	3	7.3	0	0.0	4	4.3
<i>Casual</i>	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<i>Unemployed</i>	0	0.0	0	0.0	1	2.4	0	0.0	1	1.1
<i>Other</i>	0	0.0	0	0.0	6	14.6	1	5.9	7	7.4
Women										
<i>Full-Time</i>	11	45.8	2	16.7	15	36.6	11	64.7	39	41.5
<i>Part-Time</i>	8	33.3	8	66.7	13	31.7	3	17.6	32	34.0
<i>Casual</i>	5	20.8	1	8.3	3	7.3	2	11.8	6	6.4
<i>Unemployed</i>	0	0.0	1	8.3	4	9.8	1	5.9	11	11.7
<i>Other</i>	0	0.0	0	0.0	6	14.6	0	0.0	6	6.4

The Childcare Centre Sample

The second group of the sample was recruited from parents of children enrolled at a Melbourne based childcare centre (N = 12). Numerous studies have examined the characteristics of the family domain as predictors of work and family conflict. Majority of these studies have consistently found conflict to be higher for those individuals who are responsible for dependent children, especially for those with very young children (Cinamon, 2006; Frone and Yardley, 1996; Huang et al., 2004; Kossek et al., 2001; Rothbard et al., 2005). Frone and Yardley (1996) found parents with children under the age of six to report greater levels of conflict, especially F-W conflict. The presence of young children at home was found to increase the amount of time devoted to childcare and domestic work. Following these researchers, data was collected from matched pairs of single and dual-earner couples with parental responsibilities.

On average, men from this group were 42.17 years old (SD = 7.61) and had completed an undergraduate degree. Women were, on average, 38.42 years old (SD = 5.58) and had also completed an undergraduate degree. Eighty-three percent of couples were married while the remainder were in *de facto* living arrangements. All couples were responsible for at least one child. On average a couple was responsible for two children. Ninety-two percent of couples were responsible for at least one child under the age of 5 years.

All men were employed on a full-time basis, compared with just 16.7 percent of women. On average, men worked 43.42 hours per week (SD = 8.79 hours) compared with 23.25 hours per week (SD = 13.67 hours) for women. Men, on average, spent 28.95 hours per week (SD = 14.02 hours) on the combined domestic tasks of childcare, household chores, maintenance and grocery shopping, compared with 52.35 hours per week (SD = 22.84

hours) for women. Finally, men on average earned \$91,000 per year (before tax) (SD = 1.54) and women \$65,000 (before tax) (SD = 1.95).

The School Community Sample

The third group of the sample was recruited from parents of a Melbourne-based school community (N = 41). Consistent with the previous two sources, matched pairs of couples were included in the final data set. The rationale for the selection of this group of respondents was the same as those recruited from the childcare centre. Similar to the childcare centre sample, it was expected that both single and dual-earner couples from the school would face high conflict between their work and family domains due to parental responsibilities.

On average, men from this group were 47.83 years old (SD = 8.11) and had completed an undergraduate degree. Women were, on average, 45 years old (SD = 6.84) and had also completed an undergraduate degree. Eighty-five percent of couples were married while the remainder were in *de facto* living arrangements. All couples were responsible for at least one child. On average, a couple was responsible for two children. Twenty-two percent of couples were responsible for at least one child under the age of 5 years.

Seventy-six percent of men and thirty-seven percent of women were employed on a full-time basis. On average, men worked 44.82 hours per week (SD = 13.93 hours) and women 30.05 hours per week (SD = 18.19 hours). Men on average spent 23.54 hours per week (SD = 25.88 hours) and women 48.72 hours per week (SD = 29.42 hours) on the combined domestic tasks of childcare, household chores, maintenance and grocery shopping. Finally,

men on average earned \$91,000 per year (before tax) ($SD = 1.93$) and women \$65,000 (before tax) ($SD = 1.74$).

The Snowball Sample

As noted earlier, the final group of the sample was drawn through the social network of individuals known to the researcher. Consistent with the overall selection criteria, survey packs were distributed to both married and *de facto* single and dual-earner couples. Unlike the previous three sources, the total population from which this sub-sample was recruited is unknown due to the difficulty in determining the total number friends and associates of individuals known to the researcher.

On average men from this group were 39 years old ($SD = 6.69$) and had completed a diploma. Women were, on average, 35.35 years old ($SD = 7.29$) and had completed an honours degree or graduate diploma. Fifty-nine percent of couples were married while the remainder were in *de facto* living arrangements. Forty-seven percent of couples did not have children. On average, those couples with parental responsibilities were responsible for at least one child. Twenty-four percent of couples were responsible for at least one child under the age of 5 years.

Ninety-four percent of men and sixty-five percent of women were employed on a full-time basis. Men worked 47.50 hours per week ($SD = 6.57$ hours) and women 36.06 hours per week ($SD = 14.72$ hours) on average. Men on average spent 19.18 hours per week ($SD = 18.70$ hours) and women 39.41 hours per week ($SD = 31.06$ hours) on the combined domestic tasks of childcare, household chores, maintenance and grocery shopping. Finally,

men on average earned \$91,000 per year (before tax) (SD = 1.93) and women \$65,000 (before tax) (SD = 1.74).

Total Sample

As noted earlier, the final sample for the thesis was drawn by combining the above sub-samples. The final sample consisted of 94 pairs of matched couples. On average men were 42.89 years old (SD = 8.65) and had completed an undergraduate degree. Women were, on average, 39.95 years old (SD = 8.11) and had also completed an undergraduate degree. Eighty percent of couples were married while the remainder were in *de facto* living arrangements. Nine percent of couples did not have children. On average, those couples with parental responsibilities were responsible for at least two children. Thirty-five percent of couples were responsible for at least one child under the age of 5 years.

Eighty-seven percent of men and forty-two percent of women were employed on a full-time basis. Men worked 46.92 hours per week (SD = 11.93 hours) and women 30.33 hours per week (SD = 16.90 hours) on average. Men on average spent 22.52 hours per week (SD = 21.39 hours) and women 46.91 hours per week (SD = 31.92 hours) on the combined domestic tasks of childcare, household chores, maintenance and grocery shopping. Finally, men on average earned \$115,000 per year (before tax) (SD = 1.74) and women \$65,000 (before tax) (SD = 1.74).

As can be seen from Table 3.1, although the final sample was drawn from four separate sources, the sample characteristics between the sub-samples were to a large degree similar. Across all four sub-samples, men (between 38 and 48 years) and women (between 35 and 45) were of middle age, indicating a similar life cycle stage. Furthermore, men were on

average older than women in all four groups. Both men and women from all groups had a similar level of educational attainment (i.e. minimum of a diploma or undergraduate degree). Men on average spent more hours in paid work per week while women spent more hours in unpaid domestic work per week across all sub-samples. Men on average earned \$25,000 (before tax) more per annum than women across all groups. On average, majority of couples from all sub-samples were responsible for at least one child indicating similarity in parental responsibility. Finally, across all groups more men were employed full-time than women.

Despite the largely similar demographic makeup of the four groups, a number of key differences were also found. First, men and women drawn from the Melbourne-based school community were the only sample in which both men and women were over forty years of age. Second, the difference between men and women's average weekly work hours in the law firm sample (i.e. 21 hours) was approximately double the number of hours in the snowball sample (i.e. 11 hours). Women from the childcare centre sample were the only group of women who on average spent more than 50 hours per week on fulfilling family responsibilities. This could be due to the greater responsibility held by these women for young children. In contrast, women from the snowball sample were the only group that spent less than 40 hours per week on unpaid family work. This finding might be due to almost half of the couples from the snowball group being childless. Finally, men and women from the law firm sample on average earned \$25,000 more per annum than the other three samples. The availability of greater income for the law firm couples could contribute to lower conflict between work and family domains as they are able to afford domestic help to fulfil family responsibilities.

However, despite these differences, the four sub-samples remain largely similar and hence unlikely to distort the findings of the current study. Furthermore, the study estimations control for the differences in work and family hours when examining the relationship between the role salience congruence/incongruence between partners and their experience of W-F and F-W conflict.

3.3 Measures

The questionnaire comprised of four sections, namely, background information (i.e. demographic details), work and family conflict (Carlson et al., 2000), organisational work-family culture (Thompson et al., 1999), and life role salience (Amatea, Cross, Clark, and Bobby, 1986). The items used for each of these measures and the response formats are presented in Appendix C. Apart from demographic variables, all independent and dependent variables were measured through multi-item scales rather than single-item measures to improve the validity and reliability (Hinkin, 1995). Moreover, all key constructs included in the survey questionnaire utilised measures with established reliability and validity, drawing on a diverse range of published studies in the work-family literature (Frone and Yardley, 1996; Rothbard et al., 2005)⁷.

⁷ The original instrument to measure work and family conflict developed by Carlson et al. (2000) and the instrument developed to measure life role salience by Amatea et al. (1986) used a five-point Likert-type scale ranging from strongly disagree (1) to strongly agree (5). For the purpose of this study, the response range of both these scale were adjusted to a seven-point Likert type scale ranging from strongly disagree (1), disagree (2), slightly disagree (3), neither agree nor disagree (4), slightly agree (5), agree (6) to strongly agree (7). The range was changed to obtain uniformity in all scales utilised in the survey questionnaire. For the life role salience scale an additional response of 'not applicable' (8) was included as an option for respondents who were neither married nor in a *de facto* relationship at the time of completing the survey (i.e. single individuals and single parents). Thompson et al.'s (1999) organisational work-family culture scale was measured using its original strongly disagree (1) to strongly agree (7) range.

Dependent Variables

The work and family conflict measure consisted of two main scales and six sub-scales with a total of 18 items developed by Carlson et al (2000). Carlson et al. (2000) report high reliability (Cronbach's α) for all scales (between .78 and .87), well above the generally accepted lower limit of .70 (Hair, Anderson, Tatham, and Black, 1998). Similarly, they report adequate discriminant validity for all sub-scales. Specifically, factor correlations from the confirmatory factor analysis conducted in their study ranged from .24 to .83, with only two correlations above .60. For this study, the two main scales comprised of overall W-F conflict (men: α = .85; women: α = .90) and F-W conflict (men: α = .81; women: α = .87). A sub-scale for time, strain, and behaviour based conflict in both directions resulted in six sub-scales:

W-F time-based conflict (men: α = .89; women: α = .82) was measured as the mean of three items, a sample item is: 'my work keeps me from my family activities more than I would like. *W-F strain-based conflict* (men: α = .87; women: α = .88) was measured as the mean of three items, a sample item is: 'when I get home from work I am often too exhausted to participate in family activities/responsibilities'. *W-F behaviour-based conflict* (men: α = .81; women: α = .83) was measured as the mean of three items, a sample item is: 'the problem-solving behaviours I use in my job are not effective in resolving problems at home'. *F-W time-based conflict* (men: α = .87; women: α = .84), was measured as the mean of three items, a sample item is: 'the time I spend on family responsibilities often interfere with my work responsibilities'. *F-W strain-based conflict* (men: α = .86; women: α = .93) was measured as the mean of three items, a sample item is: 'due to stress at home, I am often preoccupied with family matters at work'. *F-W behaviour-based conflict* (men: α = .80; women: α = .92) was measured as the mean of three items, a sample item is: 'the

behaviours that work for me at home do not seem to be effective at work' (see Appendix C for all items used).

Independent Variables

Role salience

Amatea et al. (1986) developed a 40 item Life Role Salience Scale (LRSS) to assess the personal expectations regarding occupational, marital, parental, and homecare roles of men and women. In Chapter Two it was noted that the salience attached to a given life role to be a product of the reward an individual accrues from participating in the role and the manner in which personal resources such as time, energy, and money are committed to the performance of the role (Amatea et al., 1986; Burke, 1991; Lobel, 1991; Stryker, 1968; Wiley, 1991). The LRSS measures the 'role reward' attributed to participation in a particular role and the intended level of 'commitment' of personal resources to the performance of that role. Amatea et al. (1986) report high reliability (between .79 and .94) for all sub-scales utilised in their study. Furthermore, no correlations between sub-scales were above .60 with the median correlation being .29, indicating adequate discriminant validity.

The original LRSS consists of eight sub-scales with each sub-scale comprising of 5 items. The sub-scales represented the role reward and role commitment dimensions of the higher order concept of role salience for the occupational, marital, parental, and homecare life roles. For the purpose of this study the two sub-scales for each dimension was combined into one comprising of 10 items, given that conceptually the two sub-dimensions collectively measure the higher order concept of role salience. The primary focus of the

thesis was to examine the relationship between work and family role salencies of matched pairs of couples on their experience of W-F and F-W conflict. Consequently, only the occupational and marital role scales were utilised in the analyses of the present study. The occupational salience scale was used to assess work role salience while marital role salience was used to assess family role salience⁸.

Work role salience (men: $\alpha = .80$, and women: $\alpha = .83$) was measured as the mean of 10 items, sample items include: ‘having work/a career that is interesting and exciting to me is my most important life goal’; ‘building a name and reputation for myself through work/a career is not one of my life goals’ (*reverse coded*); ‘I expect to make as many sacrifices as are necessary in order to advance in my work/career’; ‘I value being involved in a career and expect to devote the time and effort needed to develop it’ (see Appendix C for all items used) .

Family role salience (men: $\alpha = .74$, and women: $\alpha = .83$) was measured as the mean of 10 items, sample items include: ‘my life would seem empty if I never married or I’m not in an intimate relationship with someone I love’; ‘having a successful marriage/intimate relationship with the person I love is the most important thing in life to me’; ‘devoting a significant amount of my time to being with or doing things with a spouse/partner is not something I expect to do’ (*reverse coded*); ‘I expect to put a lot of time and effort into

⁸ Amatea et al. (1986) report a significant correlation between the role reward and role commitment sub-scales for all four life roles in their study. Later research undertaken by Chi-Ching (1995) and Rajadhyaksha and Bhatnagar (2000) using the LRSS scale also report high correlation between role reward and role commitment sub-scales. This study found men ($r = .62, p < 0.01$) and women’s ($r = .70, p < 0.01$) work role reward to be significantly correlated with their work role commitment. Similarly, the family role reward of both men ($r = .34, p < 0.01$) and women ($r = .50, p < 0.01$) were also found to be significantly correlated with their family role commitment. This provides further support for the interrelationship between role reward and role commitment sub-scales of men and women’s work and family domains.

building and maintaining a marital/intimate relationship' (see Appendix C for all items used).

It should be noted that Amatea et al.'s (1986) original scale items only examined respondent perceptions towards 'marriage'. Given the possible participation of couples who have never married nor intend to marry but are in committed *de facto* relationships, the items relating to family role salience were adjusted by including a reference to 'an intimate relationship' in addition to marriage.

Control Variables

Age

Individuals have been found to attach varying levels of importance to their work and family roles based on age (Judge, Cable, Boudreau, and Bretz, 1995; Veiga, 1983). In particular, individuals have been found to be willing to sacrifice family time to accommodate work responsibilities in the early stages of their work careers (Gordon and Whelan, 1998). As such, older workers are more likely to experience greater W-F conflict as they place a greater emphasis on leading a balanced life (Gordon and Whelan, 1998). Researchers have consistently used respondent age as a control variable in work-family studies to rule out alternative explanations in the dependent variable (Aryee and Luk, 1996; Frone et al., 1992; Martins et al., 2002; Schneer and Reitman, 2002). While some studies have found age to be negatively associated with work and family conflict (Gottlieb, Kelloway, and Fraboni, 1994; Kossek et al., 2001), others have not found any significant effects of age on the experience of work and family conflict (Allen, 2001; Aryee, Fields, and Luk, 1999; Thomas and Ganster, 1995). Following these researchers, this study

included respondent age as a single item control variable. Age was measured by asking respondents to report their age at the time of completing the survey questionnaire.

Work Hours

Research within the work-family framework has consistently found a positive relationship between the number of hours spent in paid work and the level of work and family conflict experienced (Burke, Weir, and Duwors, 1980; Eby et al., 2005; Greenhaus and Beutell, 1985; Gutek et al., 1991; Keith and Schafer, 1980; Pleck et al., 1980; Thomas and Ganster, 1995; Thompson et al., 1999). Specifically, numerous studies conducted on work-family issues over the past two decades have found the number of hours spent in paid work to consistently share a positive correlation with W-F conflict (Frone, Yardley et al., 1997; Hammer, Neal, Newsom, Brockwood, and Colton, 2005; Holahan and Gilbert, 1979; Lyness and Kropf, 2005). In their seminal study, Greenhaus and Beutell (1985) highlight work hours as a direct antecedent of work and family conflict through its negative impact on the time available for the family domain. In a study of managerial and professional employees, Thompson et al. (1999) found reduced work hours to correspond with lower levels of work and family conflict. These results once more are consistent with those found in previous studies conducted by Gutek et al. (1991) and Frone et al. (1997). Given the consistent empirical evidence supporting the proposition that working hours are likely to have a significant effect on the experience of work and family conflict, this study included a single item measure of work hours reported as the number of hours spent in paid work per week (including those brought home at night and/or weekends) by an individual.

Family Hours

The number of hours an individual engages in family responsibilities have also been found to be positively correlated with F-W conflict (Rothbard and Edwards, 2003). As noted in the previous chapter, where individuals attach a high salience to a certain life role, they are likely to invest more time in that role. While the majority of research has considered work hours as an antecedent of work and family conflict, fewer studies have investigated the impact of family time investment on F-W conflict (Hammer et al., 2005; Rothbard and Edwards, 2003). Rothbard and Edwards (2003) found family time investment to reduce work time investment thus resulting in F-W conflict. Similarly, Hammer et al. (2005) found the number of hours men and women spent per week caring for parents to be positively correlated with their partner's experience of W-F conflict. Consistent with these empirical findings, family time investment for this study was assessed as a composite measure of the total number of hours spent in household chores (i.e. cooking, laundry etc.), household maintenance (i.e. gardening, repairs etc.), childcare, eldercare, and shopping (i.e. for groceries and other household needs such as light bulbs, cleaning detergent etc.) per week.

Organisational Support

Family supportive organisational policies have been found to significantly reduce employee work stress (Bohen and Viveros-Long, 1981) and increase productivity and employee morale as well reduce accident rates, absenteeism, and employee turnover (Thomas and Thomas, 1990). However, despite the best efforts of organisations to introduce family supportive programs such as flexible work schedules, compressed work weeks, and maternity/paternity leave, employees are often reluctant to utilize such benefits (Galinsky, Bond, and Friedman, 1993; Perlow, 1995; Thompson, Thomas, and Maier,

1992). Friedman and Greenhaus (2000) argue family supportive policies and programs while being important do not necessarily result in reducing overall stress and work and family conflict for employees. According to them, it is the perceptions held by employees of how supportive the organisation's work-family culture is towards accommodating employee family responsibilities that determine the extent to which employees utilise such benefits. Unsupportive organisational work-family cultures may undermine even the best of formal policies designed to assist employees in balancing between competing work and family demands (Thompson et al., 1992).

To measure organisational work-family culture, this study employed the 20-item work-family culture scale developed by Thompson et al. (1999), which identifies three key components (i.e. sub-scales) of an organisation's work-family culture (i.e. managerial support, career consequences, and organisational time demands). They found both family supportive program availability and family supportive work-family culture to reduce employee experiences of work and family conflict. Given its focus on employee time commitment to his/her work role, this study uses the organisational time demands dimension of Thompson et al.'s scale (1999). Furthermore, this sub-scale has been shown to have a higher correlation with the different types of work and family conflict than the other two work-family culture sub-scales in this study. This may reflect a number of issues. First, most modern organisations are characterised by intensified work schedules and long work hours (Pocock, 2003; Watson et al., 2003). Second, organisations have been found to utilise 'face time' or the number of hours an employee spends physically at work as a measure of employee commitment (Bailyn, 1993; Perlow, 1995). As a consequence, organisational time demand expectations have a significant bearing on the time available for employees to satisfy family responsibilities.

The organisational time demands sub-scale ($\alpha = .89$ for both men and women) consisted of four items, sample items include: ‘to get ahead at this organisation, employees are expected to work more than 50 hours a week, whether at the workplace or at home’ (*reverse coded*); ‘employees are often expected to take work home at night and/or on weekends’ (*reverse coded*) (see Appendix C for all items used).

3.4 Method of Analysis

Reliability and Validity

All of the measures used in testing the hypotheses postulated in Chapter Two were established measures with evidence of adequate reliability and validity. All summated scale values used in the analyses were constructed consistent with the procedures outlined in the original studies. Scale items were used in their original form apart from where noted different. As reported earlier, all of the scales used in the present study had an acceptable level of reliability for both men ($\alpha = .74$ to $.89$) and women ($\alpha = .82$ to $.93$) which was above the generally agreed upon lower limit of $.70$ for confirmatory research (Hair et al., 1998). In addition, adequate discriminant validity was reported for all scales in the original studies.

Hypothesis Testing

It will be recalled from Chapter Two, the primary aim of this study is to examine the relationship between the salencies partners’ place on their respective work (family) roles and their experience of W-F (F-W) conflict. Specifically, the thesis aims to investigate the crossover effects of congruent/incongruent work (family) role salencies between partners on men and women’s W-F (F-W) conflict. Given these relationships are hypothesised at

the couple-level, it was necessary to utilise an analytical technique that allowed testing to be done at the level of the couple-dyad.

Difference Scores

Founded on person-environment (P-E) fit research, Edwards (1993, 2002, 2007) provides an extensive discussion of two techniques that could be used to test hypotheses based on the congruence/incongruence between two constructs as a predictor of outcomes. The first technique utilizes a 'difference' score between two constructs to predict outcomes. For example, where X and Y correspond to two component measures, a difference score is represented by the value obtained through $(X - Y)$. Typically difference scores consist of algebraic, absolute, or squared difference between two measures or the sum of absolute or squared differences between profiles of measures (Edwards, 2002; Edwards and Parry, 1993). Difference scores are widely used in organisational research to measure the extent of congruence (i.e. fit, similarity, or agreement) between two constructs as a predictor of outcomes (Chatman, 1989; Fleenor, McCauley, and Brutus, 1996; French, Caplan, and Harrison, 1982; Kristof, 1996). Notwithstanding its widespread use in organisational research, difference scores have been found to possess a number of significant methodological limitations (Edwards, 2002).

First, difference scores have been found to be less reliable than either of their component measures. That is, where X and Y represent the two component measures constituting the difference and are positively correlated (usually the case in congruence research), the reliability of the algebraic difference between X and Y is often less than the reliability of either X or Y (Edwards, 2002). Second, difference scores are inherently ambiguous due to combining measures of two conceptually distinct elements into a single score. As a

consequence, difference scores obscure the contribution of each element to the overall score (Edwards, 1993). Furthermore, by combining two conceptually heterogeneous elements into a single score, difference scores reduce an inherently three-dimensional relationship (i.e. X and Y on outcome Z) to two dimensions ((X-Y) on outcome Z). As a result difference scores have been found to discard information and oversimplify the relationship between the two constructs and the outcome (Edwards, 1993).

Finally, difference scores have been found to impose a number of constraints on the relationship between the two component measures and the outcome. For example, in the case of the present study, where X and Y represent the husband's and wife's work saliencies, Z represents the husband's overall W-F conflict, and e represents a random disturbance term, using the difference score technique the following equation can be used to test the hypothesis (H1) postulated in Chapter Two:

$$Z = b_0 + b_1 (X - Y) + e. \quad (1)$$

According to the above equation the difference between X and Y is positively related to Z (i.e. b_1 is positive). Expanding this equation provides the following:

$$Z = b_0 + b_1 X - b_1 Y + e. \quad (2)$$

This expansion indicates that Equation 1 implies a positive relationship between X and Z and a negative relationship between Y and Z. Therefore, using an algebraic difference score as a predictor has the effect of constraining the coefficient on X and Y where they are equal in magnitude but opposite in sign (i.e. $b_1 = -b_1$).

While the above equation used an algebraic difference as a single predictor, research has also used absolute or squared difference between two measures or the sum of squared or absolute differences between profiles of measures to test dyadic-level relationships (Edwards, 2002). The constraints imposed on the estimation when using a squared difference score can be identified by using a similar process. For example, the following equation uses a squared difference score as a predictor:

$$Z = b_0 + b_1(X - Y)^2 + e. \quad (3)$$

Expanding this equation yields the following expression:

$$Z = b_0 + b_1X^2 - 2b_1XY + b_1Y^2 + e. \quad (4)$$

Thus, a squared difference score effectively implies positive coefficients of equal proportion on both X^2 and Y^2 along with a negative coefficient twice as large in absolute magnitude on XY . Furthermore, the equation uses curvilinear (X^2 and Y^2) and interactive terms (XY) without appropriate constituent terms (X and Y) (Aiken and West, 1991; Cohen, 1978). Using this squared difference score imposes four constraints: (1) the coefficient on X is 0; (2) the coefficient on Y is 0; (3) the coefficients on X^2 and Y^2 are equal; and (4) the coefficients on X^2 , XY , and Y^2 add up to 0 (Edwards and Parry, 1993). Edwards (2002) asserts that the above constraints imposed by difference scores in Equations 1 and 3 result in inaccurate regression coefficients concealing substantial differences in the effects of the components on the outcome.

By relaxing the constraints imposed by the squared difference score in Equation 4, and including the corresponding lower order terms, the following polynomial regression estimation provides a better alternative to test hypotheses based on the congruence/incongruence between two components as a predictor of outcomes:

$$Z = b_0 + b_1X + b_2Y + b_3X^2 + b_4XY + b_5Y^2 + e. \quad (5)$$

This equation enables the researcher to overcome the methodological limitations of difference scores outlined above. Furthermore, the inclusion of higher-order quadratic terms (X^2 , XY , and Y^2) in addition to the component terms (X and Y) allows hypotheses to be developed and empirically tested for both linear as well as curvilinear crossover effects of role salience congruence/incongruence between partners on their experience of work and family conflict.

Polynomial Regression Analysis

Given the serious problems introduced in estimating effects using difference scores, Edwards and others have advocated the use of polynomial regression analysis and response surface methodology as an alternative to differences scores (Edwards, 1993, 2002; Edwards and Parry, 1993; Edwards and Shipp, 2007). Polynomial regression is founded upon three principles. First, rather than viewing the congruence between two constructs as a single score – as with the difference score approach – a polynomial approach explicitly assumes that it should be viewed as the association between the constructs in a two-dimensional space. Based on this approach, perfect congruence ($Y = X$) or perfect incongruence ($Y = -X$) are not a point, but instead a line along which the component

measures are either equal or unequal. This allows the researcher to capture the extent and direction of congruence/incongruence in addition to the absolute levels of the constructs.

Second, the relationship between the crossover effects of congruence/incongruence on an outcome should not be viewed in a two-dimensional space, as with the difference score approach, but, as a three-dimensional surface mapping the two constructs to the outcome. This allows the researcher to test the effect on the outcome where perfect congruence/incongruence could be obtained at either the high or low end of the scale (Edwards, Caplan, and Harrison, 1998).

Third, as noted earlier, the constraints imposed on the estimation by a difference score approach should be treated as hypotheses to be tested empirically. It will be recalled that these constraints included an implicit assumption that the X and Y constructs used to construct the difference score have an equal but opposite effect on the outcome variable. Similarly, an estimation equation that uses a squared difference score (i.e. Equation 4) also imposes a number of constraints that should be empirically tested. Without testing these constraints, the conceptual model upon which the difference score is based on cannot be validated.

Basic Assumptions of Polynomial Regression

Polynomial regression analysis requires three assumptions to be satisfied before being employed in estimating the relationship between the crossover effects of congruence/incongruence of two component measures (e.g. each partner's work salience) and an outcome variable (e.g. men's W-F conflict). First, the two component measures should be conceptually related and express the components in terms of the same content dimension

(Caplan, 1987; Graham, 1976). Examples of such measures used in other dyadic research employing polynomial regression analysis include preferred and perceived work-home segmentation (Kreiner, 2006); self and other ratings of performance (Atwater, Ostroff, Yammarino, and Fleenor, 1998); and supervisor and subordinate ratings of organizational goals (Colbert et al., 2008). Commensurate measures are necessary to ensure the conceptual relevance of the two component measures to one another. More importantly, it enables the researcher to meaningfully interpret the nature of the relationship between the two component variables used to construct the congruence measure and any outcome variable (Edwards, 2002).

The second assumption requires both constructs to be measured using the same numerical scale. This allows the researcher to accurately determine the degree of congruence/incongruence between the two construct variables, and to compare the relative magnitude of the coefficient estimates (Edwards, 2002).

The third assumption, like any application of regression analysis, requires all measures to be at the interval or ratio level and the component measures to contain no measurement error. The coefficient estimates are found to be biased upward or downward as component measure reliability decreases. This problem is found to be particularly acute for higher-order terms used in quadratic equations, such as Equation 5.

The first two of these assumptions were satisfied; however, third assumption was only partially satisfied. Edwards (2002) asserts that this assumption is rarely satisfied as measures used in most social science research contain some degree of measurement error, and an appropriate decision rule is to determine whether the measurement error is of

magnitude likely to influence the estimation. While all measures were at the interval level, the component variable measures did contain some measurement error. However, given the reliability of all component measures was above .70, measurement error for the current study was not severe in any of the regression analysis. Consequently, the use of polynomial regression analysis and response surface methodology to assess the hypotheses was deemed appropriate.

Application of Polynomial Regression Analysis

While polynomial regression can be applied in an exploratory manner, it is primarily suited for confirmatory research (Edwards, 2002). That is, in most studies in which polynomial regression has been used, hypotheses to be tested by the quadratic equation (Equation 5) have been classified *a priori* (Colbert et al., 2008; Edwards, 2002; Kreiner, 2006; Kristof-Brown and Stevens, 2001). In instances where theory is not sufficiently developed to derive hypotheses *a priori*, polynomial regression may be used in an exploratory manner (Edwards, 2002).

The confirmatory procedure of polynomial regression commences by selecting a conceptual model of congruence/incongruence and identifying the equivalent regression equation. As noted earlier, the use of higher-order terms in addition to the component terms within the quadratic equation (i.e. Equation 5) captures both linear as well as curvilinear effects on the outcome variable based on the crossover effects between the two independent component variables. Furthermore, the quadratic equation allows the researcher to test the changes in the surface shape along the lines of perfect congruence ($Y = X$) and perfect incongruence ($Y = -X$) by examining the surface relating to the quadratic equation (Edwards, 2002).

Once the appropriate equation is selected and tested, four conditions need to be met to obtain support for the proposed model: variance explained by quadratic equation differs from zero; the coefficients follow the projected pattern, where coefficients expected to have nonzero values differ from zero and have the correct sign; constraints relating to the model are met; and the variance explained by the set of higher order terms in the equation does not differ from zero.

The first condition is assessed using a simple omnibus test to establish that the equation explains variance in the outcome. The second condition confirms the general form of the model (e.g. W-F conflict is maximised rather than minimised along the line of perfect congruence) and ensures that the model constraints are not satisfied due to all coefficients being near zero. The third condition establishes whether the relative size of the coefficients match up to the proposed model. The fourth and final condition ensures the proposed model does not understate the complexity of the joint crossover effects of the two components on the outcome variable (Edwards, 2002).

Interpreting Estimation Coefficients Using ‘Response Surface Methodology’

While simply inspecting the signs and magnitudes of coefficients from linear equations is relatively straightforward, coefficients from quadratic equations are often difficult to interpret, particularly when they deviate from the pattern implied by the squared difference, as is usually the case. When coefficients from a quadratic equation (i.e. Equation 5) do not follow the pattern corresponding to the squared difference (i.e. Equation 4), the joint relationship of two component measures with an outcome variable cannot be adequately depicted in two dimensions, but instead must be viewed as a three-dimensional surface (Edwards and Parry, 1993).

To facilitate an easier interpretation of coefficients relating to quadratic equations, Edwards and colleagues introduce ‘response surface methodology’ as an analytical tool for describing and investigating the essential features of surfaces corresponding to quadratic equations (Edwards, 2002; Edwards and Parry, 1993; Edwards and Rothbard, 1999; Edwards and Shipp, 2007; Edwards and Van Harrison, 1993). Response surface methodology is comprised of a collection of procedures for measuring and interpreting the effect two component terms would have on an outcome variable. It allows the relationship between two component measures and an outcome variable along the lines of perfect congruence ($Y = X$) and perfect incongruence ($Y = -X$) to be represented in a three-dimensional space. This surface plot along with essential statistical information, allows for an easier interpretation of the estimation coefficients and relationships between variables.⁹

A number of key features of surfaces relating to polynomial regression equations are examined through the use of response surface methodology. Surfaces corresponding to a quadratic equation such as Equation 5 can take one of three curvilinear forms: concave (i.e. the surface is dome-shaped); convex (i.e. the surface is bowl-shaped); and saddle (i.e. the surface is saddle-shaped).

For each form of surface, three key features are analysed through response surface methodology: the stationary point (i.e. the point at which the slope of the surface is zero in all directions); the principal axes of the surfaces that run perpendicular to one another and intersect at the stationary point (i.e. these explain the overall direction of the surface in

⁹ The use of response surface methodology is said to be appropriate for the study of congruence/incongruence for two principal reasons. First, the use of difference scores was found to have a number of methodological limitations. Furthermore, limited empirical evidence is found for studies employing difference scores to survive confirmatory analyses (Edwards, 1994; Edwards and Parry, 1993; Edwards and Van Harrison, 1993). Second, a central principle of polynomial regression is to conceptualise the effects of two component terms on an outcome in a three dimensional space. Therefore, in order to test hypotheses based on dyadic crossover effects, it is necessary to focus on the surface as a whole.

relation to the X,Y plane); and the shape of the surface along the lines of perfect congruence ($Y = X$) and perfect incongruence ($Y = -X$).

Although, the stationary point and principal axes provide additional information regarding the effect of the two component terms on the outcome variable, investigating the shape of the surface along the lines of perfect congruence and perfect incongruence is sufficient to statistically test the hypotheses developed in the previous chapter (Atwater et al., 1998; Edwards and Rothbard, 1999). Given the nature of the hypotheses postulated in Chapter Two, therefore, this study only focuses on the last of these three features.

An outcome that is hypothesised to minimize or maximize along the line of perfect congruence implies a surface that is flat along the $Y = X$ line. The shape of the surface along this line can be analysed by substituting X for Y in Equation 5:

$$\begin{aligned} Z &= b_0 + b_1X + b_2X + b_3X^2 + b_4 X^2 + b_5X^2 + e. \\ &= b_0 + (b_1 + b_2)X + (b_3 + b_4 + b_5)X^2 + e. \end{aligned} \quad (6)$$

Equation 6 implies the slope of the $Y = X$ line equals $(b_1 + b_2)$ at the point $X = 0$ (and, by construction $Y = 0$), and the curvature along the line equals $(b_3 + b_4 + b_5)$. If either of these values differs significantly from zero, the hypothesis that the surface is flat along the $Y = X$ line is rejected (Edwards and Parry, 1993).

A hypothesis that predicts an outcome that increases on either side of the point of perfect fit implies a surface that is U-Shaped along the $Y = -X$ line, and flat at $Y = X$, its turning point (i.e. where $Y = -X$ line intersects $Y = X$ line). The shape of the surface along this line can be analysed by substituting $-X$ for Y in Equation 5:

$$Z = b_0 + b_1X - b_2X + b_3X^2 - b_4X^2 + b_5X^2 + e.$$

$$b_0 + (b_1 - b_2)X + (b_3 - b_4 + b_5)X^2 + e. \quad (7)$$

The value of $(b_3 - b_4 + b_5)$ can be used to analyse the curvature of the surface along the $Y = -X$ line. If the value is negative, the surface is curved downward along the $Y = -X$ line. If the value is positive, the surface is curved upward. If the value of $(b_1 - b_2)$ equals zero, the surface is flat at the point X and Y both equal zero. Together, these results can be used to test the hypothesised maximised or minimised effects on the outcome along the $Y = -X$ line (Edwards and Parry, 1993).

3.5 Conclusion

The aim of this chapter was to outline the research methodology to be used to test the hypotheses developed in Chapter Two. Unlike the majority of work-family studies, this study employed a dyadic-level research design to capture the crossover effect of work (family) role salience congruence/incongruence between couples on their experience of W-F (F-W) conflict (Allen, 2001; Frone, 2000; Gutek et al., 1991; Huang et al., 2004). Data were collected through the combination of an online survey questionnaire and self-administered paper-based survey questionnaires. The final sample for the study was mainly drawn from three different organisations that agreed to participate in the study: a large law firm, a childcare centre, and a school. In addition to this, a snowball sample was also recruited through the researcher's social network. Numerous steps were taken to ensure an adequate response rate despite an overall low response rate and consequent small sample.

All measures used in the study were drawn from well established, reliable and valid scales. To further ensure the accuracy of the measures, reliability analyses were run for all

independent and dependent variables for both men and women. Finally, the steps taken to test the research hypotheses were outlined. Specifically, a detailed discussion was provided on polynomial regression analysis and response surface methodology. A quadratic equation (i.e. Equation 5) was proposed to test each dependent variable (e.g. W-F conflict) for men and women based on the crossover effects of their work and family role saliencies. Hierarchical multiple regression analyses were undertaken to determine the effects of these quadratic equations. The following chapter will present the analytical procedure undertaken in greater detail to assess the research hypotheses postulated in Chapter Two.

4 RESULTS

4.1 Introduction

In Chapter Two, the work and family conflict literature was reviewed and, based on an extension of the standard framework used to explore the causes and consequences of work and family conflict, a number of testable hypotheses were developed. These hypotheses allow for an assessment of the relationship between the relative importance attached to work and family roles of individuals within a dyad and their experience of work and family conflict. In particular a number of hypotheses were established predicting the potential crossover effects at the couple-level. Chapter Three then outlined the data collection and estimation technique employed to test these hypotheses. Here it was established that the most appropriate method for testing the hypotheses was polynomial regression analysis. The aim of this chapter is twofold: first, it will describe the procedures employed to ensure the data meet the conditions required for multivariate analysis; and, second, to report the results of the polynomial regression analysis used to test the hypotheses.

The chapter consists of three further sections. Section 4.2 reports the preliminary assessment of the data. This assessment was undertaken to ensure the data met the assumptions required for multivariate analysis. Section 4.3 then presents the results of the polynomial regression analysis used in the study to evaluate the hypotheses. Section 4.4 draws together in summary form the key results relating to each of the hypotheses tested in the analysis. The final section, Section 4.5 then draws conclusions. These conclusions will then form the basis for the discussion chapter that follows.

4.2 Data Assessment

Prior to undertaking any preliminary statistical analysis, the raw data files were screened to minimise alternative findings due to inaccurate data entry and/or missing values. This procedure involved two steps. First, the data were double-checked with the original web-based and paper-based survey questionnaires for consistency. Minor errors in data entry were found through this method and were corrected accordingly. Second, univariate descriptive statistics of all variables were examined to determine the percentage of missing values as well as those values that did not fall within a possible response range (e.g. 1-7).

All continuous variables were found to possess means and standard deviations (SD) within a plausible range (e.g. 1-7). Data were also screened for missing values. No categorical variables were used in the analyses for both men and women¹⁰. For men, of the 17 continuous variables, ten variables had missing data (between 2.1 percent to 19.1 percent), while the remaining seven variables had no missing data. For women, all but one of the 17 continuous variables had missing data (between 1.1 percent to 16.0 percent). Tabachnick and Fidell (2001) advocate no more than 5 percent missing data in multivariate analysis. For both men and women, only organisational support had more than 5 percent missing data (19.1 and 16.0 percent, respectively). All other variables had 5 percent or less missing data. Although missing values for the organisational support variable was above the specified lower limit of 5 percent, this was found to be random rather than in a systematic pattern. Given the high correlation found between organisational support and men and women's W-F and F-W conflict, a decision was made to include organisational support as

¹⁰ As all outcome variables (i.e. W-F and F-W conflict) for both men and women were tested separately, gender was not used within the analysis. Preliminary analysis undertaken did not indicate any significant impact of parental or marital status (i.e. married or de facto) on an individual's W-F and F-W conflict. As such, categorical variables were not included within the final analysis. These variables were measured to determine the sexual status of couples (i.e. gender to determine heterosexual and homosexual couples), and due to the findings of previous empirical research undertaken within the work-family framework (i.e. where marital and parental status have been found to be significant predictors of work and family conflict).

a control variable with inferences drawn from the analyses being subject to careful interpretation. Consistent with guidelines provided by Pallant (2005), and due to the small sample size, pairwise deletion was adopted in dealing with missing data for this study. Following this initial data screening, the data were assessed for the assumptions imposed by multivariate analysis to determine whether it was appropriate to employ polynomial regression analysis. This assessment is generally recommended to ensure the reliability and validity of inferences drawn from the multivariate analysis.

Testing for Multivariate Assumptions

Ordinary least squares regression analysis makes a number of assumptions about the characteristics of the data used in the analysis (Hair et al., 1998). These assumptions are: The data include no outlier observations, which might disproportionately influence the estimates of coefficients; the independent or explanatory variables are independent (i.e., an absence of multicollinearity); dependent variables are normally distributed; homoscedasticity, where dependent variables exhibit equal levels of variance across the range of predictor variables; and the linearity of the data. The procedure for assessing whether the data met these assumptions followed guidelines recommended by Tabachnick and Fidell (2001), although the assumption of linearity was not determined. This reflected the expectation of *non-linear* relationships among variables.

Outliers

Once missing data were investigated and addressed, all variables were tested for potential outliers. Hair et al. (1998, p. 64) define outliers as “observations with a unique combination of characteristics identifiable as distinctly different from the other observations.” Two forms of outliers were tested within the current study: univariate

outliers (i.e. an extreme value on a single variable) and multivariate outliers (i.e. combinations between two or more variables that are distinct from the remainder of the sample). Outliers are found to have a significant influence on multivariate analyses through effects on regression coefficients and standard errors, as well as the overall variance explained (R^2). That is, even where a case may be only moderately extreme on component terms X and Y separately, the product of these values (e.g. XY) may result in an extreme value which can create spurious effects or mask *a priori* hypothesised effects (Cohen, Cohen, West, and Aiken, 2003).

Outliers were identified using a number of commonly recommended procedures. First, histograms, box plots, and normal probability plots were all visually inspected. This visual inspection indicated the presence of outliers for a number of variables. This visual inspection was therefore augmented with a more systematic test for outliers. Tabachnick and Fidell (2001) recommend that cases with z-scores exceeding ± 3.29 ($p < .001$) should be identified as potential outliers. For men, forty cases were found to be univariate outliers.

Specifically, twenty-five cases were found with z-scores above this criterion on work hours, family hours, the squared term of work salience, the squared term of family salience, and the product term of family salience between men and women. Ten cases were identified with z-scores below this criterion on work hours and family role salience. For women, fifteen cases were found to be univariate outliers. All outliers had a z-score score above this criterion on the squared term of work salience, the squared term of family salience, and the product term of family salience between women and men. Following the procedure recommended by Hutcheson and Sofroniou (1999), cases with outlying values

on the above variables for both men and women were altered to one unit larger (or smaller) than the next most extreme value in the distribution.

In addition to investigating univariate outliers, the presence of multivariate outliers was assessed using the Mahalanobis distance measure ($p < .001$). Four cases were identified as multivariate outliers. These cases were not seen as outliers in the previous univariate outlier analyses indicating that they are not distinctive to one single variable but unique in combination. Although extreme values were found on a small number of cases, no values were extreme on a sufficient number of variables to be considered as unrepresentative of the population. Observations detected as multivariate outliers appeared to be sufficiently similar to the remaining observations and thus were retained in the polynomial regression analyses (Hair et al., 1998).

Normality

Once data were explored for missing values and outliers, tests were undertaken to check for normality and homoscedasticity of the data. Normality of the data were tested by estimating the extent of skewness and kurtosis in the data (Tabachnick and Fidell, 2001). Both the skew and kurtosis statistics were computed by dividing the raw value by the standard error (Hair et al., 1998). Tharenou, Donohue and Cooper (2007) suggest that for a normal distribution, the skewness and kurtosis values should not exceed ± 2 and ± 5 respectively. The skew and kurtosis values for men did not violate the critical value of ± 5 for any of the dependent variables, and none were severely skewed. Mild to moderate skewness was detected in time-based W-F conflict and strain-based F-W conflict for men. However, visual inspection of histograms and normal probability plots for the same

variables revealed no major deviation from normality. Consequently, it was determined that transformation to these variables was not required (Tabachnick and Fidell, 2001).

None of the dependent variables for women violated the critical values for skewness and kurtosis, thus meeting the assumption of normality. Furthermore, a visual inspection of histograms and normal probability plots further provided evidence of normality. That is, the normality assumption was satisfied for women as well.

Homoscedasticity

Data is found to be homoscedastic when the variance of the error terms (e) appears constant over a range of predictor variables (Hair et al., 1998). The homoscedasticity of variables were tested through an inspection of bivariate scatterplots (i.e. graphs plotting the independent variable on one axis and dependent variable on the other) and scatterplots of standardised residuals and standardised predicted values produced from the regression equations. The bivariate scatterplots for both men and women were generally oval-shaped, indicating they did not violate the assumption of homoscedasticity (Tharenou et al., 2007). The scatterplots produced from the regression equations were roughly distributed in a rectangular shape with the majority of the scores concentrated in the centre along the 0-axis point (Pallant, 2005). Results from both the bivariate and regression equation scatterplots indicated no violation of the assumption of homoscedasticity and therefore transformation of values was not necessary.

Multicollinearity

Lastly, all variables were tested for an absence of multicollinearity. When two (or more) variables are found to be highly correlated, multicollinearity is said to exist (Tharenou et al., 2007). Bivariate correlations that are greater than .70 are found to be problematic when employing a multivariate technique such as polynomial regression analysis (Tabachnick and Fidell, 2001). Multicollinearity is found to raise both logical and statistical problems. First, including redundant variables in a regression analysis tend to inflate error terms, effectively weakening the robustness of the analysis. Second, extreme cases of multicollinearity (for example, where two or more independent variables are perfectly correlated; i.e. $r = \pm 1$), can result in unstable and improbable regression coefficient estimates (Tabachnick and Fidell, 2001). Furthermore, high correlations between two or more independent variables make it difficult to interpret the importance of a given predictor on an outcome variable due to confounded effects between the predictors (Hair et al., 1998). To investigate the presence of multicollinearity, a Pearson correlation analysis was conducted.

The correlations matrix produced by the analysis is presented in Table 4.1. Few cases appear to be highly correlated. The age of women was found to be highly correlated with the age of the youngest child for both men and women ($r = .76, p < 0.01$), and the age of men ($r = .89, p < 0.01$). No other variables were found to possess correlations above .70. Hair et al. (1998) recommends the deletion of one or more redundant variables from the multiple regression equation to eradicate multicollinearity.

While no data were missing within the age variable for both men and women, almost 1/5 of data were missing from the age of the youngest child variable for both. Therefore, a

decision was taken to omit the latter variable from the polynomial regression analyses for both men and women to reduce the impact of missing values on the inferences drawn from the analyses. As none of the regressions included the age of men and women as independent variables together, the high correlation between these two variables did not violate the assumption of multicollinearity.

In addition to Pearson correlation analyses, both Hair et al. (1998) and Pallant (2005) recommend the use of tolerance levels and variance inflation factors (VIF) to detect multicollinearity. Tolerance represents the “amount of variability of the selected independent variable not explained by the other independent variables” (Hair et al., 1998, p. 193). The VIF represents the inverse of tolerance (i.e. $1/\text{tolerance}$), and measures the effect of other independent variables on the standard error of a regression coefficient. A tolerance value less than .10 and a VIF value greater than 10 indicates multicollinearity. Apart from the age of women and the age of the youngest child, the tolerance of the independent variables for all regression analyses ranged from .41 to .83 (for both men and women), which was well above the critical value of .10. Similarly, for both men and women the VIF values did not exceed 2.83, well below the cut-off point of 10 (Hair et al., 1998). Therefore, as identified through Pearson correlation analyses, only two variables, namely, the age of women and the age of the youngest child were found to be highly correlated. Consequently, in order to meet the assumption of multicollinearity, the omission of the age of the youngest child variable from the subsequent polynomial regression analyses was justified.

In summary, the findings of the preliminary analyses satisfied the necessary assumptions of an absence of outliers and multicollinearity, normality and homoscedasticity for

multivariate analyses. Once these assumptions were met, it was appropriate to employ polynomial regression analyses and response surface methodology to test the hypotheses postulated in Chapter Two. The next section describes the procedure taken in testing these hypotheses.

Table 4.1: Means, Standard Deviations, and Correlations of all Variables

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10
1) Time W-F M.	4.71	1.60	(0.89)									
2) Strain W-F M.	3.85	1.49	.62***	(0.87)								
3) Behav W-F M.	3.80	1.29	.20	.31**	(0.81)							
4) Time F-W M.	3.45	1.46	.35***	.30**	.18	(0.87)						
5) Strain F-W M.	2.61	1.19	.25*	.36***	.19	.42***	(0.86)					
6) Behav F-W M.	3.70	1.19	.23*	.28**	.72***	.20	.15	(0.80)				
7) W-F M.	4.12	1.13	.82***	.85***	.61***	.36***	.35***	.51***	(0.85)			
8) F-W M.	3.25	0.92	.39***	.44***	.49***	.80***	.73***	.60***	.57***	(0.81)		
9) Time W-F W.	3.46	1.60	-.16	-.01	.16	-.01	-.02	.22*	-.01	.08	(0.82)	
10) Strain W-F W.	3.85	1.77	-.01	.04	.20	.12	.07	.17	.09	.16	.72***	(0.88)
11) Behav W-F W.	3.42	1.44	-.06	.05	.30**	.16	.12	.24*	.11	.24*	.46***	.53***
12) Time F-W W.	4.20	1.70	.11	-.03	.03	.17	.05	-.05	.05	.09	.21	.32**
13) Strain F-W W.	3.00	1.58	.05	-.06	.16	.03	.15	.07	.06	.11	.29**	.47***
14) Behav F-W W.	3.32	1.40	.04	.08	.23*	.21*	.12	.27**	.14	.28**	.36***	.49***
15) W-F W.	3.56	1.36	-.08	.04	.25*	.09	.07	.24*	.08	.18	.86***	.90***
16) F-W W.	3.50	1.21	.10	.00	.17	.17	.14	.11	.11	.20	.36***	.55***
17) Age M.	42.89	8.65	.06	-.13	-.10	-.12	-.08	-.18	-.12	-.18	.12	.13
18) Youngest M.	6.60	5.49	.03	.09	.12	-.01	.19	.04	.07	.10	.35**	.26*

Table 4.1: Means, Standard Deviations, and Correlations of all Variables (cont...)

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10
19) W-Hours M.	46.92	11.93	.56***	.44***	.22*	.19	.09	-.24*	.55**	.24*	-.04	-.05
20) F-Hours M.	22.52	21.39	.06	-.07	-.14	.26*	.02	-.01	-.06	.14	.04	.14
21) Org Support M.	4.46	1.53	-.41***	-.52***	-.18	-.38***	-.01	-.27*	-.49***	-.32**	.11	.10
22) Age W.	39.95	8.11	-.01	-.10	-.03	-.05	-.01	-.13	-.06	-.09	.13	.12
23) Youngest W.	6.58	5.47	-.03	.09	.11	.00	.18	.03	.06	.09	.35**	.25*
24) W-Hours W.	30.33	16.90	-.24*	.06	.05	.03	.09	.15	-.07	.11	.54***	.42***
25) F-Hours W.	51.81	40.58	.12	-.13	-.06	.09	-.10	-.07	-.02	-.03	-.23*	-.24*
26) Org Support W.	3.83	1.57	-.29**	-.15	-.14	-.28*	-.01	-.11	-.26*	-.20	-.43***	-.41***
27) W-Salience M.	4.20	0.88	.22*	.27*	.09	.20	.09	.04	.26*	.16	-.11	-.04
28) F-Salience M.	5.64	0.73	.05	.12	.06	-.04	.05	.18	.10	.08	.08	-.05
29) W-Salience W.	4.13	1.00	-.03	.11	.03	-.03	.14	.11	.04	.10	.03	.02
30) F-Salience W.	5.16	1.03	.06	.05	.07	-.17	-.11	.13	.08	-.08	.14	-.10
31) W-Salience M. (SQ)			.10	.10	.03	.00	.12	.20	.10	.14	.24*	.23*
32) W-S-M_on_W-S-W			-.14	-.11	.05	.13	-.01	.18	-.09	.14	.19	.06
33) W-Salience W. (SQ)			-.21*	-.13	.09	-.10	-.06	.12	-.13	-.03	.26*	.20
34) F-Salience M. (SQ)			.07	.04	.05	.05	-.10	.07	.07	.01	-.03	-.05
35) F-S-M_on_F-S-W			.01	.02	.25*	.00	-.18	.14	.11	-.02	.03	.02
36) F-Salience W. (SQ)			-.14	-.16	.01	-.13	-.18	-.05	-.14	-.17	-.04	.04

Table 4.1: Means, Standard Deviations, and Correlations of all Variables (cont...)

Variable	Mean	SD	11	12	13	14	15	16	17	18	19	20
11) Behav W-F W.	3.42	1.44	(0.83)									
12) Time F-W W.	4.20	1.70	.21*	(0.84)								
13) Strain F-W W.	3.00	1.58	.40***	.44***	(0.93)							
14) Behav F-W W.	3.32	1.40	.82***	.27**	.44***	(0.92)						
15) W-F W.	3.56	1.36	.77***	.29**	.47***	.64***	(0.90)					
16) F-W W.	3.50	1.21	.60***	.77***	.82***	.71***	.59***	(0.87)				
17) Age M.	42.89	8.65	.12	.23*	.12	.10	.14	.20				
18) Youngest M.	6.60	5.49	.29*	-.10	.12	.27*	.37***	.13	.63***			
19) W-Hours M.	46.92	11.93	-.04	-.15	-.15	-.07	-.04	-.16	-.18	-.03		
20) F-Hours M.	22.52	21.39	.13	.41***	.21	.14	.10	.33**	.06	-.28*	-.20	
21) Org Support M.	4.46	1.53	.13	-.01	.22	.13	.14	.14	.13	.11	-.38***	-.11
22) Age W.	39.95	8.11	.19	.28**	.13	.15	.16	.25*	.89***	.76***	-.13	.11
23) Youngest W.	6.58	5.47	.28*	-.11	.13	.27*	.36***	.12	.64***	1.00***	-.03	-.29*
24) W-Hours W.	30.33	16.90	.15	-.06	.10	.05	.45***	.04	.03	.37***	-.13	.01
25) F-Hours W.	51.81	40.58	-.14	.34***	-.04	-.10	-.28*	.09	-.08	-.63***	.20	.31**
26) Org Support W.	3.83	1.57	-.32**	-.46***	-.09	-.26*	-.46***	-.37***	-.02	.05	-.25*	-.30
27) W-Salience M.	4.20	0.88	-.05	.21*	.02	-.03	-.07	.10	-.06	.02	.17	-.08
28) F-Salience M.	5.64	0.73	-.16	-.07	-.07	-.16	-.04	-.13	-.17	-.04	.13	-.06

Table 4.1: Means, Standard Deviations, and Correlations of all Variables (cont...)

Variable	Mean	SD	11	12	13	14	15	16	17	18	19	20
29) W-Saliency W.	4.13	1.00	-.01	.05	-.07	-.03	.02	-.01	-.04	.09	-.01	-.02
30) F-Saliency W.	5.16	1.03	-.16	-.10	-.07	-.18	-.02	-.14	-.07	.10	.20	-.33**
31) W-Saliency M. (SQ)			.23*	-.06	.13	.22*	.28**	.11	-.07	.13	.14	.11
32) W-S-M_on_W-S-W			.11	.05	.09	.04	.14	.07	-.06	.05	-.15	.06
33) W-Saliency W. (SQ)			.07	-.05	.16	.09	.22*	.08	-.05	.21	-.15	-.13
34) F-Saliency M. (SQ)			.08	-.05	-.06	.02	.00	-.04	-.07	-.16	.00	.04
35) F-S-M_on_F-S-W			.16	.02	.06	.18	.08	.11	-.09	-.10	-.09	.00
36) F-Saliency W. (SQ)			.09	-.05	.11	.08	.01	.04	.14	.08	-.17	.06

Table 4.1: Means, Standard Deviations, and Correlations of all Variables (cont...)

Variable	Mean	SD	21	22	23	24	25	26	27	28	29	30
21) Org Support M.	4.46	1.53	(0.89)									
22) Age W.	39.95	8.11	.16									
23) Youngest W.	6.58	5.47	.11	.76***								
24) W-Hours W.	30.33	16.90	-.09	-.01	.38***							
25) F-Hours W.	51.81	40.58	-.11	-.05	-.63***	-.59***						
26) Org Support W.	3.83	1.57	.38**	-.05	.06	-.05	.20	(0.89)				
27) W-Salience M.	4.20	0.88	-.20	-.05	.01	-.09	.03	-.12	(0.80)			
28) F-Salience M.	5.64	0.73	-.17	-.15	-.04	.17	.01	-.23*	-.03	(0.74)		
29) W-Salience W.	4.13	1.00	-.12	-.07	.08	.36***	-.19	.00	.29**	.01	(0.83)	
30) F-Salience W.	5.16	1.03	-.08	-.12	.10	.01	-.06	-.10	-.01	.39***	-.10	(0.83)
31) W-Salience M. (SQ)			-.09	-.08	.12	.17	-.15	-.12	-.25*	.14	.07	.05
32) W-S-M_on_W-S-W			.03	-.09	.05	.11	-.06	-.06	.14	.09	.03	.18
33) W-Salience W. (SQ)			.20	-.05	.22	.14	-.23*	.11	.04	.08	-.14	.19
34) F-Salience M. (SQ)			.04	-.11	-.16	-.17	-.02	-.02	-.07	.20	-.16	.05
35) F-S-M_on_F-S-W			-.06	-.13	-.10	.04	-.04	.08	.03	.07	-.12	.06
36) F-Salience W. (SQ)			.07	.08	.08	.05	-.04	.16	-.13	.12	.03	-.11

Table 4.1: Means, Standard Deviations, and Correlations of all Variables (cont...)

Variable	Mean	SD	31	32	33	34	35
31) W-Salience M. (SQ)							
32) W-S-M_on_W-S-W			.22*				
33) W-Salience W. (SQ)			.13	.47***			
34) F-Salience M. (SQ)			.19	.23*	.04		
35) F-S-M_on_F-S-W			-.11	.12	.03	.50***	
36) F-Salience W. (SQ)			.00	.10	-.01	.29**	.46***
*** $p < 0.001$ ** $p < 0.01$ * $p < 0.05$							

Note: Cronbach Alphas are shown in parenthesis where appropriate

M.: Men; **W.:** Women; **W-F:** work-to-family conflict; **F-W:** family-to-work conflict; **Behav:** behaviour-based conflict; **Youngest:** age of youngest child; **W-Hours:** work hours; **F-Hours:** family hours; **Org Support:** organisational support; **W-Salience:** work role salience; **F-Salience:** family role salience; **W-Salience M./W. (SQ):** work salience of Men/women²; **F-Salience M./W. (SQ):** family salience of men/women²; **W-S-M_on_W-S-W:** work role salience of men X work role salience of women; **F-S-M_on_F-S-W:** family role salience of men X family role salience of women

Procedure for Hypotheses Testing

The guidelines provided by Hair et al. (1998) were followed to satisfy the number of observations necessary for hierarchical regression analyses. While a desired ratio of 15 to 20 observation per independent variable is suggested by Hair et al. (1998), a ratio of 5 observation per independent variable is considered as the minimum ratio acceptable. A ratio of 10.44 respondents per independent variable was found for all hierarchical regression analyses for the present study, which was higher than the minimum threshold outlined by Hair et al. (1998).

Following the procedures outlined by Edwards (1993), Atwater, Ostroff, Yammarino, and Fleenor (1998) and Kreiner (2006) employed two-step and three-step hierarchical regression models to test quadratic equations similar to Equation 5 outlined in the previous chapter. In this equation Z represent an outcome (e.g. men's W-F conflict), X (e.g. men's work role salience) and Y (e.g. partner's work role salience) represent two component terms, and e represents a random disturbance term.

$$Z = b_0 + b_1X + b_2Y + b_3X^2 + b_4XY + b_5Y^2 + e. \quad (5)$$

While Atwater et al. (1998) did not include any control variables in their model, Kreiner (2006) included a number of demographic variables using a three-step hierarchical regression model. Following the procedure used by Kreiner (2006), hierarchical regressions were computed for each outcome variable (e.g., W-F and F-W conflict of men and women) where all control variables were regressed in the first step (Model 1); the main

effects (i.e. X and Y) of work (family) role salencies of men and women in the second step (Model 2); and the higher order terms (X^2 , XY , and Y^2) in the third step (Model 3).

As advocated by Edwards and Parry (1993), each of the independent variables and control variables used in the analyses were mean-centred to improve the interpretations of the surface plots. Thus, the value '0' represents the mean value for the particular variable within the corresponding surface plots. In addition to assisting the interpretation of surface plots, this procedure reduces multicollinearity between independent and control variables (Cohen et al., 2003). Support for each model was measured by satisfying the four conditions (see application of polynomial regression analysis in previous chapter) advocated by Edwards (2002).

4.3 Estimation Results

The slopes and curvatures of the $Y = X$ and $Y = -X$ lines for each of the dependent variables for both men and women are reported in Table 4.2. Tests of the shape of a surface along the $Y = X$ and $Y = -X$ lines involves tests of linear combinations of regression coefficients (Edwards, 2002). Following the procedure outlined by Edwards (2003), the statistical software package SYSTAT was used to test the significance of the slope (a_1 and x_1 in Table 4.2) and curvature (a_2 and x_2 in Table 4.2) along the $Y = X$ (i.e. perfect role salience congruence) and $Y = -X$ (i.e. perfect role salience incongruence) lines for all dependent variables.

The results of hierarchical regression analyses testing the crossover effects of work role salience congruence/incongruence between partners on men and women's W-F conflict are presented in Tables 4.3 and 4.4. The results for the crossover effects of family role salience congruence/incongruence between partners on men and women's F-W conflict are presented in Tables 4.5 and 4.6.

Table 4.2: Slopes along Lines of Interest

Dependent Variable	Y = X		Y = -X	
	a ₁ (b ₁ + b ₂)	a ₂ (b ₃ + b ₄ + b ₅)	x ₁ (b ₁ - b ₂)	x ₂ (b ₃ - b ₄ + b ₅)
Men				
W-F Conflict	0.17 [*]	0.01	0.29 ^{**}	0.21
Time: W-F	0.14	-0.16	0.56 ^{**}	0.12
Strain: W-F	0.33 ^{**}	-0.01	0.33 ^{**}	0.41
Behaviour: W-F	0.04	0.20	-0.04	0.10
F-W Conflict	-0.02	-0.04	0.26 [†]	-0.16
Time: F-W	-0.33	0.10	0.09	0.04
Strain: F-W	0.04	-0.36	0.48	-0.10
Behaviour: F-W	0.23 [†]	0.14	0.17	-0.40
Women				
W-F Conflict	-0.18	0.50 ^{**}	-0.06	0.64 [*]
Time: W-F	-0.30	0.69 ^{***}	0.00	0.67 [†]
Strain: W-F	-0.14	0.46 ^{**}	-0.20	1.04 ^{**}
Behaviour: W-F	-0.10	0.40 [*]	0.02	0.20
F-W Conflict	-0.43	0.19	0.19	-0.53
Time: F-W	-0.46	0.18	0.30	-0.38
Strain: F-W	-0.24	0.08	0.16	-0.28
Behaviour: F-W	-0.56 [†]	0.28	0.08	-0.80

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

Note: Men's experience of W-F (F-W) conflict was regressed on the men's (X) and women's (Y) work (family) salience and the related higher order quadratic terms controlling for the men's age, work hours, family hours, and organisational support.

Note: women's experience of W-F (F-W) conflict was regressed on the women's (X) and men's (Y) work (family) salience and the related higher order quadratic terms controlling for the women's age, work hours, family hours, and organisational support.

Men

- $b_1 =$ unstandardized weights for men's work (family) salience
- $b_2 =$ unstandardized weights for women's work (family) salience
- $b_3 =$ unstandardized weights for men's work (family) salience-squared
- $b_4 =$ unstandardized weights for the cross-product of men and women's work (family) saliences
- $b_5 =$ unstandardized weights for the women's work (family) salience-squared

Women

- $b_1 =$ unstandardized weights for women's work (family) salience
- $b_2 =$ unstandardized weights for men's work (family) salience
- $b_3 =$ unstandardized weights for women's work (family) salience-squared
- $b_4 =$ unstandardized weights for the cross-product of women and men's work (family) saliences
- $b_5 =$ unstandardized weights for the men's work (family) salience-squared

Table 4.3: W-F Conflict of Men

Independent Variable	Dependent Variable											
	<u>W-F Conflict</u>			<u>Time-Based Conflict</u>			<u>Strain-Based Conflict</u>			<u>Behaviour-Based Conflict</u>		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Constant (B0)	4.10	4.10	4.05	4.70	4.71	4.77	3.82	3.82	3.72	3.77	3.77	3.65
Age M.	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	-0.01	-0.01	-0.01
Work Hrs M.	0.06***	0.05***	0.05**	0.10***	0.09***	0.09***	0.05*	0.05*	0.04†	0.02	0.02	0.02
Fam. Hrs M.	0.00	0.00	0.00	0.02	0.02	0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
Org. Support M.	-0.24**	-0.23**	-0.23**	-0.22†	-0.21†	-0.19	-0.41***	-0.39***	-0.38***	-0.12	-0.11	-0.13
X		0.17	0.23		0.25	0.35†		0.22	0.33		0.04	0.00
Y		-0.04	-0.06		-0.16	-0.21		0.04	0.00		0.01	0.04
X ²			0.11			0.17			0.20			-0.04
XY			-0.10			-0.14			-0.21			0.05
Y ²			0.00			-0.19			0.00			0.19
R	0.62	0.64	0.64	0.62	0.64	0.65	0.59	0.60	0.62	0.28	0.28	0.30
R ²	0.39	0.41	0.41	0.38	0.40	0.42	0.35	0.36	0.38	0.08	0.08	0.09
F	10.59***	7.32***	4.80***	10.35***	7.23***	4.96***	8.75***	6.14***	4.18***	1.37	0.90	0.70
ΔR ²	0.39	0.02	0.01	0.38	0.02	0.02	0.35	0.02	0.02	0.08	0.00	0.02
ΔF	10.59***	0.87	0.26	10.35***	1.00	0.65	8.75***	0.95	0.54	1.37	0.03	0.35

Note: All values were rounded to two decimal places, and therefore coefficients with the same rounded value may not be equally significant, M. = Men.

X = Work Role Salience of Men

Y = Work Role Salience of Women

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

Table 4.4: W-F Conflict of Women

Independent Variable	Dependent Variable											
	<u>W-F Conflict</u>			<u>Time-Based Conflict</u>			<u>Strain-Based Conflict</u>			<u>Behaviour-Based Conflict</u>		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Constant (B0)	3.55	3.56	3.16	3.46	3.47	3.02	3.84	3.85	3.36	3.41	3.41	3.17
Age W.	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03
Work Hrs W.	0.03**	0.03**	0.03**	0.05***	0.05***	0.05***	0.04**	0.04**	0.04**	0.00	0.00	0.00
Fam. Hrs W.	-0.01	-0.01	0.00	0.00	0.00	0.00	-0.01	-0.01	0.00	-0.01	-0.01	-0.01
Org. Support W.	-0.41***	-0.42***	-0.41***	-0.41***	-0.42***	-0.42***	-0.46***	-0.46***	-0.46***	-0.32**	-0.33**	-0.30**
X		-0.17	-0.12		-0.25	-0.15		-0.24	-0.17		-0.02	-0.04
Y		-0.09	-0.06		-0.13	-0.15		-0.03	0.03		-0.12	-0.06
X ²			0.35 [†]			0.46*			0.49 [†]			0.05
XY			-0.07			0.01			-0.29			0.10
Y ²			0.22			0.14			0.26			0.25
R	0.66	0.67	0.71	0.68	0.70	0.74	0.59	0.60	0.64	0.41	0.42	0.45
R ²	0.43	0.45	0.50	0.46	0.49	0.55	0.34	0.36	0.41	0.17	0.17	0.20
F	12.60***	8.76***	6.85***	14.18***	10.25***	8.19***	8.69***	5.97***	4.66***	3.53**	2.26*	1.74 [†]
ΔR ²	0.43	0.02	0.05	0.46	0.03	0.06	0.34	0.01	0.05	0.17	0.01	0.03
ΔF	12.60***	1.04	2.11	14.18***	1.75	2.57 [†]	8.69***	0.70	1.66	3.35**	0.23	0.75

Note: All values were rounded to two decimal places, and therefore coefficients with the same rounded value may not be equally significant, W. = Women.

X = Work Role Salience of Women

Y = Work Role Salience of Men

*** $p < .001$ ** $p < .01$ * $p < .05$ [†] $p < .10$

Response surfaces used to test the hypotheses were created through the use of an Excel spreadsheet program acquired from Jeffrey Edwards¹¹. Beta weights for each dependent variable were entered into the polynomial regression equation for numerous combinations of men and women's work (family) role salience scores. Through this procedure, an outcome value is computed for each possible value of men and women's work (family) role salencies. In keeping with the procedures outlined by Edwards and Parry (1993), the unstandardized weights were then used to plot the three-dimensional surface corresponding to each regression equation. Protocols outlined by Edwards and Parry (1993) for mathematically identifying important features of these surfaces were followed in interpreting the regression analyses results in conjunction with the surface plots. Previous research undertaken in self-other agreement (Atwater et al., 1998), person-organisation fit (Kristof-Brown and Stevens, 2001), and work and family (Kreiner, 2006) literature have also followed these protocols in employing polynomial regression analyses.

Hypotheses Testing: W-F Conflict

Results obtained for the crossover effects of work role salience congruence/incongruence between partners on men and women's experience of W-F conflict are detailed in Tables 4.3 and 4.4 respectively. Figures 4.1, 4.3, 4.5, and 4.7 represent the corresponding surface plots generated through these hierarchical regression analyses for men. For women, Figures 4.2, 4.4, 4.6, and 4.8 represent the equivalent surface plots.

¹¹ The Excel software package can be downloaded free of charge from Jeffery R. Edwards' home page <<http://public.kenan-flagler.unc.edu/faculty/edwardsj/downloads.htm>>

Hypothesis One: Work Role Salience Congruence and W-F Conflict

H1 can be tested by evaluating the slope of the $Y = X$ line at the point X and $Y = 0$, represented by a_1 in Table 4.2. If a_1 is positive, congruence at higher levels of work role salience is found to produce greater levels of W-F conflict than at lower levels. The curvature of the $Y = X$ line is represented by a_2 in Table 4.2. If a_2 is negative, a concave shape is found along the line of perfect fit; where as a positive value indicates a convex surface or one that is curved upward (Kreiner, 2006). Finally, if either of a_1 and a_2 differs significantly from zero, then there is a linear and curvilinear slope along the $Y = X$ line respectively (Atwater et al., 1998; Edwards and Parry, 1993).

Overall W-F Conflict

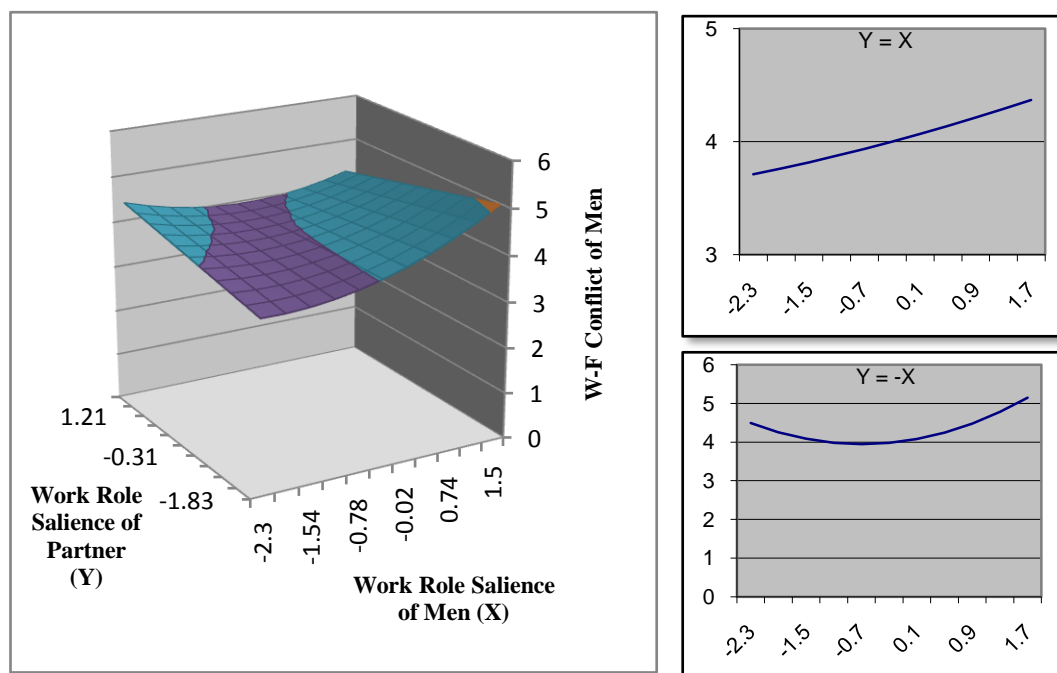
H1 stated that where the work role saliencies between partners are congruent, then their experience of W-F conflict would be greater at higher levels of congruence than at lower levels. This was expected to be the same for both men and women. In other words, the outcome value (e.g. W-F conflict of men) would be greater at higher values along the $Y = X$ line than at lower values. Results for men and women are reported under Model 3 in Table 4.3 and 4.4, respectively, with the corresponding surface plots depicted in Figures 4.1 and 4.2. In each case, separate estimations are reported for overall levels of W-F conflict and each of its three component forms (time, strain, behaviour).

For men, both the slope ($a_1 = 0.17, p < 0.05$) and curvature ($a_2 = 0.01$) along the $Y = X$ line had positive values. However, given a_2 was not significantly different from zero, a

significant curvilinear shape was not found along the $Y = X$ line. The significant and positive value found for the slope supported H1 for men.

The slope analysis confirmed what the visual diagram (Figure 4.1) represents where W-F conflict experienced by men was greater at higher values of work role salience congruence (i.e. back right corner of the surface: $Y = X$ line) than at lower values (i.e. front left corner of the surface: $Y = X$ line). As such, H1 was supported for men.

Figure 4.1: W-F Conflict of Men



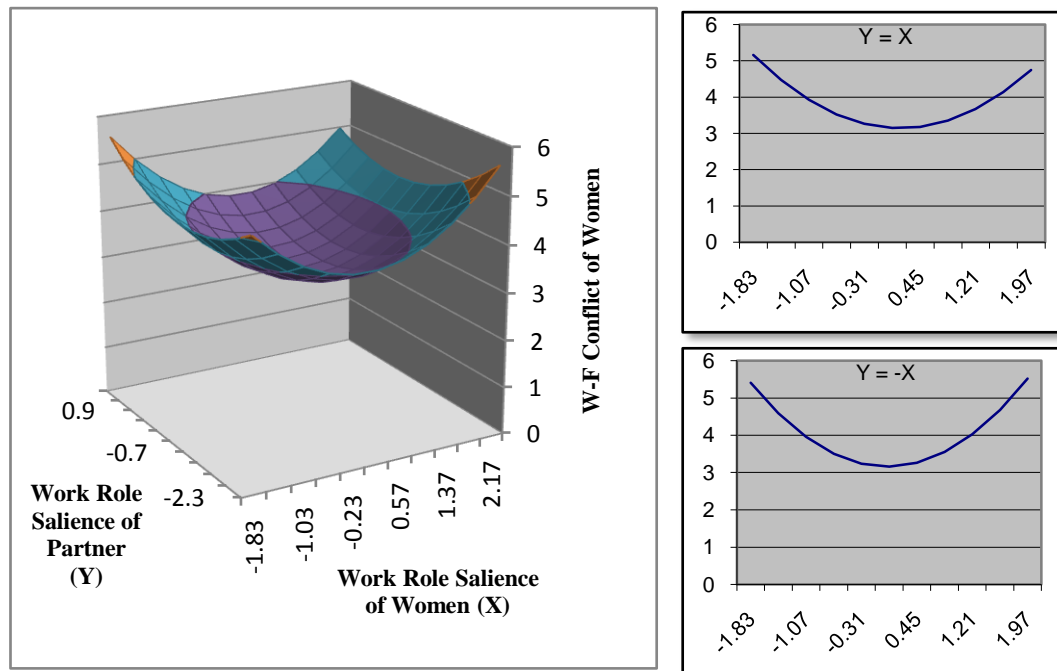
For the women, the slope ($a_1 = -0.18$) along the $Y = X$ line was negative and not significant; the curvature ($a_2 = 0.50, p < 0.01$) was positive and significant indicating a convex surface significantly curved upward. Given the slope along the $Y = X$ line was negative, H1 was not supported for women.

The slope analysis confirmed the inference drawn from the visual diagram (Figure 4.2), namely, that conflict appears to be marginally greater when both partners attach a very low salience to their work role (i.e. front left corner of the surface: $Y = X$ line) than when both place a very high salience on their work role (i.e. back right corner of the surface: $Y = X$ line). In addition, the positive curvature along the $Y = X$ line indicates women's W-F conflict increases as the work role salience congruence between partners moves away from moderate to both low and high levels of salience (i.e. moving from the centre of the surface towards the front left or back right corners of the surface along the $Y = X$ line).

Time-based W-F Conflict

H1a predicted the experience of time-based W-F conflict would be greater at higher levels of work role salience congruence between partners than at lower levels. This was expected to be the same for both men and women. Model 3 under the time-based conflict column in Tables 4.3 and 4.4 represent the coefficients of the regression equation used for testing H1a for men and women respectively. The corresponding surface plots are illustrated in Figures 4.3 and 4.4.

Figure 4.2: W-F Conflict of Women

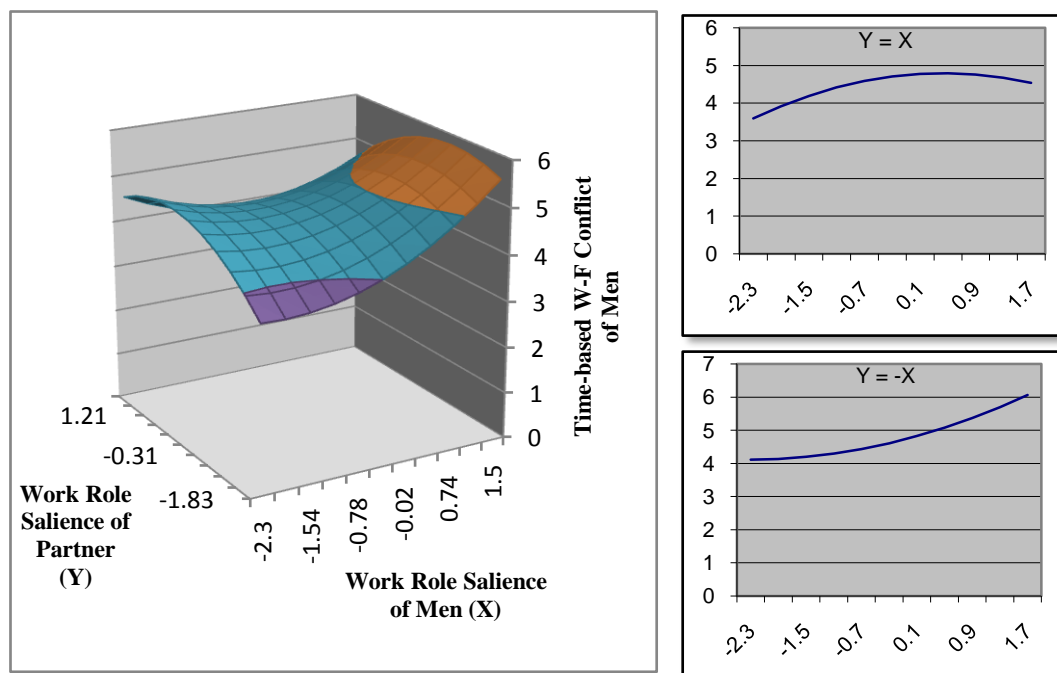


For men, the slope ($a_1 = 0.14$) along the $Y = X$ line was positive and the curvature ($a_2 = -0.16$) negative, but neither were significantly different from zero. Hence, the surface was flat indicating that men's time-based W-F conflict did not change significantly along the line of perfect congruence (Edwards and Parry, 1993). Therefore, H1a for men was not supported.

A visual inspection of Figure 4.3 supports this where time-based W-F conflict experienced by men is found to be only marginally greater at higher values of congruence than at lower values (i.e. moving from the front left corner towards the back right corner of the surface: $Y = X$ line). However, it appears that at very high levels of congruence men's time-based W-F conflict is found to decrease slightly. This shape of the $Y = X$ line is further evident

by the non-significant but marginally negative value found for a_2 , indicating a concave surface curved downward along the line of perfect congruence.

Figure 4.3: Time-based W-F Conflict of Men

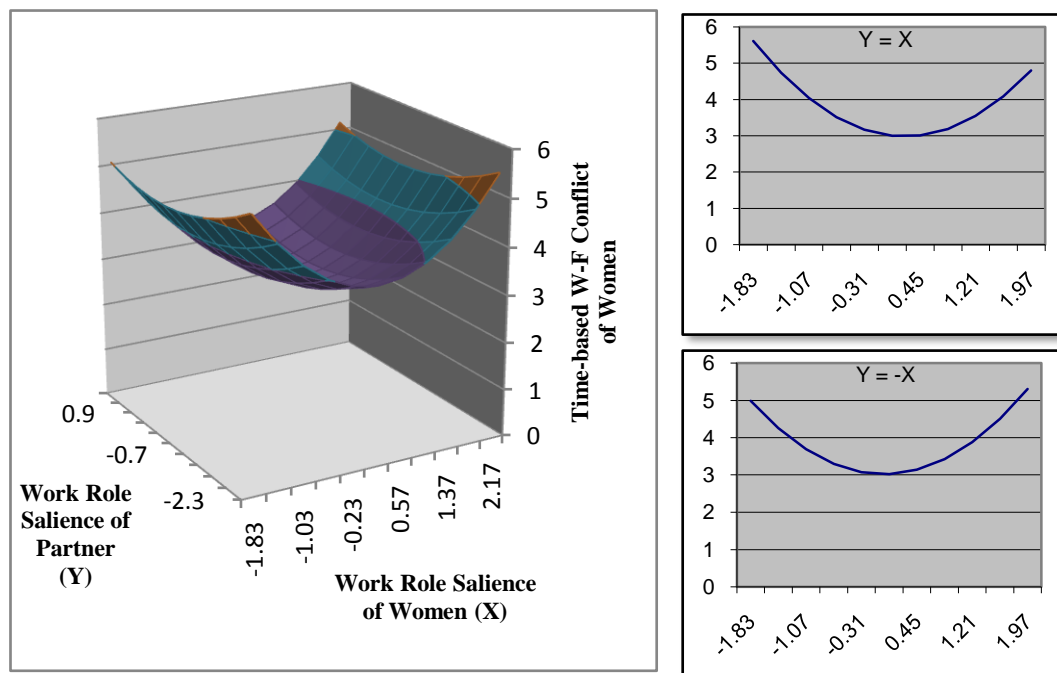


For women, the slope ($a_1 = -0.30$) along the $Y = X$ line was negative and not significant, while the curvature ($a_2 = 0.69, p < 0.001$) was positive and significant, indicating a convex surface significantly curved upward. Given the slope along the $Y = X$ line was negative, H1a was also not supported for women.

The slope analysis confirmed the inference drawn from the visual diagram (Figure 4.4) where conflict appears to be slightly greater when both partners attach a very low salience

(i.e. front left corner of the surface: $Y = X$ line) than a very high salience to their work roles (i.e. back right corner of the surface: $Y = X$ line). As with overall W-F conflict, the positive curvature along the $Y = X$ line indicates women's time-based W-F conflict to increase as the work role salience congruence between partners move away from moderate to both low and high levels of work role salience (i.e. moving from the centre of the surface towards the front left or back right corners along the $Y = X$ line).

Figure 4.4: Time-based W-F Conflict of Women

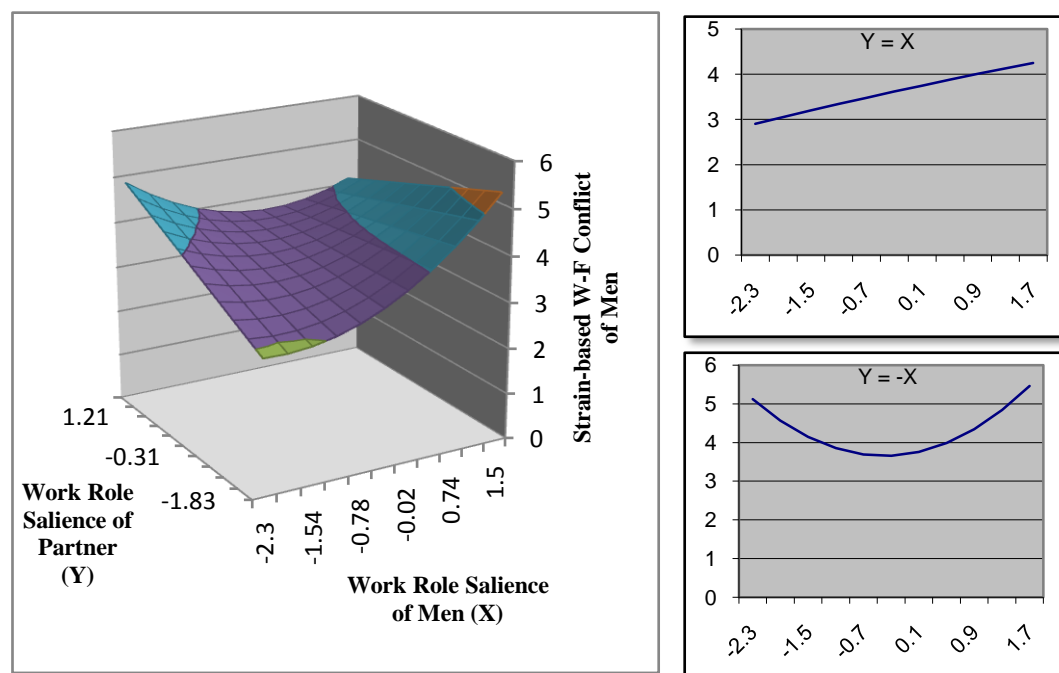


Strain-based W-F Conflict

H1b predicted the experience of strain-based W-F conflict would be greater at higher levels of work role salience congruence between partners than at lower levels. This was expected to be the same for both men and women. Model 3 under the strain-based conflict

column in Tables 4.3 and 4.4 represent the coefficients of the regression equation used for testing H1b for men and women respectively. The corresponding surface plots are depicted in Figures 4.5 and 4.6.

Figure 4.5: Strain-based W-F Conflict of Men

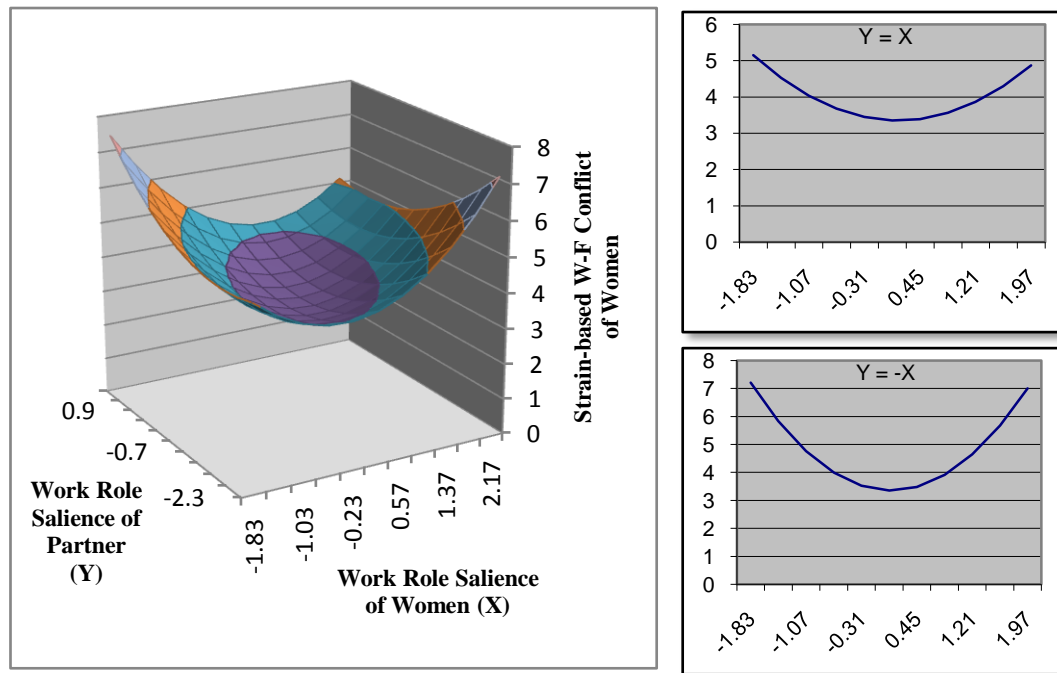


For men, the slope ($a_1 = 0.33$, $p < 0.01$) along the $Y = X$ line was positive and significant. The curvature ($a_2 = -0.01$) while being negative was not significantly different from zero. Thus, H1b for men was supported.

A visual inspection of Figure 4.5 supports this where strain-based W-F conflict experienced by men is found to be greater at higher levels (back right corner of the surface:

Y = X line) of work role salience congruence than at lower levels (i.e. front left corner to the surface: Y = X line).

Figure 4.6: Strain-based W-F Conflict of Women



For women, the slope ($a_1 = -0.14$) along the $Y = X$ line was negative and not significant. The curvature ($a_2 = 0.46$, $p < 0.01$) was positive and significant indicating a convex surface significantly curved upward. Given the slope along the $Y = X$ line was negative, H1b was not supported for women.

The slope analysis confirmed what the visual diagram (Figure 4.6) represents: conflict appears to be marginally greater when both partners attach a very low salience (i.e. front left corner of the surface: $Y = X$ line) than when both place a very high salience on their

work roles (i.e. back right corner of the surface: $Y = X$ line). As with overall W-F conflict and time-based W-F conflict, the positive curvature along the $Y = X$ line indicates women's strain-based W-F conflict to increase as the congruence in the work role saliencies between partners move away from moderate to both low and high levels (i.e. moving from the centre of the surface towards the front left or back right corners along the $Y = X$ line).

Behaviour-based W-F Conflict

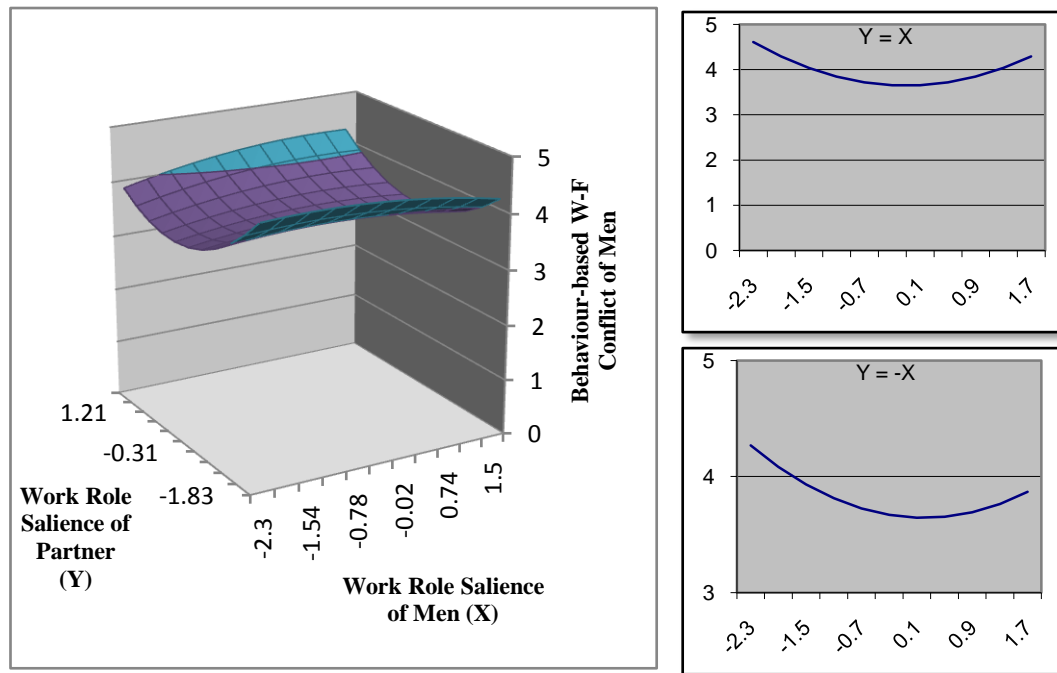
H1c predicted the experience of behaviour-based W-F conflict would be greater at higher levels of work role salience congruence between partners than at lower levels. This was expected to be the same for both men and women. Model 3 under the behaviour-based conflict column in Tables 4.3 and 4.4 represent the coefficients of the regression equation used for testing H1c for men and women respectively. The corresponding surface plots are depicted in Figures 4.7 and 4.8.

For men, both the slope ($a_1 = 0.04$) and curvature ($a_2 = 0.20$) along the $Y = X$ line were positive and non-significant. As such, the surface was flat indicating that men's behaviour-based W-F conflict did not change significantly along the line of perfect congruence (Edwards and Parry, 1993). Therefore, H1c for men was not supported.

A visual inspection of Figure 4.7 supports this where behaviour-based W-F conflict experienced by men is found to be only marginally greater at lower values of congruence

than at higher values (i.e. moving from the front left corner to the back right corner of the surface: $Y = X$ line).

Figure 4.7: Behaviour-based W-F Conflict of Men

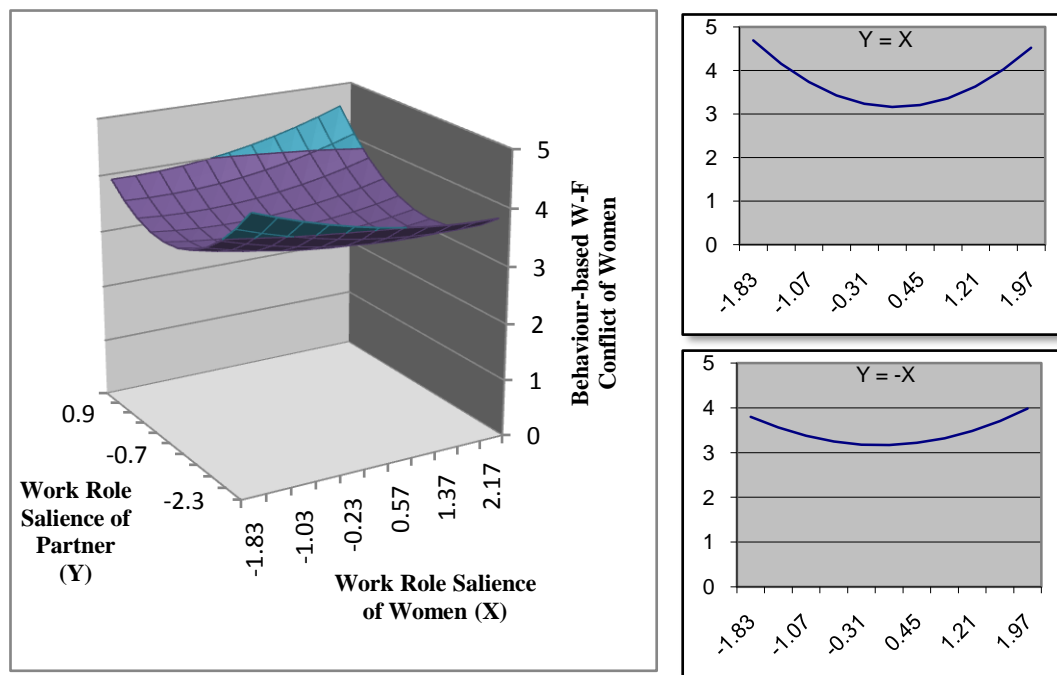


For women, while the slope ($a_1 = -0.10$) along the $Y = X$ line was negative and not significant, the curvature ($a_2 = 0.40, p < 0.05$) was positive and significant indicating a convex surface significantly curved upward. Given the slope along the $Y = X$ line was negative, H1c for women was not supported.

The slope analysis confirmed what the visual diagram (Figure 4.8) represents where conflict appears to be slightly greater when both partners attach a very low salience (i.e. front left corner of the surface: $Y = X$ line) than when both place a very high salience on

their work roles (i.e. back right corner of the surface: $Y = X$ line). As with overall W-F conflict, time-based and strain-based W-F conflict, the positive curvature along the $Y = X$ line indicates women's behaviour-based W-F conflict to increase as the congruence between the work role salencies of partners moves away from moderate to both low and high levels (i.e. moving from the centre of the surface towards the front left or back right corners along the $Y = X$ line).

Figure 4.8: Behaviour-based W-F Conflict of Women



Hypothesis Two: Work Role Salience Incongruence and W-F Conflict

H2 can be tested by examining the slope and curvature along the $Y = -X$ line. If a positive slope (i.e. x_1) combined with a negative curvature (i.e. x_2) is found at the point X and $Y = 0$, support for H2 is found (Edwards and Rothbard, 1999; Kreiner, 2006). Similar to the

interpretations of the slope and curvature along the $Y = X$ line, if x_1 differs from zero there is a linear slope along the line of $Y = -X$; and if x_2 is positive, the surface is convex and curved upward along the $Y = -X$ line, whereas if the value is negative, the surface is concave and curved downward along the $Y = -X$ line. If x_1 equals zero, the surface is flat at the point where the $Y = -X$ line intersects the $Y = X$ line (i.e. where X and $Y = 0$) (Edwards, 2002).

The results for the crossover effects of work role salience incongruence between partners on men and women's W-F conflict is also reported under Model 3 in Table 4.3 and 4.4, respectively. The same surface plots used to investigate H1 and associated sub-hypotheses are also drawn upon in testing H2 and associated sub-hypotheses. However, in this instance, instead of the $Y = X$ line, the shape of the surface along the $Y = -X$ line is examined.

Overall W-F Conflict

H2 predicted W-F conflict would increase as an individual's work role salience increases towards that of the partner and decrease when exceeding the partner's work role salience substantially. This was expected to be the same for both men and women.

For men, both the slope ($x_1 = 0.29, p < 0.01$) and the curvature ($x_2 = 0.21$) were positive along the $Y = -X$ line. Thus, H2 was not supported for men.

A visual inspection of Figure 4.1 reveals that the level of W-F conflict experienced by men decreased as their work role salience increased towards the partner's work role salience (i.e. moving from the back left corner towards the centre of the surface: $Y = -X$ line) and increased once their work role salience exceeded that of the partner (i.e. moving from the centre of the surface towards the front right corner of the surface: $Y = -X$ line). That is, contrary to expectations, men's W-F conflict was equally high when their work role salience was significantly greater as well as significantly lower than their partner's work role salience.

Men's experience of W-F conflict was at its lowest when both partners were found to attach a very low importance to their work role (i.e. front left corner of the surface). When men's work role salience was very high and their partner's work role salience was very low, the level of W-F conflict experienced by men was at its highest (i.e. front right corner of the surface). Although men experienced greater conflict when attaching a higher salience to the work role than their partner, there was only a moderate difference when the opposite held true.

For women, the slope ($x_1 = -0.06$) along the $Y = -X$ line was negative and not significant. The curvature ($x_2 = 0.64$, $p < 0.01$) was positive and significant. Thus, H2 was not supported for women.

A visual inspection of Figure 4.2 reveals that the level of W-F conflict experienced by women decreased as their own work role salience increased towards the partner's (i.e. moving from the back left corner towards the centre of the surface: $Y = -X$ line) and

increased once exceeding the partner's work role salience (i.e. moving from the centre of the surface towards the front right corner of the surface: $Y = -X$ line).

Women's experience of W-F conflict was at its lowest when both partners were found to attach a very moderate importance to their work role (i.e. centre of the surface). When one partner attached a very high salience and the other a very low salience to their respective work roles, the level of W-F conflict experienced by women was at its highest (i.e. back left and front right corners of the surface). However, conflict was found to be marginally greater when women's work role salience substantially exceeded the partner's work role salience than vice versa (i.e. front right corner of the surface).

Time-based W-F Conflict

H2a predicted time-based W-F conflict would increase as an individual's work role salience increases towards that of the partner and decrease when exceeding the partner's work role salience substantially. This was expected to be the same for both men and women.

For men the slope ($x_1 = 0.56, p < 0.01$) along the $Y = -X$ line was significant and positive. However, the curvature ($x_2 = 0.12$) was positive and not significant. Thus, H2a was not supported for men.

A visual inspection of Figure 4.3 reveals that the while the level of time-based W-F conflict experienced by men increased as their own work role salience increased towards

the partner's work role salience (i.e. moving from the back left corner towards the centre of the surface: $Y = -X$ line) it did not decrease when men's work role salience was substantially greater than the partner's. Men's time-based W-F conflict in fact kept increasing once their work role salience exceeded that of the partner (i.e. moving from the centre of the surface towards the front right corner of the surface: $Y = -X$ line).

Men's experience of time-based W-F conflict was at its lowest when both partners were found to attach a very low importance to their work role (i.e. front left corner of the surface). When men's work role salience was very high and the partner's was very low, the level of time-based W-F conflict experienced by them was at its highest (i.e. front right corner of the surface).

For women, the slope ($x_1 = 0.00$) along the $Y = -X$ line was zero and the curvature ($x_2 = 0.67, p < 0.10$) positive and marginally significant. Therefore, H2a for women was not supported.

A visual inspection of Figure 4.4 reveals that the level of W-F conflict experienced by women decreased as their own work role salience increased towards their partner's (i.e. moving from the back left corner towards the centre of the surface: $Y = -X$ line) and increased once exceeding the partner's work role salience (i.e. moving from the centre of the surface towards the front right corner of the surface: $Y = -X$ line).

Women's experience of time-based W-F conflict was at its lowest when both partners were found to attach a very moderate importance to their work roles (i.e. centre of the surface).

When both partners attached a very low salience to their work roles, the level of time-based W-F conflict experienced by the women was at its highest (i.e. front left corner of the surface).

Strain-based W-F Conflict

H2b predicted strain-based W-F conflict would increase as an individual's work role salience increases towards that of the partner and decrease when exceeding the partner's work role salience substantially. This was expected to be the same for both men and women.

For men, the slope ($x_1 = 0.33$, $p < 0.01$) along the $Y = -X$ line was positive and significant. However, the curvature ($x_2 = 0.41$) was positive and not significant. Thus, H2b was not supported for men.

A visual inspection of Figure 4.5 reveals that the level of strain-based W-F conflict experienced by men decreased as their own work salience increased towards the partner's work role salience (i.e. moving from the back left corner towards the centre of the surface: $Y = -X$ line) and increased when their work salience was substantially greater than that of the partner (i.e. moving from the centre of the surface towards the front right corner of the surface: $Y = -X$ line).

Men's experience of strain-based W-F conflict was at its lowest when both partners were found to attach a very low importance to their work roles (i.e. front left corner of the

surface). The highest level of strain-based W-F conflict for the men was found when their work role salience was very high and the partner's work role salience was very low or vice versa. The level of conflict experienced by men was found to be high and almost similar at either end of the $Y = -X$ line (i.e. front right and back left corners of the surface). However, conflict was marginally greater in the former instance than the latter.

For women, the slope ($x_1 = -0.20$) along the $Y = -X$ line was negative and not significant. The curvature ($x_2 = 1.04, p < 0.01$) was positive and significant. Thus, H2b was also not supported for women.

A visual inspection of Figure 4.6 reveals that the level of strain-based W-F conflict experienced by women decreased as their own work role salience increased towards the partner's work role salience (i.e. moving from the back left corner towards the centre of the surface: $Y = -X$ line) and increased once exceeding that of the partner (i.e. moving from the centre of the surface towards the front right corner of the surface: $Y = -X$ line).

Women's experience of strain-based W-F conflict was at its lowest when both partners attached a very moderate importance to their work roles (i.e. centre of the surface). When men attached a very high salience to their work role and women a very low salience to their work role, the level of W-F conflict experienced by women was at its highest (i.e. back left corner of the surface).

Behaviour-based W-F Conflict

H2c predicted behaviour-based W-F conflict would increase as an individual's work role salience increases towards that of the partner and decrease when exceeding the partner's work role salience substantially. This was expected to be the same for both men and women.

For men, the slope ($x_1 = -0.04$) along the $Y = -X$ line was negative and not significant. The curvature ($x_2 = 0.10$) was positive and also not significant. Thus H2c was not supported for men.

A visual inspection of Figure 4.7 reveals that the level of behaviour-based W-F conflict experienced by men decreased as their own work role salience increased towards the partner's work role salience (i.e. moving from the back left corner towards the centre of the surface: $Y = -X$ line) and increased marginally when their work role salience was substantially greater than that of the partner (i.e. moving from the centre of the surface towards the front right corner of the surface).

Men's experience of behaviour-based W-F conflict was at its lowest when both partners were found to attach a moderate importance to their work roles (i.e. centre of the surface where $Y = X$ and $Y = -X$ lines intersect). The highest level of behaviour-based W-F conflict for men was found when both partners held either very high or very low levels of work role saliencies (i.e. back right and front left corners of the surface). However, conflict was marginally greater in the latter instance than the former.

For women, both the slope ($x_1 = 0.02$) and the curvature ($x_2 = 0.20$) along the $Y = -X$ line were positive and not significant. Therefore, H2c was also not supported for women.

A visual inspection of Figure 4.8 reveals that the level of behaviour-based W-F conflict experienced by women decreased as their own work role salience increased towards the partner's work role salience (i.e. moving from the back left corner towards the centre of the surface: $Y = -X$ line) and increased once exceeding that of the partner (i.e. moving from the centre of the surface towards the front right corner of the surface: $Y = -X$ line).

Women's experience of behaviour-based W-F conflict was at its lowest when both partners were found to attach a very moderate importance to their work roles (i.e. centre of the surface). When both partners attached a very low salience to their respective work roles, the level of behaviour-based W-F conflict experienced by women was at its highest (i.e. front left corner of the surface).

Hypotheses Testing: F-W Conflict

Results obtained for the effects of family role salience congruence/incongruence between dyadic partners on the experience of F-W conflict are summarised in Tables 4.5 and 4.6 for men and women, respectively. Figures 4.9, 4.11, 4.13, and 4.15 represent the corresponding surface plots generated through the hierarchical regression analyses for men. For women, Figures 4.10, 4.12, 4.14, and 4.16 represent the equivalent surface plots. The same procedure used to test H1 is used to evaluate H3.

Table 4.5: F-W Conflict of Men

Independent Variable	Dependent Variable											
	<u>F-W Conflict</u>			<u>Time-Based Conflict</u>			<u>Strain-Based Conflict</u>			<u>Behaviour-Based Conflict</u>		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Constant (B0)	3.27	3.26	3.37	3.49	3.50	3.55	2.62	2.60	2.83	3.69	3.69	3.72
Age of M.	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.02	-0.01
Work Hrs M.	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.01	0.02	0.02	0.02
Fam. Hrs M.	0.01	0.01	0.01	0.03*	0.02†	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Org. Support M.	-0.14†	-0.14†	-0.14†	-0.29**	-0.31**	-0.32**	0.03	0.03	0.03	-0.16	-0.14	-0.13
X		0.07	0.12		-0.14	-0.12		0.18	0.26		0.17	0.20
Y		-0.11	-0.14		-0.18	-0.21		-0.19	-0.22		0.06	0.03
X ²			0.05			0.26			-0.07			-0.03
XY			0.06			0.03			-0.13			0.27
Y ²			-0.15			-0.19			-0.16			-0.10
R	0.40	0.41	0.44	0.46	0.48	0.50	0.12	0.19	0.29	0.33	0.35	0.38
R ²	0.16	0.17	0.19	0.21	0.23	0.25	0.01	0.04	0.08	0.11	0.12	0.14
F	3.16*	2.21*	1.66	4.47**	3.30**	2.36*	0.26	0.41	0.63	2.10†	1.55	1.17
ΔR ²	0.16	0.01	0.02	0.21	0.02	0.02	0.01	0.02	0.05	0.11	0.01	0.02
ΔF	3.16*	0.43	0.64	4.47***	0.97	0.60	0.26	0.73	1.05	2.10†	0.51	0.49

Note: All values were rounded to two decimal places, and therefore coefficients with the same rounded value may not be equally significant, M = Men.

X = Family Role Salience of Men

Y = Family Role Salience of Women

4.3.1 *** $p < .001$ ** $p < .01$ * $p < .05$ † $p < .10$

Table 4.6: F-W Conflict of Women

Independent Variable	Dependent Variable											
	<u>F-W Conflict</u>			<u>Time-Based Conflict</u>			<u>Strain-Based Conflict</u>			<u>Behaviour-Based Conflict</u>		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Constant (B0)	3.50	3.52	3.49	4.21	4.23	4.24	2.99	3.00	2.92	3.32	3.34	3.30
Age of W.	0.04*	0.03 [†]	0.03 [†]	0.06**	0.05**	0.06**	0.03	0.02	0.02	0.02	0.01	0.02
Work Hrs W.	0.01	0.01	0.01	0.02	0.02	0.02	0.01	0.01	0.01	-0.01	-0.01	-0.01 [†]
Fam. Hrs W.	0.00	0.00	0.00	0.02**	0.02**	0.02**	0.00	0.00	0.00	-0.01	-0.01	-0.01
Org. Support W.	-0.26**	-0.29**	-0.31***	-0.39***	-0.43***	-0.44***	-0.07	-0.09	-0.12	-0.27**	-0.32**	-0.35**
X		-0.10	-0.12		-0.06	-0.08		-0.05	-0.04		-0.22	-0.24
Y		-0.32	-0.31		-0.40	-0.38		-0.19	-0.20		-0.34	-0.32
X ²			0.02			-0.06			0.15			0.03
XY			0.36			0.28			0.18			0.54*
Y ²			-0.19			-0.04			-0.25			-0.29
R	0.44	0.48	0.52	0.61	0.63	0.64	0.18	0.20	0.25	0.33	0.42	0.49
R ²	0.19	0.23	0.25	0.38	0.40	0.41	0.03	0.04	0.06	0.11	0.18	0.24
F	3.91**	3.28**	2.57**	9.93***	7.12***	4.73***	0.56	0.45	0.44	2.09 [†]	2.28**	2.18**
ΔR ²	0.19	0.04	0.04	0.38	0.02	0.01	0.03	0.01	0.02	0.11	0.06	0.07
ΔF	3.91**	1.82	1.10	9.93***	1.30	0.38	0.56	0.26	0.44	2.09 [†]	2.48 [†]	1.80

Note: All values were rounded to two decimal places, and therefore coefficients with the same rounded value may not be equally significant, W = Women.

X = Family Role Salience of Women

Y = Family Role Salience of Men

*** $P < .001$ ** $P < .01$ * $P < .05$ [†] $P < .10$

Hypothesis Three: Family Role Salience Congruence and F-W Conflict

Overall F-W Conflict

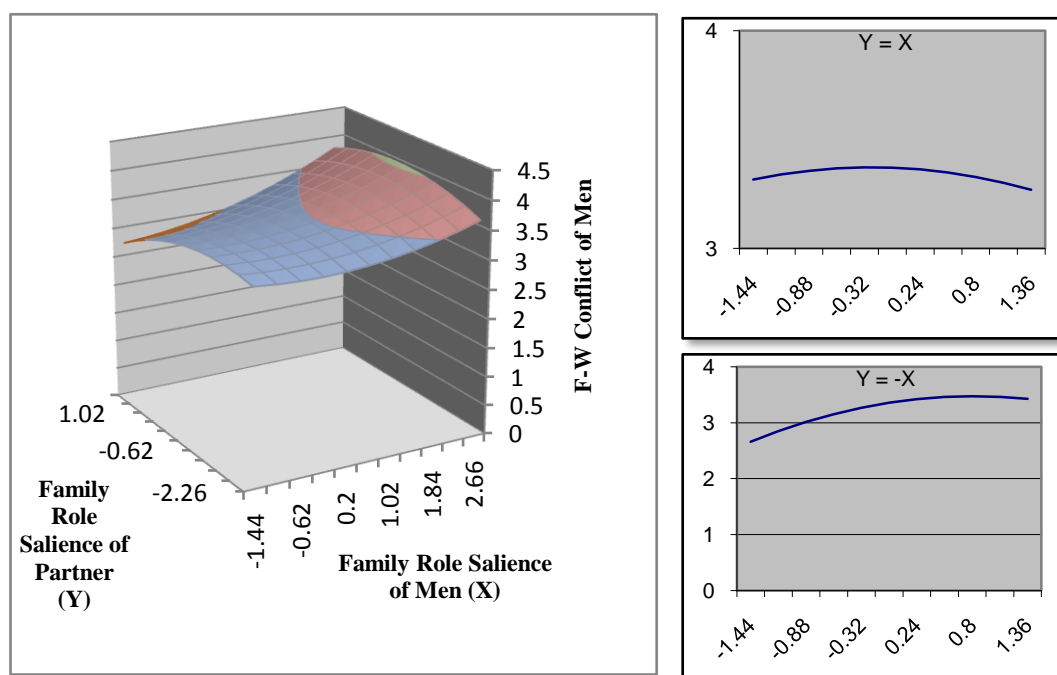
H3 predicted the experience of F-W conflict would be greater at higher levels of family role salience congruence than at lower levels. This was expected to be the same for both men and women. That is, the outcome value (e.g. F-W conflict of men) would be greater at higher values along the $Y = X$ line than at lower values. Results for men and women are reported under Model 3 in Table 4.5 and 4.6, respectively, with the corresponding surface plots depicted in Figures 4.9 and 4.10. In each case, separate estimations are reported for overall levels of F-W conflict and each of its three component forms (time, strain, behaviour).

For men, both the slope ($a_1 = -0.02$) and curvature ($a_2 = -0.04$) along the $Y = X$ line were negative and not significant. Hence, the surface was flat indicating that men's F-W conflict did not change significantly along the line of perfect congruence (Edwards and Parry, 1993). The negative curvature indicates a surface that is concave and marginally curved downwards along the $Y = X$ line. H3 was not supported for men as the slope along the $Y = X$ line was negative. The negative and insignificant value found for the slope indicates F-W conflict for men to be marginally greater at lower levels of family role salience congruence than at higher levels.

A visual inspection of Figure 4.9 supports this where F-W conflict experienced by men is found to slightly increase as the congruence of the family role salencies of partners

increase towards moderate levels (i.e. moving from the front left corner towards the centre of the surface: $Y = X$ line). However, conflict is found to marginally decrease as the congruence increase from moderate to very high levels (i.e. moving from the centre of the surface towards the back right corner of the surface: $Y = X$ line).

Figure 4.9: F-W Conflict of Men

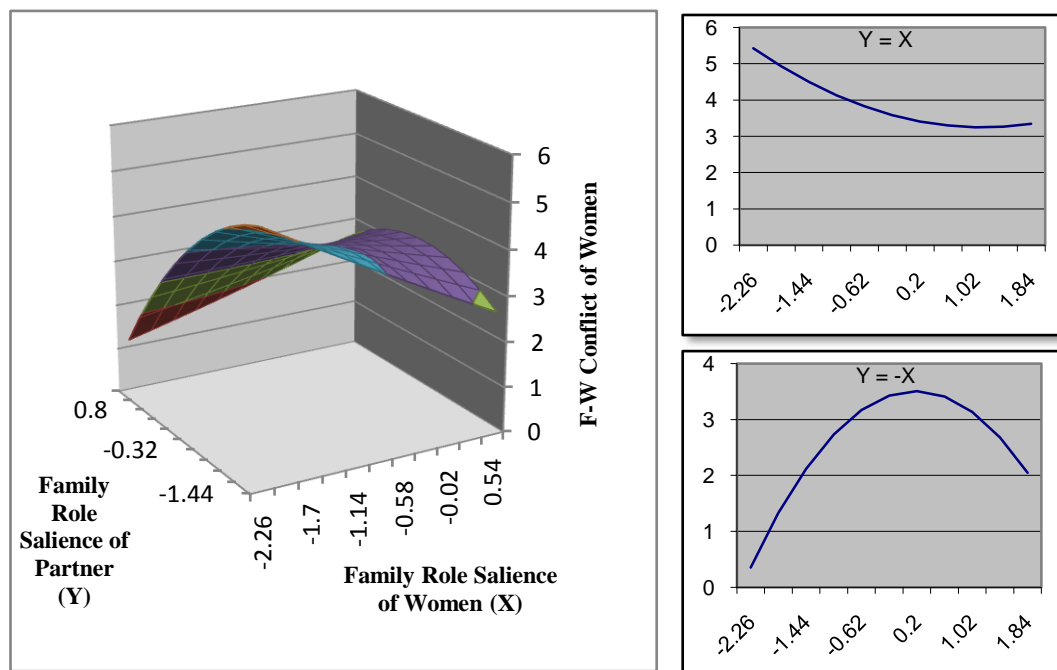


For women, the slope ($a_1 = -0.43$) along the $Y = X$ line was negative and not significant. The curvature ($a_2 = 0.19$) along the $Y = X$ line was positive and also not significant. Thus, H3 for women was not supported.

The slope analysis confirmed what the visual diagram (Figure 4.10) represents where conflict appears to be greater when both partners attach a very low salience (i.e. front left

corner of the surface: $Y = X$ line) than when both place a very high salience to their work roles (i.e. back right corner of the surface: $Y = X$ line). F-W conflict experienced by women is found to decrease as the family salience congruence of the partners increase. Although not significant, conflict is found to marginally increase when both partners attach a very high salience to their respective family roles. This shape of the curve is further supported by the positive value found for the curvature along the $Y = X$ line. While the statistical analysis of significance did not support any curvilinear effects along the $Y = X$ line, the visual surface plot provides evidence of a marginal curvilinear effect. This could be due to the sample size of the study not being large enough to statistically capture any significant effects (Cohen, 1992).

Figure 4.10: F-W Conflict of Women



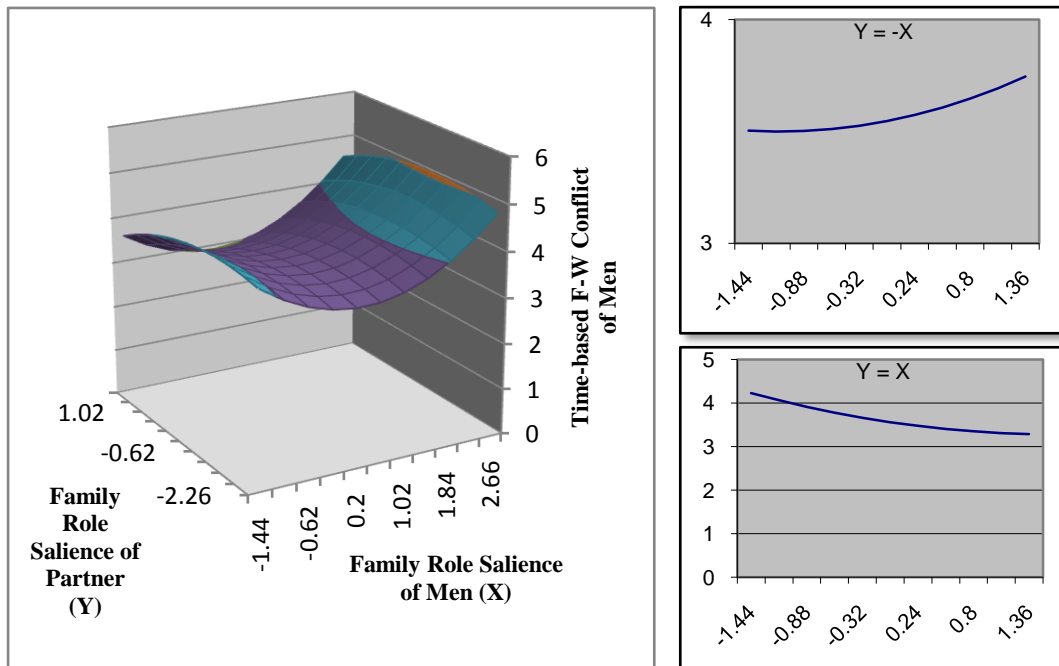
Time-based F-W Conflict

H3a predicted the experience of time-based F-W conflict would be greater at higher levels of family role salience congruence than at lower levels. This was expected to be the same for both men and women. Model 3 under the time-based conflict column in Tables 4.5 and 4.6 represent the coefficients of the regression equation used for testing H3a for men and women respectively. The corresponding surface plots are depicted in Figures 4.11 and 4.12.

For men, the slope ($a_1 = -0.33$) along the $Y = X$ line was negative but not significant. The curvature along the $Y = X$ line was positive ($a_2 = 0.10$) and also not significant. Thus, the surface was flat indicating that men's time-based F-W conflict did not change substantially along the line of perfect congruence (Edwards and Parry, 1993). The small positive curvature indicates a surface that is convex and marginally curved upwards along the $Y = X$ line. H3a for men was not supported as the slope along the $Y = X$ line was negative.

A visual inspection of Figure 4.11 supports this where time-based F-W conflict experienced by men is found to decrease as one moves from very low levels of family role salience congruence towards very high levels of congruence (i.e. $Y = X$ line).

Figure 4.11: Time-based F-W Conflict of Men

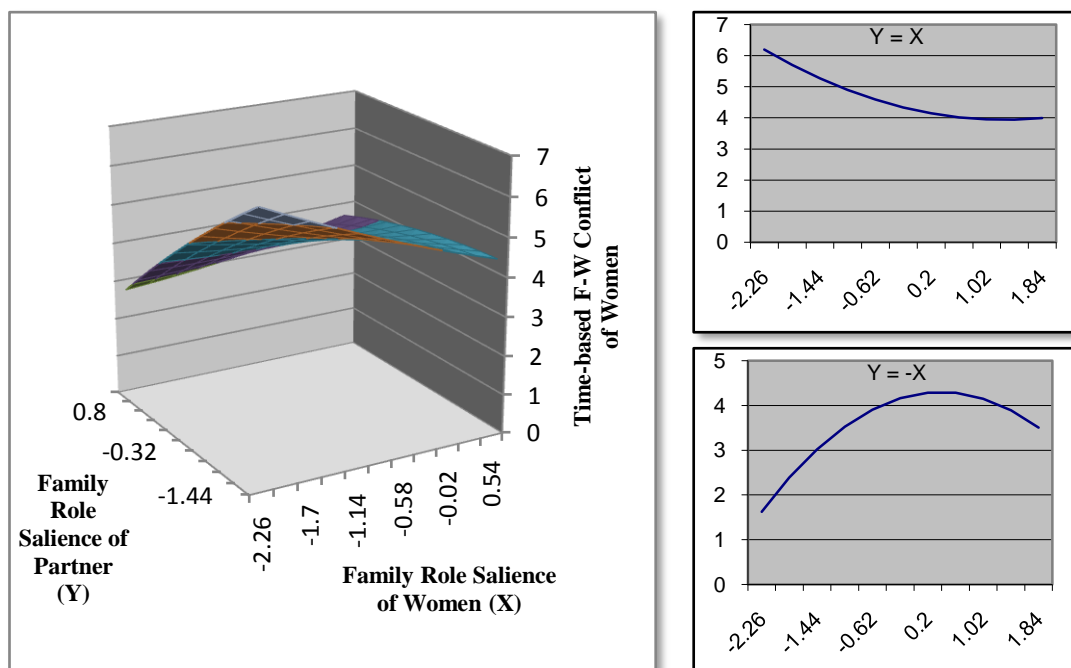


For women, the slope ($a_1 = -0.46$) along the $Y = X$ line was negative and the curvature ($a_2 = 0.18$) positive. However, neither was significant. Given the negative slope along the $Y = X$ line, H3a for women was not supported.

A visual inspection of Figure 4.12 supports this where time-based F-W conflict experienced by women is found to be greater when both partners attach a lower value to their family roles (i.e. front left corner of the surface: $Y = X$ line) than when they attach a higher value (i.e. back right corner of the surface: $Y = X$ line). Time-based F-W conflict experienced by women is found to decrease as the family role salience congruence of the partners increase.

However, conflict is found to marginally increase at very high levels of family role salience congruence. This shape of the curve is further supported by the positive value found for the curvature along $Y = X$ line. Once again, while the statistical analysis of significance did not support any significant curvilinear effects along the $Y = X$ line, the surface plot provides evidence of a marginal curvilinear effect. This could be due to the sample size of the study not being large enough to capture any significant effects (Cohen, 1992).

Figure 4.12: Time-based F-W Conflict of Women



Strain-based F-W Conflict

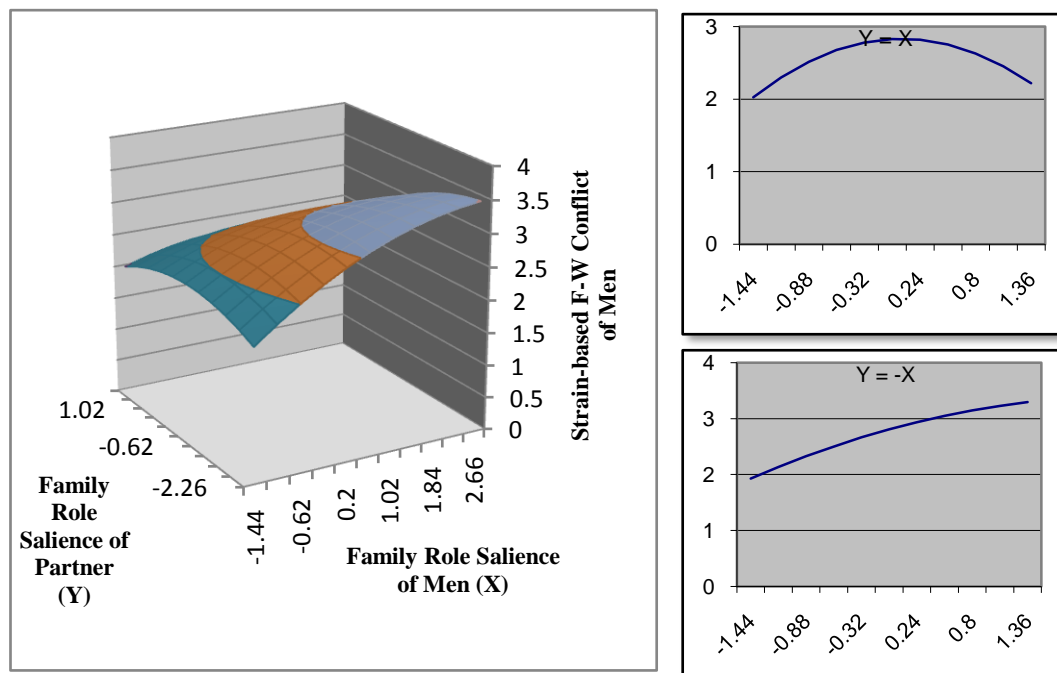
H3b predicted the experience of strain-based F-W conflict would be greater at higher levels of family role salience congruence than at lower levels. This was expected to be the same for both men and women. Model 3 under the strain-based conflict column in Tables 4.5 and 4.6 represent the coefficients of the regression equation used for testing H3b for men and women respectively. The corresponding surface plots are depicted in Figures 4.13 and 4.14.

For men, the slope ($a_1 = 0.04$) along the $Y = X$ line was positive but not significant. The curvature ($a_2 = -0.36$) was negative and also not significant. This indicates a flat surface where men's strain-based F-W conflict does not differ substantially at very high or very low levels of family role salience congruence. The negative curvature indicates a surface that is concave and curved downwards. Although the positive value found for the slope was small, it supported H3b for men. However, the difference between very low and very high levels of family role salience congruence was marginal.

A visual inspection of Figure 4.13 confirms this where strain-based F-W conflict experienced by men initially increases as the family role salencies of both partners reach moderate levels (i.e. moving from the front left corner towards the centre of the surface: $Y = X$ line). Conflict is found to decrease gradually as the family role salencies of both partners continue to increase and reach very high levels (i.e. back right corner of the surface: $Y = X$ line). The level of strain-based F-W conflict for men along the line of perfect congruence is found to peak when both partners attach a moderate importance to their respective family roles (i.e. at the centre of the surface along the $Y = X$ line). This

shape of the $Y = X$ line is further evident by the negative value found for the curvature where the surface is concave and curved downward along the line of perfect congruence. While the statistical test of significance did not support the existence of a curvilinear relationship along the $Y = X$ line, the visual surface plot provides evidence of a marginal curvilinear relationship. It is possible the small sample size used in the study was unable to detect the curve represented in the surface plot and hence does not provide statistical support for the same (Cohen, 1992).

Figure 4.13: Strain-based F-W Conflict of Men

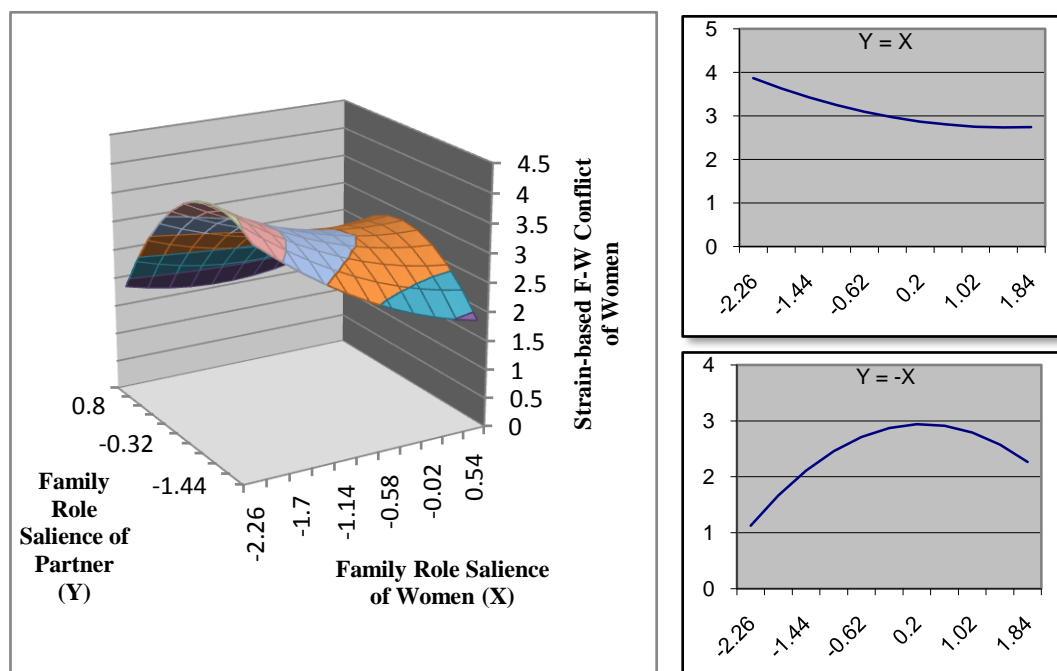


For women, the slope ($a_1 = -0.24$) along the $Y = X$ line was negative and the curvature ($a_2 = 0.08$) positive. However, neither was significant. This indicates a surface that is flat along the $Y = X$ line where the strain-based F-W conflict experienced by women does not change

substantially at high or low levels of family role salience congruence. Given the negative slope along the $Y = X$ line, H3b for women was not supported.

A visual inspection of Figure 4.14 confirms this where strain-based F-W conflict experienced by women is found to be only marginally greater at lower levels of family role salience congruence (i.e. front left corner of the surface: $Y = X$ line) than at higher levels (i.e. back right corner of the surface: $Y = X$ line). Strain-based F-W conflict of women decreased as the family role salience congruence between partners increased (i.e. moving from the front left corner towards the back right corner of the surface along the $Y = X$ line).

Figure 4.14: Strain-based F-W Conflict of Women



Behaviour-based F-W Conflict

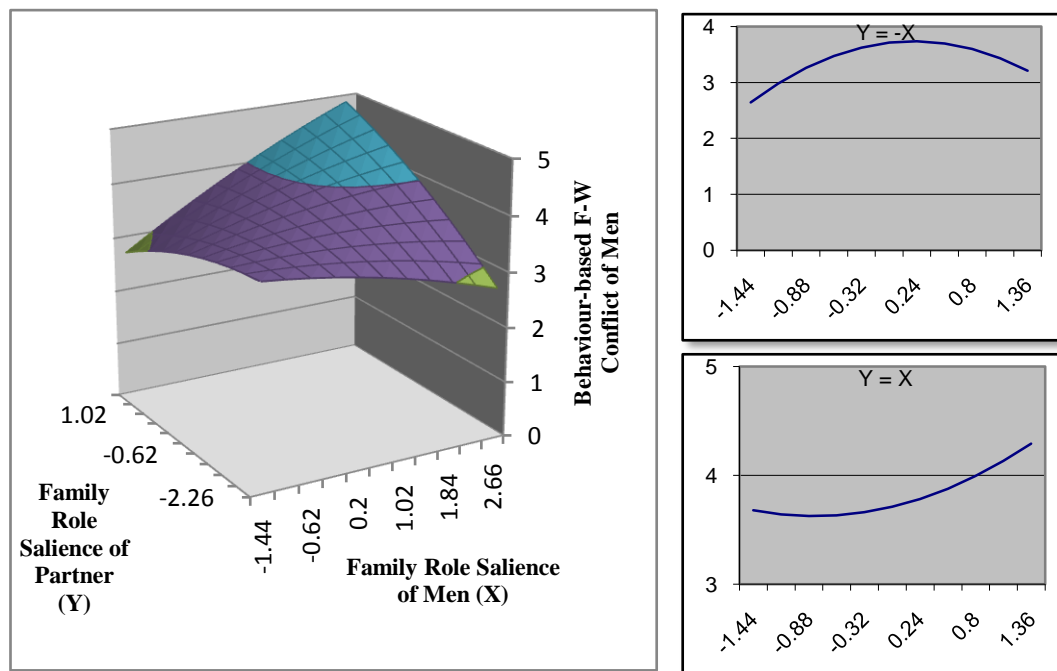
H3c predicted the experience of behaviour-based F-W conflict would be greater at higher levels of family role salience congruence than at lower levels. This was expected to be the same for both men and women. Model 3 under the behaviour-based conflict column in Tables 4.5 and 4.6 represent the coefficients of the regression equation used for testing H3c for men and women respectively. The corresponding surface plots are depicted in Figures 4.15 and 4.16.

For men, the slope ($a_1 = 0.23, p < 0.10$) along the $Y = X$ line was positive and marginally significant. The curvature ($a_2 = 0.14$) while also positive was not significant. The positive curvature indicates a surface that is convex and curved upwards. The positive and marginally significant slope found along the $Y = X$ line supported H3c for men.

A visual inspection of Figure 4.15 confirms this where behaviour-based F-W conflict experienced by men is higher at greater levels of family role salience congruence (i.e. back right corner of the surface: $Y = X$ line) than at lower levels (i.e. front left corner of the surface: $Y = X$ line). This shape of the $Y = X$ line is further evidence by the positive value found for the curvature where the surface is convex and curved upward along the line of perfect congruence.

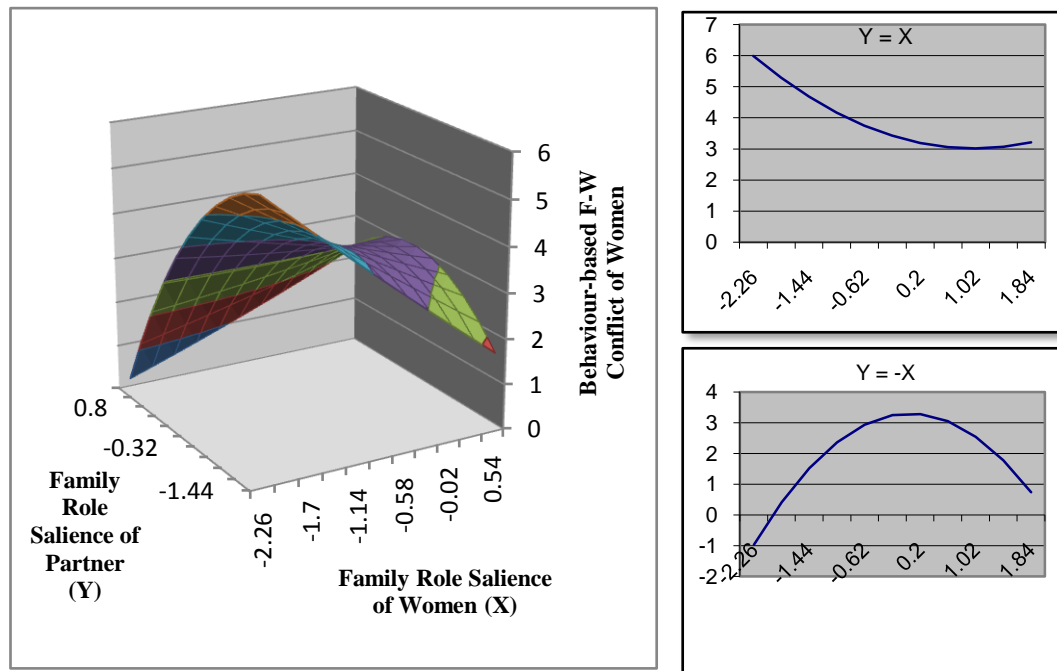
For women, while the slope ($a_1 = -0.56, p < 0.10$) along the $Y = X$ line was negative and marginally significant, the curvature ($a_2 = 0.28$) along the $Y = X$ line was positive and not significant. The positive curvature indicates a surface that is convex and curved upwards. Given the negative slope along the $Y = X$ line, H3c for women was not supported.

Figure 4.15: Behaviour-based F-W Conflict of Men



A visual inspection of Figure 4.16 confirms this where F-W conflict experienced by women is found to be greater at lower levels of family role saliency congruence (i.e. front left corner of the surface: $Y = X$ line) than at higher levels (back right corner of the surface: $Y = X$ line). Behaviour-based F-W conflict experienced by women decreased as the level of family role saliency congruence between partners increased (i.e. moving from the front left corner towards the back right corner of the surface along the $Y = X$ line).

Figure 4.16: Behaviour-based F-W Conflict of Women



Hypothesis Four: Family Role Saliency Incongruence and F-W Conflict

H4 can be tested through the same procedure used to evaluate H2 earlier. The results for the crossover effects of family role saliency incongruence between partners on men and women's F-W conflict are also reported under Model 3 in Table 4.5 and 4.6, respectively. The same surface plots used to investigate H3 and associated sub-hypotheses are also drawn upon in testing H4 and associated sub-hypotheses. However, in this instance, the shape of the surface along the $Y = -X$ line is examined.

Overall F-W Conflict

H4 predicted F-W conflict would increase as an individual's family role salience increase towards that of the partner and decrease when exceeding the partner's family role salience substantially. This was expected to be the same for both men and women.

For men, the slope ($x_1 = 0.26, p < 0.10$) along the $Y = -X$ line was positive and marginally significant. The curvature ($x_2 = -0.16$) was negative but not significant. Given the positive slope and negative curvature, H4 for men was supported.

A visual inspection of Figure 4.9 supports this where F-W conflict experienced by men increased as their own family role salience increased towards that of the partner (i.e. moving from the back left corner towards the centre of the surface: $Y = -X$ line) and continued to increase before decreasing marginally when their family role salience was substantially greater than the partner's family role salience (i.e. moving from the centre towards the front right corner of the surface: $Y = -X$ line).

Men's experience of F-W conflict was at its lowest when their family role salience was very low and the partner's family role salience was very high (i.e. back left corner of the surface). When men's family role salience was very high and the partner's very low, the level of F-W conflict experienced by men was at its highest (i.e. front right corner of the surface).

For women, the slope ($x_1 = 0.19$) along the $Y = -X$ line was positive and the curvature negative ($x_2 = -0.53$). Although not significant, the positive slope and the negative curvature found along the $Y = -X$ line supported H4 for women.

A visual inspection of Figure 4.11 supports this where F-W conflict experienced by women increased as their own family role salience increased towards that of the partner (i.e. moving from the back left corner towards the centre of the surface: $Y = -X$ line) and continued to increase before decreasing when their family role salience was substantially greater than the partner's family role salience (i.e. moving from the centre towards the front right corner of the surface: $Y = -X$ line). Although the statistical analysis of significance did not support a curvilinear relationship, the surface plot lends support to a reasonable curvilinear effect. Once again this could be due to the small effect size of the sample used for the study (Cohen, 1992).

Women's experience of F-W conflict was at its lowest when men attached a very high salience to their family role and the women a very low salience to their family role (i.e. back left corner of the surface). When both partners attached a very low salience to their respective family roles, the level of F-W conflict experienced by women was at its highest (i.e. front left corner of the surface).

Time-based F-W Conflict

H4a predicted time-based F-W conflict would increase as an individual's family role salience increases towards that of the partner and decrease when exceeding the partner's

family role salience substantially. This was expected to be the same for both men and women.

For men, both the slope ($x_1 = 0.09$) and the curvature ($x_2 = 0.04$) along the $Y = -X$ line were positive and not significant. Although the slope was positive, the curvature was not negative along the $Y = -X$ line and hence did not support H4a for men.

A visual inspection of Figure 4.11 supports this where time-based F-W conflict experienced by men increased as their own family role salience increased towards that of the partner (i.e. moving from the back left corner towards the centre of the surface: $Y = -X$ line) and continued to increase when their family role salience was substantially greater than the partner's family role salience (i.e. moving from the centre towards the front right corner of the surface: $Y = -X$ line).

Men's experience of time-based F-W conflict was at its lowest when both partners were found to attach a very high importance to their family roles (i.e. back right corner of the surface). When both partners attached a very low salience to their family roles, the level of time-based F-W conflict experienced by men was at its highest (i.e. front left corner of the surface).

For women, the slope ($x_1 = 0.30$) along the $Y = -X$ line was positive, while the curvature ($x_2 = -0.38$) was negative. Although not significant, the positive slope and the negative curvature along the $Y = X$ line supported H4a for women.

A visual inspection of Figure 4.12 supports this where time-based F-W conflict experienced by women increased as their own family role salience increased towards that of the partner (i.e. moving from the back left corner towards the centre of the surface: $Y = -X$ line) and continue to increase before decreasing when women's family role salience was substantially greater than the partner's family role salience (i.e. moving from the centre towards the front right corner of the surface: $Y = -X$ line). Although the statistical analysis of significance did not support a curvilinear relationship, the surface plot lends support to a moderate curvilinear effect. Once again this could be due to the small effect size of the sample used for the study (Cohen, 1992).

Women's experience of time-based F-W conflict was at its lowest when men attached a very high salience to their family role and women a very low salience to theirs (i.e. back left corner of the surface). When both partners attached a very low salience to their respective family roles, the level of time-based F-W conflict experienced by women was at its highest (i.e. front left corner of the surface).

Strain-based F-W Conflict

H4b women predicted strain-based F-W conflict would increase as an individual's family role salience increases towards that of the partner and decrease when exceeding the partner's family role salience substantially. This was expected to be the same for both men and women.

For men, while the slope ($x_1 = 0.48$) along the $Y = -X$ line was positive, the curvature ($x_2 = -0.10$) was negative and both were not significant. Despite the positive slope and the marginally negative curvature along the $Y = -X$ line, H4b was not supported for men.

A visual inspection of Figure 4.13 reveals strain-based F-W conflict experienced by men to increase as their own family role salience increased towards that of the partner (i.e. moving from the back left corner towards the centre of the surface: $Y = -X$ line) and continued to increase when exceeding the partner's family role salience substantially (i.e. moving from the centre towards the front right corner of the surface: $Y = -X$ line).

Men's experience of strain-based F-W conflict was at its lowest when they attached a very low importance to their family role and the partner attached a very high importance to hers (i.e. back left corner of the surface). When men attached a very high salience to their family role and the partners a very low importance to theirs, the level of strain-based F-W conflict experienced by men was at its highest (i.e. front right corner of the surface).

For women, the slope ($x_1 = 0.16$) along the $Y = -X$ line was positive, while the curvature ($x_2 = -0.28$) was negative. Although not significant, the positive slope and the negative curvature found along the $Y = -X$ line supported H4b for women.

A visual inspection of Figure 4.14 supports this where strain-based F-W conflict experienced by women increased as their own family role salience increased towards that of the partner (i.e. moving from the back left corner towards the centre of the surface: $Y = -X$ line) and continued to increase before decreasing when their family role salience was

substantially greater than the partner's family role salience (i.e. moving from the centre towards the front right corner of the surface: $Y = -X$ line). Although the statistical analysis of significance did not support a curvilinear relationship, the surface plot provides evidence of a moderate curvilinear effect. Once again this could be due to the small effect size of the sample used for the study (Cohen, 1992).

Women's experience of strain-based F-W conflict was at its lowest when their partner attached a very high salience to his family role and they placed a very low salience to their family role (i.e. back left corner of the surface). When both partners attached a very low salience to their respective family roles, the level of strain-based F-W conflict experienced by women was at its highest (i.e. front left corner of the surface).

Behaviour-based F-W Conflict

H4c predicted behaviour-based F-W conflict would increase as an individual's family role salience increases towards that of the partner and decrease when exceeding the partner's family role salience substantially. This was expected to be the same for both men and women.

For men, the slope ($x_1 = 0.17$) along the $Y = -X$ line was positive and the curvature ($x_2 = -0.40$) negative while both were not significant. Although not significant, the positive slope and the negative curvature found along the $Y = -X$ line supports H4c for men.

A visual inspection of Figure 4.15 supports this where behaviour-based F-W conflict experienced by men increased as their own family role salience increased towards that of the partner (i.e. moving from the back left corner towards the centre of the surface: $Y = -X$ line) and continued to increase, decreasing when exceeding the partner's family role salience substantially (i.e. moving from the centre towards the front right corner of the surface: $Y = -X$ line). As with strain-based F-W conflict, although the statistical analysis of significance did not support a curvilinear relationship, a visual inspection of the surface plot does.

Men's experience of behaviour-based F-W conflict was at its lowest when their partner's family role salience was very high and their family role salience was very low (i.e. back left corner of the surface). When both partners attached a very high importance to their respective family roles, the level of behaviour-based F-W conflict experienced by men was at its highest (i.e. back right corner of the surface).

For women, the slope ($x_1 = 0.08$) along the $Y = -X$ line was positive, while the curvature ($x_2 = -0.80$) was negative. Although not significant, the positive slope and the negative curvature found along the $Y = -X$ line supported H4c for women.

A visual inspection of Figure 4.16 supports this where behaviour-based F-W conflict experienced by women increased as their own family role salience increased towards that of the partner (i.e. moving from the back left corner towards the centre of the surface: $Y = -X$ line) and continued to increase before decreasing when their family role salience was substantially greater than the partner's family role salience (i.e. moving from the centre

towards the front right corner of the surface: $Y = -X$ line). Once again statistical analysis of significance did not support a curvilinear relationship, although a visual inspection of the surface plot provides evidence of a substantial curvilinear effect.

Women's experience of behaviour-based F-W conflict was at its lowest when their partner attached a very high salience to his family role and they attached a very low salience to their family role (i.e. back left corner of the surface). When both partners attached a very low salience to their respective family roles, the level of behaviour-based F-W conflict experienced by women was at its highest (i.e. front left corner of the surface).

Hypothesis Five: Gender and Work and Family Conflict

The final hypothesis, H5 developed in Chapter Two predicted crossover effects of work (family) role salience congruence/incongruence between partners on W-F (F-W) conflict to be more pronounced for women than men. This hypothesis can be tested by comparing the change in variance (ΔR^2) under Model 3 for W-F (F-W) conflict in Tables 4.3 (4.5) and 4.4 (4.6). In addition, a visual examination of the corresponding surface plots (i.e. Figures 4.1 (4.9) and 4.2 (4.10)) also assists in interpreting the effect of gender on the relationships between couple-level work (family) role salience crossover and W-F (F-W) conflict.

The change in variance of W-F conflict due to crossover effects of work role salience congruence/incongruence between partners was greater for women ($\Delta R^2 = 0.05$) than men ($\Delta R^2 = 0.01$). A visual examination of Figures 4.1 and 4.2 confirm this finding where the shapes of $Y = X$ and $Y = -X$ axes for men are flatter than those of women.

The change in variance of F-W conflict due to crossover effects of family role salience congruence/incongruence between partners was also greater for women ($\Delta R^2 = 0.04$) than men ($\Delta R^2 = 0.02$). A visual examination of Figures 4.9 and 4.10 confirm this finding where the shapes of $Y = X$ and $Y = -X$ axes for men are flatter than those of women. Therefore, the crossover effects of work (family) role salencies between partners on W-F (F-W) conflict were greater for women than men, supporting H5.

All hypotheses proposed in this study, and whether or not they were supported by the analyses presented in Section 4.3 are summarised in Table 4.7 below.

Table 4.7: List of Hypotheses and Results from Polynomial Regressions

Hypotheses	Men	Women
H1: For work role salience, W-F conflict will be higher for an individual when both partners are high rather than low in their work role saliencies.	Supported	Not Supported
H1a: For work role salience, time-based W-F conflict will be higher for an individual when both partners are high rather than low in their work role saliencies.	Not Supported	Not Supported
H1b: For work role salience, strain-based W-F conflict will be higher for an individual when both partners are high rather than low in their work role saliencies.	Supported	Not Supported
H1c: For work role salience, behaviour-based W-F conflict would be higher for an individual when both partners are high rather than low in their work role saliencies.	Not Supported	Not Supported
H2: For work role salience, W-F conflict will increase as an individual's work role salience increases towards that of the partner, decreasing when exceeding the partner's work role salience substantially.	Not Supported	Not Supported
H2a: For work role salience, time-based W-F conflict will increase as an individual's work role salience increases towards that of the partner, decreasing when exceeding the partner's work role salience substantially.	Not Supported	Not Supported
H2b: For work role salience, strain-based W-F conflict will increase as an individual's work role salience increases towards that of the partner, decreasing when exceeding the partner's work role salience substantially.	Not Supported	Not Supported
H2c: For work role salience, behaviour-based W-F conflict will increase as an individual's work role salience increases towards that of the partner, decreasing when exceeding the partner's work role salience substantially.	Not Supported	Not Supported

Table 4.7: List of Hypotheses and Results from Polynomial Regressions (Cont...)

Hypotheses	Men	Women
H3: For family role salience, F-W conflict will be higher for an individual when both partners are high rather than low in their family role salencies.	Not Supported	Not Supported
H3a: For family role salience, time-based F-W conflict will be higher for an individual when both partners are high rather than low in their family role salencies.	Not Supported	Not Supported
H3b: For family role salience, strain-based F-W conflict will be higher for an individual when both partners are high rather than low in their family role salencies.	Supported	Not Supported
H3c: For family role salience, behaviour-based F-W conflict would be higher for an individual when both partners are high rather than low in their family role salencies.	Supported	Not Supported
H4: For family role salience, F-W conflict will increase as an individual's family role salience increases towards that of the partner, decreasing when exceeding the partner's family role salience substantially.	Supported	Supported
H4a: For family role salience, time-based F-W conflict will increase as an individual's family role salience increases towards that of the partner, decreasing when exceeding the partner's family role salience substantially.	Not Supported	Supported
H4b: For family role salience, strain-based F-W conflict will increase as an individual's family role salience increases towards that of the partner, decreasing when exceeding the partner's family role salience substantially.	Not Supported	Supported
H4c: For family role salience, behaviour-based F-W conflict will increase as an individual's family role salience increases towards that of the partner, decreasing when exceeding the partner's family role salience substantially.	Supported	Supported
H5: Couple-level crossover effects of work (family) role salience congruence/incongruence between partners on W-F (F-W) conflict would be more pronounced for women than men.	Supported	

4.4 Summary of Results

A number of key findings emerged from the polynomial regression analyses and the corresponding surface plots presented above.

First, only the crossover effects of work role salience congruence/incongruence between partners on their experience of W-F conflict were significant. This was the case for both men and women. Minimal support was found, however, for crossover effects of family role salience congruence/incongruence on the experience of F-W conflict for both men and women. Nonetheless, a marginal crossover effect of family role saliences between partners on behaviour-based F-W conflict was found for both men and women.

Second, mixed results were found for the crossover effects of family role salience congruence/incongruence on F-W conflict for men and women. While not statistically significant, some curvilinear effects of family role salience crossover between partners were found for women's F-W conflict. As noted, the lack of statistical significance might be due to the relatively small sample size of this study. In contrast, neither linear nor curvilinear effects were evident in the relationship between family role salience crossover and men's F-W conflict. That is, men's experience of F-W conflict appeared to be largely independent of crossover effects of family role salience between partners.

Third, a distinctive gender difference in the effects of work role salience congruence/incongruence was evident. While the relationship between work role salience congruence

and W-F conflict was linear for men, the same relationship was curvilinear for women. This difference was not predicted by the hypotheses.

Fourth, as predicted, the crossover effects of work (family) role salience congruence/incongruence between partners on their experience of W-F (F-W) conflict was more pronounced for women than men. This held especially true in relation to the effect work role salience congruence/incongruence on W-F conflict.

Finally, results from the polynomial regression equations and corresponding surface plots for both men and women indicate minimal crossover effects of work (family) role salience congruence/incongruence between partners on their behaviour-based W-F (F-W) conflict.

4.5 Conclusion

This chapter presented the findings of the preliminary analyses and subsequent polynomial regression analyses and surface plots used to test the hypotheses postulated in Chapter Two. The chapter consisted of two main sections. The first section reported on a series of preliminary statistical analyses conducted to ensure all assumptions to conduct polynomial regression analyses were met. Specifically, data were screened for its accuracy (i.e. out of range values), missing values, and compatibility with the assumptions underlying multivariate analyses (i.e. an absence of outliers and multicollinearity, normality, and homoscedasticity). The assumption of linearity was not tested given the expectation of non-linear relationships among the variables. The analyses revealed no out of range responses and following Pallant (2005), pairwise deletion was used to handle missing data.

Statistical and graphical methods were employed in detecting and handling univariate and multivariate outliers. The results of normality and homoscedasticity were satisfactory. Multicollinearity was tested by using both the Pearson correlation statistic and tolerance levels and variance inflation factors (VIF). After the exclusion of redundant variables, no other variables were found to be highly correlated.

The second section presented the results of the polynomial regression analyses and surface plots used to examine the hypotheses. Sixteen hypotheses each were tested for the crossover effects of work (family) role salience congruence/incongruence on men and women's experience of W-F (F-W) conflicts. Overall, support was found for 10 out of 32 hypotheses tested in total for both men and women. Specifically, the results revealed a significant crossover effect of work role salience congruence/incongruence between partners on men and women's experience of W-F conflict. However, limited support was found for significant crossover effects of family role salience congruence/incongruence between partners F-W conflict for both men and women. In addition, although not hypothesised, for men, the effects of work role salience congruence/incongruence had a significant linear but no curvilinear relationship with their experience of W-F conflict. For women, the opposite held true where greater curvilinear effects than linear effects were found between the work role salience congruence/incongruence of partners and their experience of W-F conflict. As hypothesised, couple-level crossover effects of work (family) role salience congruence/incongruence on W-F (F-W) were greater for women than men. Finally, the influence of work (family) role salience crossover on behaviour-based W-F (F-W) conflict appeared to be minimal for both men and women.

The following chapter will explore the theoretical and practical implications of the key findings reported in Section 4.4. In addition, the limitations of this study and directions for future research will also be outlined.

5 DISCUSSION

5.1 Introduction

In the previous chapter, the estimation results of the polynomial regression analysis were reported. Overall, none of the four higher level hypotheses received unequivocal support. Six of the sixteen hypotheses predicted were supported for men, while four of the predicted sixteen were supported for women. Nonetheless, these results indicated that crossover effects of work role salience between partners in a couple significantly influenced their experience of W-F conflict. However, crossover effects of family role salience had no significant couple-level effects for men and women's F-W conflict. Finally, as predicted, couple-level crossover effects of work (family) role salience were greater for women than men.

These findings are significant and have important implications for the future study of work and family conflict. The purpose of this chapter is to explore the implications of these results in more detail and consider their significance for future research in the area. The chapter consists of seven further sections. Section 5.2 provides a discussion on the empirical findings drawn from Chapter Four. The methodological significance and the theoretical implications of the study are addressed in Sections 5.3 and 5.4, respectively. Section 5.5 presents the practical implications of the study findings. The limitations of the study are highlighted in Section 5.6. Section 5.7 suggests directions for future research within the work-family framework. The final section, Section 5.8, then draws conclusions.

5.2 Discussion of Empirical Findings

The purpose of this section is to provide a more detailed discussion on the empirical findings reported in Chapter Four. First, the key findings relating to W-F conflict will be summarised, followed by the inferences drawn from these findings. Next, the discussion will summarise the key findings relating to F-W conflict and present a number of inferences drawn from them. Finally, the inferences drawn from both W-F and F-W conflict will be combined in presenting the overall themes that emerged from the empirical findings reported in Chapter Four. These themes will then provide the foundation for the discussion of key theoretical implications presented in Section 5.4.

Findings Relating to W-F Conflict

Chapter Four reported estimation results for eight different hypotheses. These tested the extent to which the importance partners within a couple attached to their work roles crossover and influence an individual's W-F conflict. Hypotheses were tested separately for men and women. These results can be summarised as follows:

- (1) When partners within a couple attached an equal level of importance to their work roles (i.e. work role saliencies were congruent), as expected, men's W-F conflict was higher when both partners attached an equally high importance to their work roles. In contrast, when both partners within a couple attached either high or low levels of importance to their work roles, women's experience of W-F conflict was high.

- (2) Contrary to expectations, when partners within a couple attached a different level of importance to their work roles (i.e. work role saliencies were incongruent), the level of W-F conflict experienced by an individual increased as the difference between partners on the importance attached to their work roles increased. This was true for both men and women.
- (3) As predicted, crossover effects of work role importance between partners on an individual's W-F conflict were greater for women than men.

Key Inferences

A number of key inferences can be drawn from the above results. First, when partners within a couple attached an equal level of importance to their work roles, findings were consistent with the predictions of identity theory only for men. Second, when the level of importance attached to their work roles between partners were different, findings proved inconsistent with identity theory. This was the case for both men and women. Third, crossover effects of work role importance between partners on an individual's experience of W-F conflict proved to be gender asymmetric. Fourth, a distinct gender pattern was found on crossover effects of work role importance between partners and an individual's experience of W-F conflict. Finally, an individual's behaviour-based W-F conflict was not influenced by crossover effects of work role importance between partners. This was true for both men and women. These inferences provide further insight on factors influencing an individual's experience of W-F conflict.

Equal Work Role Importance between Partners

When partners within a couple attached an equal level of importance to their work roles (i.e. work role saliencies were congruent), the results relating to men are highly consistent with the prediction of identity theory. That is, the importance men and their partner's attached to their work roles appear to crossover and exacerbate individual-level effects of resource drain and negative spillover on the level of W-F conflict experienced by men.

This effect was increased as the importance that partners placed on their work roles increased to high levels. Once more, this finding is highly consistent with identity theory, which predicted that the positive relationship between work role importance and the investment of personal resources in the performance of the work role would deplete the amount of personal resources available to satisfy competing family responsibilities for both partners (Burke, 1991; Edwards and Rothbard, 2000; Stryker, 1968). As a consequence, when both partners attach a very high importance to their respective work roles, resources available at the couple-level to satisfy shared family responsibilities such as childcare and domestic chores are reduced and appears to increase men's experience of W-F conflict.

For women, however, the results reported in Chapter Four are inconsistent with the prediction of identity theory. There is only a marginal difference in the W-F conflict experienced by women when both they and their partner attached either a very high or very low importance to their work roles, with conflict being slightly greater in the latter instance. While the finding that conflict was intensified when both partners attached a high importance to their work roles is consistent with identity theory, the finding of high levels of conflict when both placed a very low importance to their work roles is not.

How, then, can this result be explained? The answer reflects, it is argued here, the extent to which the boundaries between work and family roles are permeable. In Chapter Two, it was noted that much of the research on work and family conflict has concluded that both men and women perceive work boundaries as more rigid than family boundaries, thereby leading to an asymmetry in the degree to which work interferes with family relative to family interfering with work (Eby et al., 2005; Rothbard and Edwards, 2003). From this view, it is possible for an individual's investment of personal resources in fulfilling paid work responsibilities to be independent of the importance they attach to their work role. As a consequence, even when placing a very low importance on their work roles, both men and women can invest a substantial portion of their personal resources in fulfilling work responsibilities reducing resources available to fulfil family responsibilities.

Consistent with this explanation, identity theorists have also highlighted the fact that women in general attach a greater importance to their family role than work role (Simon, 1992; Stryker, 1987; Thoits, 1992). The depletion of resources available to a highly important role has been found to be more threatening to an individual's concept of self (i.e. their self-identity) than a reduction of resources available to a less important role (Simon, 1992). Thus, women might perceive the depletion of personal resources available to satisfy family role demands (i.e. role of higher importance) due to the rigidity of their work role (i.e. role of lower importance) to have a greater detrimental effect on their concept of self than men.

Different Work Role Importance between Partners

When partners within a couple attached a different level of importance to their work roles (i.e. work role salencies are incongruent), the findings proved inconsistent with identity

theory. This was the case for both men and women. In general, individuals reported a high level of W-F conflict when the importance attached to their work role was significantly lower than that of their partner. In addition, when the importance attached to their work role was significantly greater than that of their partner, individuals reported an equally high level of W-F conflict. According to these findings, the level of W-F conflict experienced by an individual increased as the difference in the importance attached to their work roles between partners increased. What inferences can be drawn from these findings?

In Chapter Two, it was noted that when one partner within a couple attached a very low importance to their work role and the other attached a very high importance to theirs, at the couple-level this would complement the work and family demands of each partner. For example, if an individual attached a high importance to their work role and their partner a very low importance to theirs, it is possible for the individual to take the primary responsibility for the breadwinner role. The individual's partner on the other hand is able to undertake the primary responsibility for fulfilling family needs. That is, in this instance, the individual's concept of self is most satisfied through their work role while the importance of work to their partner's concept of self is minimal. As a consequence, the depletion of personal resources for the family role due to greater investment in the work role would not result in greater W-F conflict for the individual. The same reasoning can be applied where the roles of the individual and their partner are reversed. In this instance, at the couple-level, the individual will take the primary responsibility for fulfilling family demands while their partner's main responsibility is that of a breadwinner. Once again, each partner is only responsible for only one role and, hence, is unlikely to experience greater conflict due to a depletion of personal resources.

In both instances, the couple-level work and family role arrangements reflect those of a traditional family, where one partner performs the role of a breadwinner and the other performs the role of a nurturer. Therefore, it was expected that when partners within a couple attached different levels of importance to their work roles, these will crossover at the couple-level and offset the positive relationship found between the importance attached to a life role and the experience of conflict (i.e. through individual-level effects of resource drain and negative spillover).

However, this was not the case. The asymmetry in the permeability of work and family boundaries identified by other researchers appears to have been experienced by men and women in this study. That is, even when placing a very low importance on their work role, it is possible that men and women still allocated a high amount of personal resources to their work role, thereby depleting resources available at the couple-level for the fulfilment of shared family responsibilities. The difference between partners in the importance attached to their work roles at the couple-level (through crossover) therefore, does not appear to offset an individual's lack of personal resources (i.e. due to high work role importance) available for the family role at the individual-level (through resource drain and negative spillover).

It will be recalled from Chapter Two that, on average, both men and women attach a greater importance to their family than their work role. Furthermore, it was noted that a depletion of personal resources available for a role of higher importance due to resources expended in a role of lower importance would cause significant conflict to an individual. This was not expected to be necessarily the case when an individual experiences a depletion of personal resources available for a role of lower importance due to personal

resources devoted to the performance of a role of higher importance (Wiley, 1991).

Consistent with previous work-family research (Eby et al., 2005; Rothbard and Edwards, 2003), men and women in this study placed a greater importance on their family role than their work role. Therefore, the depletion of personal resources available for the family role (i.e. a role of greater importance) due to time and energy expended in performing the work role (i.e. a role of lower importance) may have also contributed to high W-F conflict.

In addition to confirming the findings of previous research, these findings extend the research examining the impact of work role salience on W-F conflict. Typically, the importance attached to a given life role has been examined as an antecedent of work and family conflict at the individual-level. These findings indicate that when partners within a couple attached opposite levels of importance to their work roles, in addition to individual-level effects, couple-level crossover effects also influenced an individual's experience of W-F conflict. Contrary to expectations, however, this does not appear to compensate for the lack of personal resources available to fulfil family demands at the individual-level. That is, couple-level crossover effects in this instance, do not appear to offset individual-level effects of resource drain and negative spillover experienced from work to family (i.e. W-F conflict) by men and women.

Gender Asymmetry

As expected, when partners within a couple attached equal or different levels of importance to their work roles, couple-level crossover effects on an individual's W-F conflict was greater for women than men. That is, women's experience of W-F conflict was more dependent upon the work role importance crossover between partners than with the case for men. This finding is consistent with the findings of previous research

conducted within the work-family framework (Beatty, 1996; Beutell and Greenhaus, 1982, 1983; Lambert, 1991) and crossover literature (Demerouti et al., 2005; Hartel and Page, in press; Jones and Fletcher, 1993) which report women's stress and conflict to be more influenced by their partner's work and family variables than men's stress and conflict.

In addition to confirming previous research findings, the findings presented in this study add to our knowledge on gender differences in the experience of W-F conflict. In particular, the findings indicate that the degree to which women experience W-F conflict is in part dependent on the importance their (male) partner attached to their work role. This was not the case for men.

The traditional breadwinner and carer roles attached to men and women may explain this finding. Due to the greater expectations placed on women to fulfil family demands, their ability to cope with a lack of personal resources for their family role may be more dependent on the degree to which their partners participate in fulfilling shared family responsibilities than men. Given their traditional breadwinner role, men may not face as much pressure to fulfil family responsibilities, and hence, are unlikely to be as dependent on the amount of personal resources (a product of the importance attached to a given role) their partner is able to devote to fulfilling family responsibilities. As a consequence, men's experience of W-F conflict is not as dependent on the crossover effects of work role importance between partners within a couple.

Additional Findings

In addition to the above inferences, the estimation results reported for W-F conflict in Chapter Four produced two unanticipated findings. These findings highlight important gaps within the existing work-family research that need further empirical investigation. First, when partners within a couple attached equal or different levels of importance to their work roles, a distinct gender pattern emerged between crossover effects and an individual's experience of W-F conflict. That is, couple-level crossover effects were linear for men, but curvilinear for women. This finding provides new insight into the nature of an individual's experience of W-F conflict. No work-family study has previously employed quadratic regression equations to examine what crossover effects the importance partners within a couple attached to their work roles would have on an individual's W-F conflict. The finding of curvilinear relationships between work role importance crossover and W-F conflict raises questions on what is already known about the nature of relationships between the importance individuals attach to their work roles and their experiences of W-F conflict, at least in relation to women. Future work-family research should seek to explore both linear as well as curvilinear properties of crossover effects between partners on the importance attached to their work and family roles. This may provide additional insight on how the importance attached to a given life role would influence individual-level outcomes such as organisational commitment, career satisfaction, relationship satisfaction and so on.

Second, findings relating to behaviour-based W-F conflict indicated minimal couple-level work role importance crossover effects. This was the case for both men and women. Despite Greenhaus and Beutell's (1985) initial conceptualisation of time, strain, and behaviour-based W-F conflict, the majority of instruments developed and used to measure W-F conflict have focused on items relating to time and strain-based conflict only (Carlson

et al., 2000; Dierdorff and Ellington, 2008). It is therefore, difficult to determine whether the findings of this study pertaining to behaviour-based W-F conflict is due to the nature of the sample or is in fact a reliable finding. This issue will be explored further in Section 5.4.

Findings Relating to F-W Conflict

Chapter Four reported estimation results for eight different hypotheses. These tested the extent to which the importance partners within a couple attached to their family roles crossover an influenced an individual's F-W conflict. Hypotheses were tested separately for men and women. These results can be summarised as follows:

- (1) When partners within a couple attached an equal level of importance to their family roles (i.e. family role salencies were congruent), as expected, men's F-W conflict was higher when both partners attached an equally high importance to their family roles. In contrast, women's F-W conflict was higher when both partners attached an equally low importance to their family roles.
- (2) As predicted, when partners within a couple attached a different level of importance to their family roles (i.e. family role salencies were incongruent), the level of F-W conflict experienced by an individual decreased as the difference between partners on the importance attached to their family roles increased. This was the case for both men and women.
- (3) Consistent with predictions, crossover effects of family role importance between partners on an individual's F-W conflict were greater for women than men.

Key Inferences

Once again, a number of key inferences can be drawn from these findings. First, when partners within a couple attached an equal level of importance to their family roles, findings supported the predictions of identity theory only for men. Second, when the level of importance attached to their family roles between partners were different, findings proved consistent with identity theory. This was the case for both men and women. Third, crossover effects of family role importance between partners on an individual's experience of F-W conflict proved to be gender asymmetric. Fourth, a distinct gender pattern was found on crossover effects of family role importance between partners and an individual's experience of F-W conflict. Finally, crossover effects of family role importance between partners on an individual's F-W conflict were not statistically significant, indicating an asymmetry in the permeability of work and family boundaries. These inferences provide further insight on factors influencing an individual's experience of F-W conflict.

Equal Family Role Importance between Partners

When partners within a couple attached an equal level of importance to their family roles (i.e. family role salencies were congruent), the results relating to men are highly consistent with the prediction of identity theory. That is, the importance men and their partner's attached to their family roles appear to crossover and exacerbate the influence of individual-level effects of resource drain and negative spillover on men's F-W conflict. As predicted by identity theory, the positive relationship between the importance attached to an individual's family role and the investment of personal resources in the performance of the family role would deplete the amount of personal resources available to satisfy competing work responsibilities for both partners (Burke, 1991; Edwards and Rothbard, 2000; Stryker, 1968).

Given their traditional breadwinner role, men may still be expected to devote a majority of their personal resources to fulfilling work responsibilities, despite the greater importance attached to their family role. Furthermore, men and women placing a high importance to their family role have been found to expend greater personal resources in their work role (Rothbard and Edwards, 2003; Zedeck, 1992). In this instance, individuals are found to perceive personal resources invested in their work role as instrumental in fulfilling their responsibility to the family (i.e. ensuring the family's financial security). As a consequence, it is possible for both partners to expend a majority of their personal resources in their work role due to the high importance attached to their family role (contrary to the predictions of identity theory), reducing couple-level resources available to fulfil shared family responsibilities. Couple-level crossover effects of family role importance between partners may then exacerbate the individual-level effects of resource drain and negative spillover experienced by men resulting in greater F-W conflict.

It should, however, be noted that the difference in men's F-W conflict when the importance attached to their family roles by partners converged at high levels compared to low levels was only marginal. That is, even though the relationship between men's F-W conflict and the importance attached to their family roles by partners is consistent with the prediction of identity theory, this finding does not necessarily indicate substantial crossover effects of family role importance between partners on men's experience of F-W conflict.

For women, however, the results reported in Chapter Four refute the predictions of identity theory. In general, women's experience of F-W conflict was greater when both partners

attached a very low importance to their family roles than a very high importance. This may be the case for a number of reasons.

One possible reason for this is that women have traditionally been expected to perform the carer and nurturer roles within the family domain (Hochschild, 1990). As a consequence, they have been found to devote a greater amount of personal resources in fulfilling family demands than men. In this study, women spent approximately 25 hours more per week on unpaid family duties than men. It is possible that even those women, who attached a very low importance to their family role, still allocated a large proportion of their personal resources in fulfilling family responsibilities. In Chapter Two, it was noted that the allocation of personal resources in a life role of lower importance is positively related to conflict emanating from that role (Wiley, 1991). Therefore, for those women whose family role is not important for their concept of self, investing high amounts of personal resources in the family role is unlikely to provide a sense of satisfaction or self-actualisation, resulting in high F-W conflict.

Women with a partner who does not hold an equal responsibility in fulfilling shared family demands have been found to experience higher levels of F-W conflict than women with a partner who does share the responsibility for family demands equally (Hewlett, 2002, 2007; Hochschild, 1990, 1997). Identity theory predicted lower investment of personal resources in a life role if the importance attached to that role is low. While this may not hold true for women in relation to their family role due to traditional gender role norms, their partners (i.e. men) are unlikely to contribute greatly in fulfilling family responsibilities if they attached a low importance to their family role. Due to their traditional breadwinner role, men in general are unlikely to participate greatly in fulfilling

shared family responsibilities. This is likely to be even less when the importance they place on their family role is very low. Therefore, negative individual-level effects of resource drain and spillover experienced by women from family to work (i.e. F-W conflict) are likely to be compounded when their partner places a very low importance on their own family role. In this instance, the demands placed on women in fulfilling shared family responsibilities are likely to be greater, increasing their experience of F-W conflict.

Different Family Role Importance between Partners

When partners within a couple attached a different level of importance to their family roles (i.e. family role salencies were incongruent), the findings are consistent with identity theory. This was the case for both men and women. In general, individuals reported a low level of F-W conflict when the importance attached to their family role was significantly lower than that of their partner. In addition, when an individual attached a greater importance to their family role than their partner, they reported an equally low level of F-W conflict. According to these findings, the level of F-W conflict experienced by an individual decreased as the difference in the importance attached to their family roles between partners increased. This could be due to a number of reasons.

This difference in the importance that partners attached to their family roles is likely to be associated with a lower level of F-W conflict as each partner invests the majority of their personal resources in fulfilling the life role that is more central to their concept of self. At the couple-level, opposing levels of importance attached to their family roles by partners complement the work and family role requirements of the couple (Hewlett, 2002; Hochschild, 1990). For example, when an individual attaches a low importance to their family role, while their partner attaches a high importance to their family role, the partner

is able to undertake the primary responsibility to fulfil shared family tasks and leave the individual ample personal resources to fulfil work responsibilities.

This represents a prototype of the traditional nuclear family, with the only difference being that either of the partners, male or female, can act as the breadwinner or carer. The negotiation of primary responsibility for only one role (i.e. breadwinner or carer) within a couple is likely to reduce the level of strain or conflict an individual experiences. That is, at the couple-level, each partner is committed to performing either the breadwinner or carer role, which, in turn, enhances the ability of each individual within the couple-dyad to allocate finite personal resources to that role without having to worry about competing responsibilities from the other role (Hochschild, 1990). This finding is further supported by the fact that an individual's experience of F-W conflict was greatest when there was no difference in the importance attached to their family roles between partners within a couple. This was the case for both men and women. Rather than complementing the work and family role requirements of each partner, in this instance, both partners are equally pressed to distribute finite personal resources to satisfy demands emanating from both roles, not just one.

These findings extend the existing knowledge on the influence of family role salience on F-W conflict. In particular, the importance attached to their family roles (as a consequence, investment of personal resources) by partners within a couple is found to crossover and influence an individual's F-W conflict. Consistent with the prediction of this study, when partners attached an opposite importance to their family roles, these crossover effects were found to compensate for the lack of personal resources available to fulfil work demands at the individual-level. That is, couple-level crossover effects in the importance attached to

respective family roles in this instance appear to offset individual-level effects of resource drain and negative spillover experienced from family to work (i.e. F-W conflict) for both men and women.

Gender Asymmetry

As expected, when partners within a couple attached equal or different levels of importance to their family roles, couple-level crossover effects on an individual's F-W conflict was greater for women than men. That is, women's experience of F-W conflict was more dependent upon the extent to which their partner attached a high or low importance to their family role than was the case for men. Moreover, this finding is consistent with the findings of previous research conducted within the work-family framework (Beatty, 1996; Beutell and Greenhaus, 1982, 1983; Lambert, 1991) and crossover literature (Demerouti et al., 2005; Hartel and Page, in press; Jones and Fletcher, 1993) which report women's stress and conflict to be more influenced by their partner's work and family variables than men's stress and conflict.

Findings relating to the extent to which the importance attached to their family roles crossover between partners and influenced an individual's F-W conflict were not statistically significant. It should, however, be noted that surface plots corresponding to the regression equations indicated the presence of some crossover effects. As reported in Chapter Three, the lack of statistical support may be due to the small sample size (Cohen, 1992).

Nevertheless, this finding extends existing knowledge on gender differences in the experience of F-W conflict. In particular, the degree to which women experience F-W

conflict appears to be more dependent on the importance men place on their family role than vice versa. This could be due to traditional gender role expectations found in society. As noted earlier, a woman whose partner does not participate greatly in fulfilling shared family responsibility (due to the low importance attached to their family role) is likely to experience higher levels of F-W conflict than men. That is, even when their family role is not central to their concept of self, women may still be expected to undertake the majority of shared family responsibilities than men. As a consequence, their ability to cope with depleted personal resources for their work role maybe more dependent on the degree to which their partners participate in fulfilling shared family responsibilities. Given their traditional breadwinner role, men may not be expected to shoulder as much responsibility as women in fulfilling shared family responsibilities. Thus, they are likely to be less reliant on the degree to which their partner is able to contribute towards fulfilling family responsibilities (a product of their family role importance).

Additional Findings

In addition to the above inferences, empirical analyses undertaken and reported in Chapter Four on F-W conflict produced two unexpected findings. These provide new insight and highlight the need for further empirical research to better understand the process of work and family conflict.

First, although not predicted, when partners within a couple attached equal or different levels of importance to their family roles, a distinct gender pattern emerged between crossover effects and an individual's experience of F-W conflict. That is, couple-level crossover effects were significantly linear for men, but significantly curvilinear for women. This was especially true when the importance attached to their family roles between

partners was different (i.e. incongruent). However, as noted earlier, the shapes (i.e. linear and curvilinear) depicted by the surface plots were not statistically significant.

Nevertheless, the distinct linear and curvilinear relationships found for men and women's F-W conflict provides new insight into the nature of an individual's experience of F-W conflict.

The curvilinear relationships found between family role importance crossover and F-W conflict raise questions on existing knowledge on the nature of relationships between family role salience and F-W conflict. This is especially true when the levels of importance attached to their respective family roles by partners within a couple are different. In order to better understand the influence of family role importance on an individual's F-W conflict, future research should aim to explore possible linear as well as curvilinear crossover effects of the importance individuals within a couple attach to their family roles. This may provide further insight into how these crossover effects might influence individual-level outcomes such as organisational commitment, career satisfaction, relationship satisfaction and so on.

Second, the lack of significant statistical effects of family role importance crossover between partners on men and women's F-W conflict may indicate an asymmetry in the permeability of work and family boundaries (Eby et al., 2005; Rothbard and Edwards, 2003). That is, work is found to more frequently affect family than vice versa. As reported earlier, crossover effects of work role importance between partners on an individual's W-F conflict were found to be statistically significant. This was the case for both men and women. In contrast, although surface plots relating to the importance partners within a couple attached to their family roles and an individual's F-W conflict provided evidence of

some crossover effects, these were however, of lower magnitude and not statistically significant. Therefore, even at the couple-level, the importance partners within a couple attached to their work roles appear to influence an individual's W-F conflict more than the importance partners within a couple attached to their family roles influence their F-W conflict. It should, however, be noted that this asymmetry in the permeability of work and family boundaries appeared to be gendered. This will be discussed in greater detail in Section 5.4.

Summary of Key Themes

A number of themes appear from the findings discussed, and inferences drawn above. These themes provide new insight on the nature of relationships between the importance (i.e. salience) partners within a couple attach to their work (family) roles and an individual's experience of W-F (F-W) conflict.

Equal Role Importance between Partners

When partners within a couple attached an equal importance to their work (family) roles (i.e. their role salencies are congruent), significant crossover effects were evident. This was the case for both men and women, although some gender differences were found. For men, these effects were as expected. That is, the equally high levels of importance partners within a couple attached to their work (family) roles appeared to crossover and exacerbate the influence of individual-level effects of resource drain and negative spillover on men's experience W-F (F-W) conflict. For women, the influence of crossover effects was not as predicted. The equally high levels of importance partners within a couple attached to their work (family) roles did not necessarily exacerbate the influence of individual-level effects

of resource drain and negative spillover on women's W-F (F-W) conflict. Together, these findings indicate, when partners within a couple attached an equal importance to their work (family) roles, crossover effects on an individual's W-F (F-W) conflict may be gendered.

Different Role Importance between Partners

When partners within a couple attached a different (i.e. incongruent) level of importance to their work and family roles, the results indicated contrasting crossover effects for W-F and F-W conflict. This was the case for both men and women.

The opposite levels of importance partners within a couple attached to their work roles did not appear to crossover and offset individual-level effects of resource drain and negative spillover on an individual's W-F conflict. That is, an individual's lack of personal resources for shared family responsibilities due to the high importance placed on their work role did not appear to be compensated by the fact that their partner placed a considerably lower importance on their own work role. The asymmetric permeability of work and family boundaries may explain this finding. Due to the comparatively greater rigidity of work boundaries, irrespective of the importance attached to their work role, an individual's ability to draw upon resources expended in their work role to fulfil family responsibilities shared at the couple-level may be limited. As a consequence, even when an individual's partner attaches a significantly lower importance to their work role than does the individual, they are not likely to possess greater personal resources than the individual to fulfil shared family demands.

In contrast, the different levels of importance partners within a couple attached to their family roles did appear to crossover and offset individual-level effects of resource drain

and negative spillover on an individual's F-W conflict. That is, the lack of personal resources available for an individual's work responsibilities due to the high importance placed on their family role did appear to be compensated by the fact that their partner placed a considerably lower importance on their own family role. In this instance, the greater flexibility found within family boundaries is likely to allow the individual's partner to allocate the majority of their personal resources in performing the breadwinner role at the couple-level. Each partner within a couple is therefore, likely to invest the majority of their personal resources in fulfilling the life role that is most central to their concept of self (i.e. the individual in the carer role and their partner in the breadwinner role). An individual within such couple dyads is unlikely to experience high F-W conflict due to individual-level effects of resource drain and negative spillover caused by high family role importance.

The greater importance placed on their family role will deplete personal resources available for an individual's work role. However, this is unlikely result in high F-W conflict for the individual as their partner is responsible for the breadwinner role. In this instance, the individual's concept of self is derived more through their family role, and their partner's concept of self through their work role. As a consequence, the separate roles negotiated for each partner at the couple-level crossover and offset the individual-level effects of resource drain and negative spillover on an individual's F-W conflict (i.e. similar to the traditional nuclear family of a single breadwinner and single carer).

Gender Asymmetry of Crossover Effects

As predicted, the influence of couple-level crossover effects of work (family) role importance on an individual's experience of W-F (F-W) conflict was greater for women

than men. This was found to be the case when partners within a couple attached an equal level of importance as well as a different level of importance to their work (family) roles. Therefore, the extent to which the importance partners within a couple attached to their work (family) roles crossover and exacerbated individual-level effects of resource drain and negative spillover on work and family conflict was greater for women than men. As noted in Chapter One, despite significant changes to their work roles, women continue to undertake primary responsibility for the majority of family responsibilities shared at the couple-level. While men's family roles have also undergone change, their primary responsibility is still perceived to be that of a breadwinner. Therefore, the degree to which an individual's partner is able to devote personal resources to fulfilling family demands (an outcome of the importance attached to the family role) is likely to have a greater impact in determining women's ability to manage competing work and family demands, and hence, their work and family conflict. In other words, a gender asymmetry exists in the influence of couple-level crossover effects on an individual's work and family conflict.

Crossover Effects: Linear and Curvilinear

The findings of this study indicated an unexpected, yet distinct, gender effect in the relationships between the levels of importance partners within a couple attached to their work (family) roles and an individual's W-F (F-W) conflict. Specifically, couple-level crossover effects of work (family) role importance appeared to share linear relationships with men's W-F (F-W) conflict, while the same relationships were curvilinear for women.

These findings provide new insight on the nature of an individual's W-F (F-W) conflict. Chapter Two noted that the majority of work-family researchers have examined work and family conflict on the basis of individual-level effects of resource drain and negative

spillover. These individual-level effects only allow linear relationships between work and family variables to be empirically tested. The findings of this study indicate in addition to linear effects, some of these relationships may in fact have curvilinear properties, at least in relation to women (W-F conflict), or when the levels of importance partners within a couple attached to their respective family roles were different (F-W conflict). Future work-family researchers should, therefore, seek to explore both linear as well as curvilinear crossover effects of the levels of importance individuals within a couple attach to their work and family roles. This may provide further insight on how these crossover effects may influence numerous individual-level work and family outcomes such as organisational commitment, career satisfaction, relationship satisfaction and so on.

Work and Family Boundaries: Asymmetrically Permeable

The findings of this study both confirm and extend existing knowledge on the differences between W-F and F-W conflict. Individual-level research carried out within the work-family framework has consistently found individuals to report greater W-F conflict than F-W conflict. In other words, work and family boundaries have been found to be asymmetrically permeable where individual-effects of resource drain and negative spillover were more likely to occur from work-to-family (W-F) than from family-to-work (F-W). Both men and women in this study reported greater W-F than F-W conflict, confirming this asymmetry.

In addition, crossover effects of work role importance between partners were found to have a greater influence on an individual's W-F conflict than crossover effects of family role importance between partners on an individual's F-W conflict. These findings extend existing knowledge on the asymmetry between work and family boundaries. That is, even

at the couple-level, the influence of changes in the levels of importance partners attached to their respective work roles on their W-F conflict appear to be greater than the influence of changes in the levels of importance partners attached to their respective family roles on their F-W conflict.

Behaviour-based W-F Conflict

Existing research conducted on individual-level effects of resource drain and negative spillover does not necessarily provide a clear framework on the antecedents of behaviour-based W-F conflict. Despite Greenhaus and Beutell's (1985) conceptualisation of time, strain, and behaviour-based W-F conflict, most of the measures used to examine W-F conflict within work-family research examine items explicitly related time and strain-based conflict only. The findings presented in this study indicated that behaviour-based conflict may not share the same antecedents as time- and strain-based conflict. That is, work role importance crossover does not appear to influence an individual's behaviour-based W-F conflict. This was true for both men and women. This finding highlights the need for future work-family researchers to explicitly examine possible individual-level as well as couple-level antecedents of behaviour-based W-F conflict to better understand factors influencing this particular type of W-F conflict.

The theoretical implications of all of the above findings relating to W-F and F-W conflict are explored in greater detail in Section 5.4. However, before doing so, the following section highlights two significant methodological contributions made by this study to work-family research.

5.3 Significance of the Study

The research design and analytical technique used in this study contributes methodologically to work-family research in two ways. First, it employed an innovative research design in which matched pairs of couples are used as the unit of analysis. Second, this study introduces polynomial regression analysis and response surface methodology as an alternative technique to be used with couple-level analysis pertaining to work-family research. While this technique is widely used in other areas of organisational behaviour research (e.g. person-environment fit research), it has not been widely used by work-family researchers.

Dyadic Research Design

In their review of published research on work-family linkages, Parasuraman and Greenhaus (2002) highlight the overemphasis placed on individual-level analysis and the limited exploration of couple-level work-family linkages. Similarly, in a recent review of methodologies employed in work-family research over the past two decades, Casper et al. (2007) highlight the dearth of studies employing couple-level analysis to investigate work-family linkages. From the 225 studies examined, they found the majority collected data from a single source (76 percent), and conducted analysis at the individual-level (89 percent). As a consequence little is in fact known about work-family relations at the dyadic level.

This oversight is somewhat surprising given the number of studies conducted within the work-family framework that lend strong support to the significant influence that a partner has on an individual's work and family life (Bakker et al., 2008; Gareis et al., 2003; Schneer and Reitman, 2002; Streich et al., 2008; Sweet and Moen, 2007). As this study

demonstrates, this oversight is problematic for a range of reasons. Perhaps most significantly, work-family research at the individual-level carries the false assumption that individuals who are married or in *de facto* relationships make decisions pertaining to their work and family lives independent of their partner (Casper et al., 2007; Parasuraman and Greenhaus, 2002; Stets, 2006).

In particular, few studies have examined the relationship between role salience and work and family conflict at the couple-level. A review of existing literature revealed no published studies that examine the crossover effects that work and family role salencies between partners have on an individual's experience of work and family conflict. For these reasons, the couple-level research design of this study represents a significant step towards addressing this large gap in work-family research. This study is the first of its kind to investigate this key area within work-family research.

Polynomial Regression Analysis

Casper et al. (2007) found most work-family studies used simple inferential statistics (79 percent) and a single dependent variable (90 percent) rather than multiple dependent variables (8 percent) and more advanced statistical techniques such as structural equation modelling (17 percent) and moderated regression (15 percent) to examine linkages between work and family roles. Although some studies have investigated multi-level outcomes by employing advanced analytical techniques such as hierarchical linear modelling (Gareis et al., 2003; Raudenbush, Brennan, and Barnett, 1995), these are few and far between (Casper et al., 2007).

In addition to collecting data from both partners and conducting analysis at the couple-level, this study makes an additional methodological contribution by employing polynomial regression analysis and response surface methodology to conduct couple-level analysis. Studies employing this innovative technique to analyse work-family linkages have been sparse (Edwards and Rothbard, 1999; Kreiner, 2006). Typically, however, data used in these studies has been collected from a single individual rather than from multiple persons (i.e. couples).

In a study of university employees, Edwards and Rothbard (1999) examined the influence the degree of similarity between actual work (family) experiences and the values desired by an individual would have on their stress and well-being. In a recent study of alumni of a American university, Kreiner (2006) investigated the effect congruence between an individual's work-home segmentation preference and the perceived segmentation provided by the workplace would have on an individual's work-home conflict. While using polynomial regression analysis and response surface methodology, neither of these studies incorporated the dyadic research design utilised in this study. That is, both of these studies collected data from a single individual. By incorporating data collected from both partners within couple-dyads, this study minimises the possibility of biases such as common method variance that can distort the accuracy of findings. Furthermore, the use of data from both partners provides an opportunity to conduct more realistic analysis of couple-level role salience crossover effects on an individual's work and family conflict.

5.4 Theoretical Implications

The findings discussed in Section 5.2 raise a number of theoretical implications for work-family research. Most importantly, the findings of this study lend strong support for the

need to revise the existing theoretical framework used by work and family researchers to accommodate the influence of couple-level attributes on individual-level outcomes.

The results reported above suggest that crossover effects – that is the extent to which the importance partners within a couple attach to their work or family roles influence the work and family conflict experienced by an individual – appear to be asymmetric in two important respects.

First, the crossover effects between partners within a couple appear to be asymmetric between work and family roles. That is, while the importance that one individual within a couple attached to their *work* role appears to have a significant crossover effect in that it influences the extent to which their partner experiences W-F conflict, the importance that an individual attached to their *family* role did not have a significant effect on their partner's experience of F-W conflict. This was found to be the case when individuals within a couple attached equal or different levels of importance to their respective work (family) roles. As noted above, this type of asymmetry has been typically labelled as reflecting an asymmetry in the degree to which work and family boundaries are permeable.

Second, this study also suggests that crossover effects are also asymmetric in terms of the degree to which gendered roles are permeable. That is, while the degree to which men placed importance on their work (family) role was found to have a significant influence on their female partner's experience of W-F (F-W) conflict, the same crossover effect was not evident for women. The importance that women within a couple placed on their work (family) role did not have a significant effect on the extent to which their male partner

experienced W-F (F-W) conflict. This asymmetry in gender roles has not been found in any other work-family study.

Both of these results, it will be argued, have significant theoretical implications, and suggest the need for a significant re-working of the standard framework which has guided the work and family conflict research. The aim of this section is, therefore, to examine the theoretical implications of these themes in greater detail and propose a revised theoretical framework for future research.

However, before discussing the asymmetries in the permeability of work and family role boundaries and in gender roles on crossover effects, theoretical implications raised by an intriguing, yet, unexpected finding in relation to behaviour-based conflict are addressed briefly.

Behaviour-Based Conflict

In contrast to the other types of conflict (i.e. time and strain), the importance attached by partners within a couple to their work roles had minimal crossover effects on men and women's behaviour-based W-F conflict. The majority of existing research within the work-family framework has not explicitly examined men and women's behaviour-based W-F (or F-W) conflict (Dierdorff and Ellington, 2008; Ford et al., 2007). Most studies have tended to use variables such as autonomy, prestige, and employment relationships (i.e. self-employed, family business etc.), none of which are directly related to actual behaviour expectations or duties of an individual's work role (Dierdorff and Ellington, 2008; Eby et al., 2005).

It will be recalled from Chapter Two that behaviour-based conflict does not necessarily imply conflicting demands between work and family roles *per se* (Edwards and Rothbard, 2000). That is, behaviour-based conflict from either W-F or F-W only occurs when behaviour required in one role interfere with role performance in the other. Dierdorff and Ellington (2008) found occupation to be a significant predictor of behaviour-based W-F conflict. Specifically, they found individuals working in occupations that require high interpersonal interaction (i.e. interdependence) and greater responsibility for others to report greater behaviour-based W-F conflict. Dierdorff and Ellington (2008) report the effects of these two occupational antecedents were most prominent for police detectives, fire-fighters, and family and general practitioners, occupations that require high levels of interdependence and responsibility for others. In contrast, the lowest effects were found for taxi drivers, insurance adjusters and examiners, and tellers, occupations that do not require high interdependence and responsibility for others.

In this study, the participants worked in similar occupations. It was therefore difficult to examine the role of occupation in determining behaviour-based W-F and F-W conflict. While role salience may influence time-based and strain-based W-F (F-W) conflicts, it is possible that the relative importance that an individual attaches to their work and family roles does not necessarily create conflicting behaviours between work and family roles. Although existing research provides a comprehensive framework in indentifying individual-level antecedents of time-based and strain-based W-F (F-W) conflict, further research is needed to ascertain antecedents of behaviour-based W-F (F-W) conflict, both at the individual- and couple-level.

Asymmetric Permeability

As noted in Chapter Two, research carried out on work and family conflict at the individual-level indicates a clear asymmetry in the permeability of work and family boundaries. That is, in general, both men and women have been found to experience greater work interference with family (i.e. W-F conflict) than family interference with work (i.e. F-W conflict), indicating an asymmetry in the permeability of work and family boundaries (Eby et al., 2005; Gutek et al., 1991; Rothbard and Edwards, 2003). This asymmetry has been attributed to prevailing social norms in which personal resources invested in work are perceived to be instrumental in fulfilling the material needs of an individual's family (Evans and Bartolome, 1986; Kanter, 1977, 1989; Rothbard and Edwards, 2003; Zedeck, 1992). As a consequence, when attaching a high importance to their family role, an individual is more likely to draw upon personal resources invested in their family role to fulfil work responsibilities than to draw upon personal resources invested in their work role to fulfil family responsibilities.

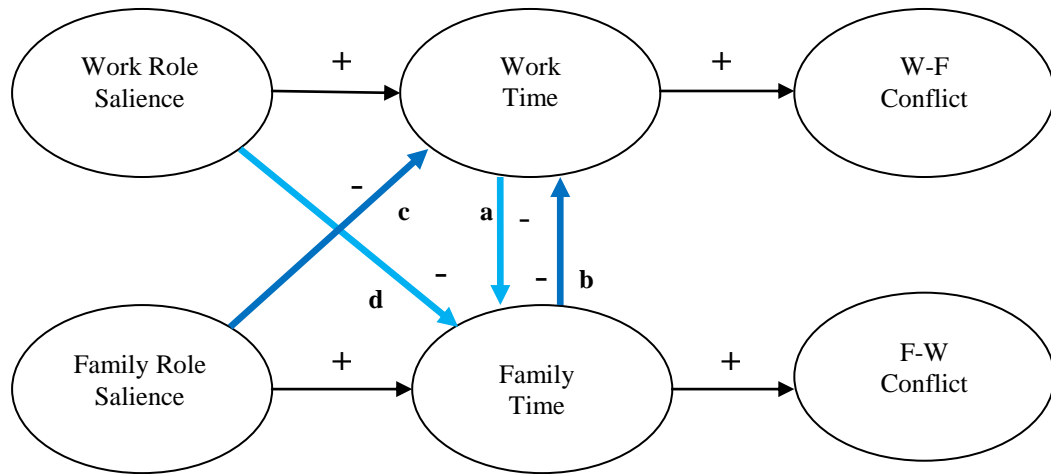
The findings of this study add to this knowledge in two ways. First, at the individual-level, both men and women in this study reported greater W-F conflict than F-W conflict. This confirms the findings of previous research. It should, however, be noted that in contrast to previous research, significant gender differences were found in this study. While the difference between overall W-F and F-W conflict reported by men was substantial, for women the difference was only marginal.

This could be due to the correlations found between weekly work and family hours of men and women. The number of hours spent in work and family roles were not correlated for men, while for women these were significantly, and negatively correlated. For women,

time spent in one role (e.g. work) resulted in a depletion of time available for the other role (e.g. family). No such relationship was found for men. Therefore, at the individual-level, women appear to experience an equal level of resource drain and negative spillover from work-to-family (W-F conflict) as well as from family-to-work (F-W conflict). This was not the case for men.

As demonstrated in Figure 5.1 (path '*a*'), the traditional carer role attached to their identity may cause women to allow time needed to fulfil family responsibilities to encroach upon time available for their work role (i.e. F-W conflict). Given the earlier mentioned rigidity of work boundaries, women are equally likely to allow time spent in their work role to impinge upon time available for their family role (i.e. W-F conflict) (path '*b*'). For women, an increase in the importance (i.e. salience) attached to one role (both path '*c*' and '*d*') therefore, is likely to result in a depletion of time available for the other role leading to approximately equal levels of W-F and F-W conflict.

Figure 5.1: Role Saliency, Time, and W-F and F-W Conflict of Women (individual-level effects of resource drain and negative spillover)



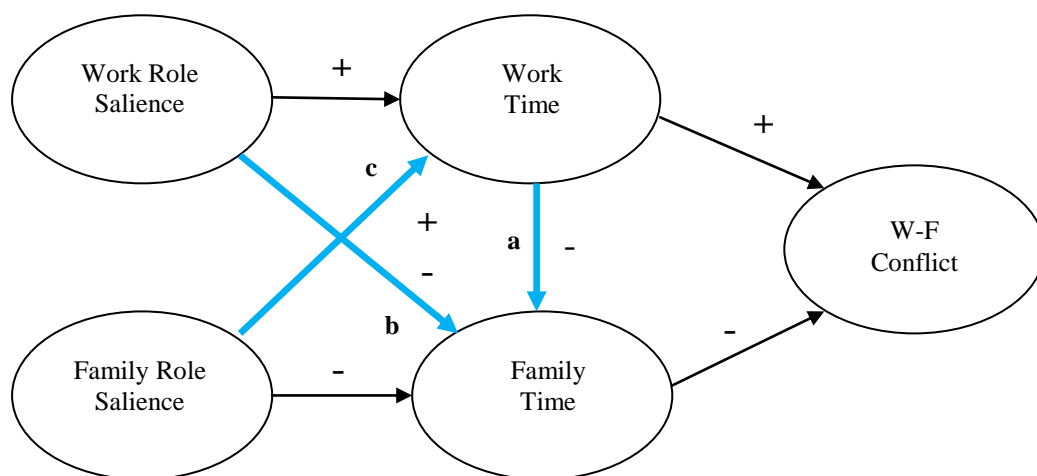
Note: Individual-level effects of resource drain and negative spillover from work-to-family (W-F) are indicated through arrows in *light blue*. The same effects from family-to-work (F-W) are depicted through arrows in *dark blue*.

Figure 5.2 graphically illustrates the same relationships for men. However, given their traditional breadwinner roles, in general, men are less likely to sacrifice time available for their work role to fulfil family responsibilities. As a consequence, men are more likely to sacrifice time available for their family role to fulfil work role responsibilities (path '*a*'). This process is likely to be exaggerated when the importance men attach to their work role increases (path '*b*'). In addition, men are also more likely to sacrifice time available for their family role to fulfil work role responsibilities when attaching a high importance to their family role (path '*c*'). That is, men may perceive being the primary breadwinner through their work role as fulfilling their obligations and responsibilities to the family. Therefore, in contrast to women, an increase in the importance attached to either the work

or family role is more likely to result in a depletion of time available for the family role (both path '*b*' and '*c*') for men.

In other words, women appear to treat the boundaries between their work and family roles as equally flexible (i.e. symmetrically permeable), while for men, the work boundary appears to be less flexible than their family boundary (i.e. asymmetrically permeable). As a consequence, at the individual-level, women's experiences of W-F and F-W conflict are not as significantly different as those of men.

Figure 5.2: Role Salience, Time, and W-F and F-W Conflict of Men (individual-level effects of resource drain and negative spillover)



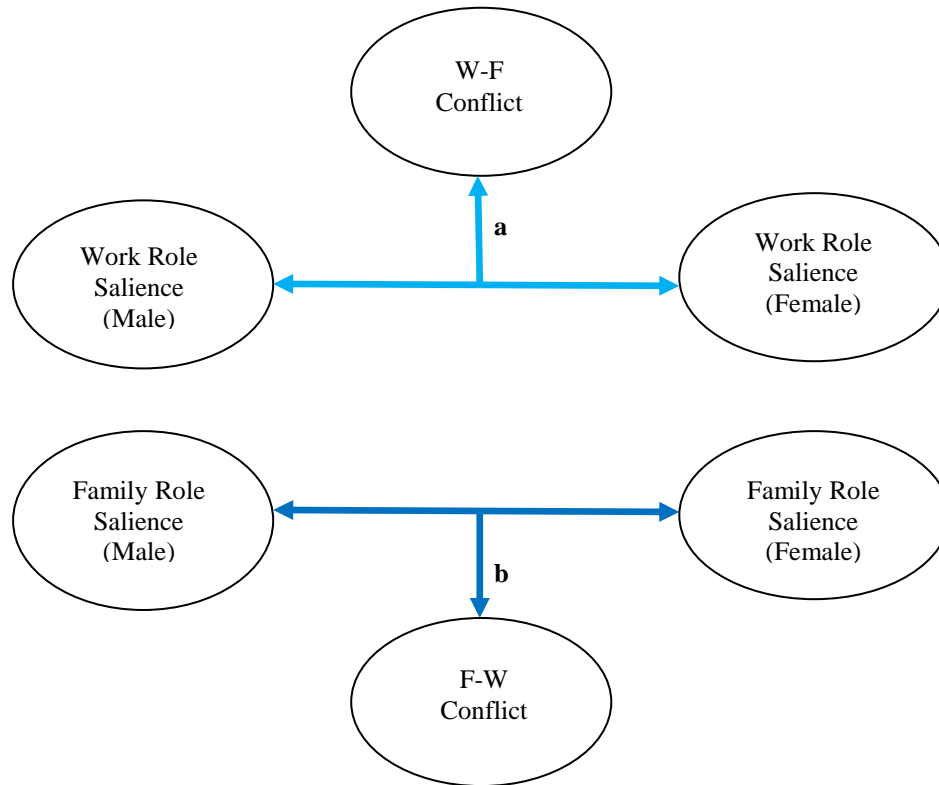
Second, couple-level crossover effects of work role importance had a significant influence on an individual's W-F conflict. That is, an individual's W-F conflict was significantly influenced when partners within a couple attached equal as well as different levels of importance to their work roles. This was the case for both men and women. However, no statistically significant crossover effects on F-W conflict were found when partners within

a couple attached equal as well as different levels of importance to their family roles. Once again, this was true for both men and women.

Figure 5.3 illustrates these relationships graphically. These findings indicate the importance an individual within a couple attached to their work role significantly influenced their partner's experience of W-F conflict (path '*a*'). This influence was however, greater than the effect an individual's family role importance had on their partners F-W conflict (path '*b*'). Therefore, just as individual-level effects of resource drain and negative spillover indicate an asymmetric permeability of work and family boundaries so too do couple-level effects of crossover.

It should, however, be noted that further examination of surface plots relating to crossover effects of family role importance on F-W conflict provided evidence of marginal gender differences. In particular, marginal crossover effects were evident for women's F-W conflict, when partners within a couple attached equal or different levels of importance to their respective family roles. It is possible that the relatively small effect size of the sample used in this study failed to statistically capture the marginal crossover effects depicted through the corresponding surface plots for women (Cohen, 1992). In contrast, the surface plots relating to men's F-W conflict confirmed the statistically insignificant crossover effects of family role importance between partners.

Figure 5.3: Role Salience, Time, and W-F and F-W Conflict of Men and Women
(couple-level effects of crossover)



Together, these findings mirror those reported above on individual-level effects of resource drain and negative spillover. That is, crossover effects of the importance attached to their family roles by partners within a couple marginally influenced women's experience of F-W conflict, but not men's F-W conflict. When combined with the significant crossover effects found between work role importance and their W-F conflict, for women, couple-level crossover effects are found for both W-F and F-W conflict. That is, at the couple-level, women appear to treat boundaries between work and family roles as symmetrically permeable (both path '*a*' and '*b*' in Figure 5.3 are significant). In contrast, at the couple-level, men appear to treat the boundaries between work and family as asymmetrically permeable (only path '*a*' in Figure 5.3 is significant). This is reflected through the

significant crossover effects of work role importance found on men's W-F conflict, but the lack of significant family role importance crossover effects on their F-W conflict.

The findings of individual-level effects of resource drain and negative spillover as well as the couple-level crossover effects of work (family) role importance on an individual's W-F (F-W) conflict suggests the experience of work and family conflict to be 'gendered'. This forms the second type of asymmetry that emerged from the findings of this study.

Gender Asymmetry

In addition to the gender differences found in the permeability of work and family boundaries, a significant gender effect was found in relation to the effects role salience crossover between partners had on an individual's work and family conflict. That is, women's work and family conflict appeared to be more dependent on the importance their partner attached to their own work and family roles than men's work and family conflict. While these findings are consistent with results reported in previous crossover research, they provide important new insights to work-family researchers.

In Chapter Two, crossover was defined as a process in which a psychological strain experienced by one partner influenced the level of strain or conflict experienced by the other partner within the marital dyad (Westman, Vinokur et al., 2004). A number of studies conducted on the crossover of negative feelings and psychological states between spouses have found crossover effects to be gendered. That is, negative crossover has been found to emanate mainly from the male partner to the female partner than from the female partner to the male partner (Hartel and Page, in press).

For example, Westman et al. (2004) found men's marital dissatisfaction to directly influence women's marital dissatisfaction, but no such relationship was found from women to men. Men's job demands and strain have also been found to influence women's anxiety and depression, even after controlling for women's own job related stress (Jones and Fletcher, 1993). Once again, no such influences were reported from women to men. In addition to these, other studies conducted within crossover research on couples have found men's job insecurity to predict women's burnout (Westman et al., 2001), women to be more distressed by issues relating to men due to their higher investment in the family role (Kessler and McLeod, 1984), and women's life satisfaction to be dependent upon men's life satisfaction (Demerouti et al., 2005).

While confirming the findings reported in the above crossover research, the results presented in this study provide important new insights to both crossover and work-family research. Notably, the results add to crossover research by investigating the importance one partner within a couple attaches to their work and family roles would have on an individual's work and family conflict. These relationships have not been previously tested with crossover research. Findings of this study enhance existing knowledge within work-family research on the role of gender on work and family conflict. In particular, the findings indicate the degree to which the importance an individual's partner places on their work and family roles influence an individual's work and family conflict to be gender asymmetric.

Explaining Gendered Asymmetries

Existing crossover, sociology, and work-family literature provide a number of explanations for why these crossover effects are likely to be asymmetric for men and women.

First, women may be more likely to offer personal coping resources to significant others (i.e. male partners) than men due to their greater investment in personal relationships (Riley and Eckenrode, 1986). As a consequence, women's ability to cope with their own stress and stress emanating from their partner diminishes, increasing the probability of women being affected by their own as well as their partner's stressors (Hartel and Page, in press).

Second, these gender differences may reflect what Demerouti et al. (2005) refer to as 'traditional gender role socialisation', in which men are socialised to take on the traditional breadwinner role, while women are socialised to place emphasis on their roles as carers and nurturers. This pattern of role socialisation may cause women to place a greater importance on their personal relationships, thereby leaving them more vulnerable to influences from their partner in managing competing work and family demands (Galambos and Silbereisen, 1989). For example, in a study of 451 married couples, Conger, Lorenz, Elder, Simons, and Xiaoja (1993) found men to report greater distress due to their work and financial issues while women's distress was found to be more influenced by exposure to negative events within the family.

Third, research conducted within sociology indicates women to experience greater personal inadequacy due to competing work and family demands. For example, in a study examining the reasons behind Norwegian mothers' withdrawal from high commitment careers, Halrynjo and Lyng (2009) found the gendered nature of the shared worker-carer ideal to significantly contribute to the greater levels of conflict experienced by women due to competing work (high-commitment career) and family (involved parenthood) demands. That is, the dual responsibility of being a highly committed employee and an involved

parent continue to be primarily a women's issue, both from a social and employer perspective. Similarly, Mitchelson (2009) found women to experience greater discrepancies than men between the standards they set themselves for their work and those achieved in reality. She attributes this to cultural expectations regarding gender creating greater social pressures on women to seek higher standards than men within their work and family domains. These experiences of personal inadequacy due to the higher standards women set for themselves may leave them more vulnerable to the contributions their partner make towards fulfilling competing work and family responsibilities within a couple dyad.

Finally, men have typically been found to possess greater personal resources for life roles other than work and family (e.g. leisure) (Rothbard and Edwards, 2003). This has been attributed to the significantly lower contribution of men in fulfilling family responsibilities shared at the couple-level. For those women in dual-earner relationships, the combined amount of personal resources expended in work and family roles therefore, tend to be significantly greater than that of men (Hochschild, 1990). When demands from either the work or family roles increase, men are less reliant on their partners, and are better able to cope as they can draw upon personal resources invested in other life roles to accommodate these changes. In contrast, due to the comparatively lesser amount of personal resources invested in other life roles, women are more likely to be more dependent upon their partner's support (i.e. participation) to cope with increases in demands placed on them by either work or family roles. Although this study did not measure the amount of time men and women spent on activities other than paid work and unpaid family work, it is possible that men possessed greater personal resources (i.e. time for leisure) than women which could have been drawn upon if they attached an equally high importance to their work and

family roles. For men, the additional personal resources required for their work (family) role in this instance, therefore, do not deplete resources available for their family (work) role. This could not, however, be tested within this study and should be interpreted cautiously.

It should nonetheless be noted that a number of crossover studies do not report gender based asymmetries in crossover effects (Bakker, Demerouti, and Schaufeli, 2005; Barnett, Raudenbush, Brennan, Pleck, and Marshall, 1995; Gareis et al., 2003; Westman and Vinokur, 1998). That is, these studies found little to no significant gender differences in crossover effect between partners. Westman, Etzion, and Horovitz (2004) argue the effect of gender on crossover to be a function of the degree to which partners share the breadwinner role. They postulate the probability of symmetrical and bi-directional crossover from men to women and women to men, to be high between couples who share the breadwinner role and low (i.e. unidirectional, generally from men to women) between couples where one partner is the main breadwinner and the other is the main carer of the family (i.e. single-earner couples).

Although the sample used in this study consisted of dual-earner couples, no measure was included to test the degree to which partners shared breadwinner and carer roles. It will be recalled that, men, on average, spent more hours in paid work than women, while, on average, women spent more hours in unpaid family work than men per week. It is possible, therefore, that the sample of women in this study invested more in their relationship than men and, as a result, were more vulnerable to the importance placed by their partner to his own work and family roles (Hartel and Page, in press). This could not, however, be confirmed from the data collected. It is necessary for future research to incorporate

measures examining the degree to which partners share breadwinner and carer roles within a couple to obtain a more complete understanding of the role of gender on the relationships between the importance partners within a couple attach to their respective work and family roles and an individual's experience of work and family conflict.

Work and Family Conflict: A New Model

Although Greenhaus and Beutell's (1985) conceptual framework used by most work and family researchers (see Figure 2.1) provides a sound theoretical basis to analyse the experience of work and family conflict at the individual-level, it implicitly assumes the choices made by individuals regarding their work and family lives to be independent of their partner.

Despite providing a clear theoretical framework in which work-family relationships can be explored and understood, the model proposed by Greenhaus and Beutell (1985) has a number of limitations.

First, while recognising the influence of the importance (i.e. salience) individuals attach to their work and family roles on their work and family conflict, the conceptual framework proposed by Greenhaus and Beutell (1985) fails to explicitly acknowledge the dynamic nature of role salience. Most importantly, their framework does not recognise the influence significant others such as an individual's partner or work supervisor has in determining the importance an individual would attach to their work and family roles. As a consequence, Greenhaus and Beutell's (1985) model does not provide a framework in which hypotheses relating to couple-level crossover effects of work (family) role salience on an individual's W-F (F-W) conflict can be developed and empirically examined.

Second, the findings of this study suggest that while time and strain-based conflicts may share similar antecedents (e.g. role salience) as proposed by Greenhaus and Beutell (1985), these do not necessarily explain behaviour-based conflicts experienced by individuals. Although highlighting the different types of antecedents that are likely to influence different types of work and family conflict, Greenhaus and Beutell's (1985) model provides limited guidance on the antecedents of behaviour-based conflict. Therefore, more exploratory research is needed to gain a better understanding of factors that may influence an individual's behaviour-based work and family conflict.

Third, reflecting the limited knowledge available on the nature of W-F and F-W conflict at the time, Greenhaus and Beutell (1985) only provide a tentative suggestion on the asymmetric permeability of work and family boundaries found in this study. Given traditional gender roles, they suggest women may experience greater W-F and men greater F-W conflict. However, as noted in Chapter Two, both men and women have been found to report greater W-F than F-W conflict. The findings of this study also suggest this process to be much more complex than originally envisaged by Greenhaus and Beutell (1985). In particular, both individual-level and couple-level analysis indicated the permeability of work and family boundaries to be gender asymmetric. That is, men appear to treat their work and family boundaries as asymmetrically permeable (i.e. predominantly W-F conflict), while women appear to treat both boundaries as symmetrically permeable (i.e. approximately equal level of W-F and F-W conflict).

Finally, Greenhaus and Beutell's (1985) model does not clearly explain the role of gender in work and family relationships. While acknowledging possible gender differences in the experience of work and family conflict, they do not provide a sound theoretical basis on

which hypotheses relating to the role of gender on relationships between role salience and an individual's work and family conflict can be developed and empirically examined. As noted earlier, findings of this study suggest crossover effects of the importance partners within a couple attached to their respective work (family) roles on an individual's W-F (F-W) conflict to be 'gender asymmetric'. Therefore, a conceptual framework which allows these gender differences to be better understood is needed within work-family research.

The limitations of Greenhaus and Beutell's (1985) model identified above highlight the necessity for a revised conceptual model that integrates both individual-level and couple-level effects on an individual's experience of work and family conflict. Given the dynamic and interdependent nature of human relationships, it is imperative that work-family researchers do not restrict themselves to only examining individual-level factors and processes that lead to work and family conflicts. The findings of this study indicate that in order to gain a more holistic understanding of the causes and consequences of work and family conflict, future studies clearly need to integrate an examination of couple-level crossover effects into their research design.

Building upon Greenhaus and Beutell's (1985) theoretical framework, the remainder of this section is devoted to outlining a new model that provides a conceptual framework for understanding couple-level effects on individual-level experiences of work and family conflict. This model, summarised in Figure 5.4, provides the foundation for developing further hypotheses and guiding empirical research within the work-family framework.

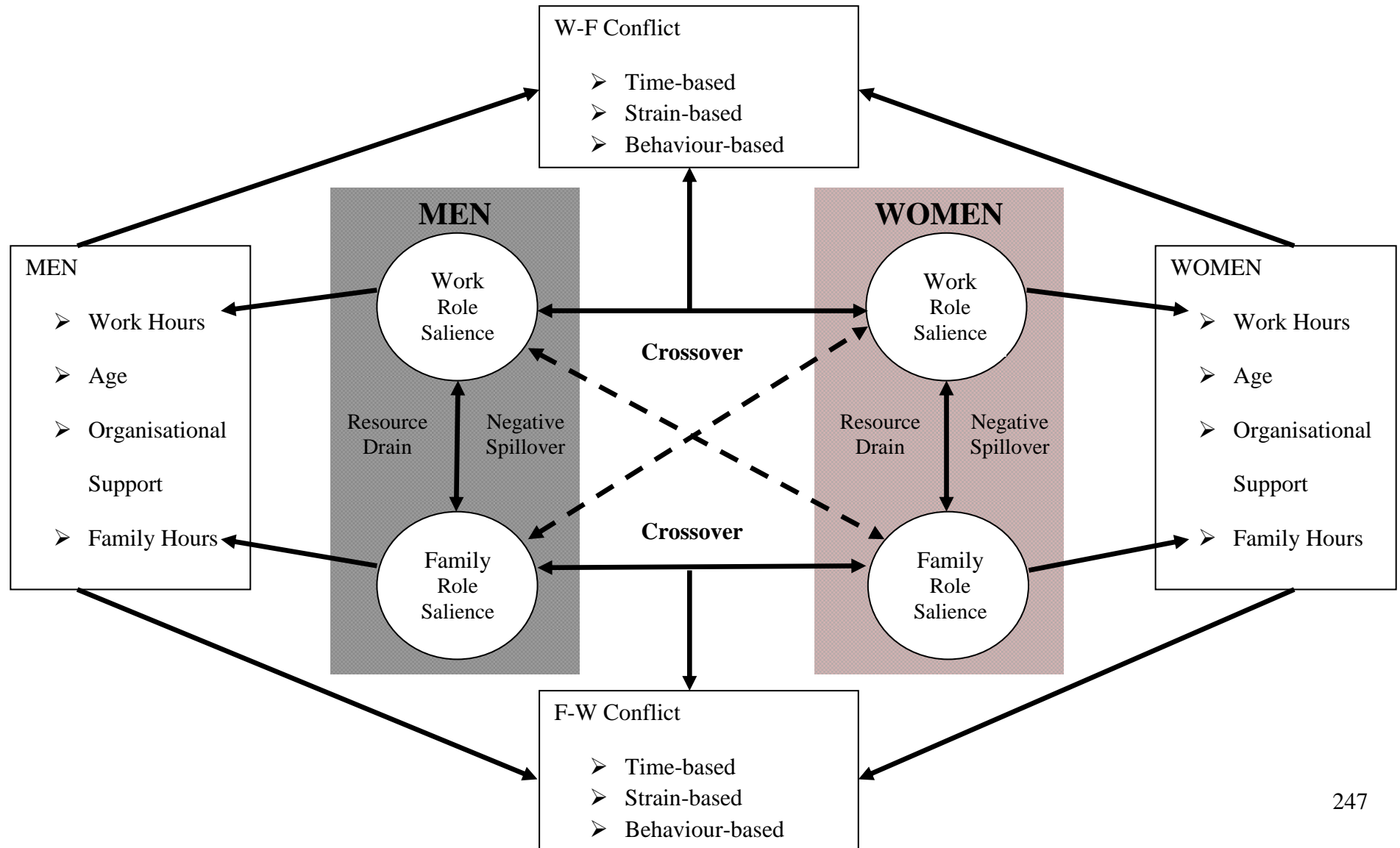
First, the model allows couple-level hypotheses to be developed, in which factors such as role salience may generate crossover effects from one partner to the other. Despite its focus

being on couple-level crossover effects, the model retains individual-level effects of negative spillover and resource drain identified by Greenhaus and Beutell (1985).

Second, by presenting W-F and F-W conflict (and the associated different types of conflict) as separate outcomes, the model explicitly recognise an individual's experience of conflict in these two directions may not be symmetric. That is, the model allows hypotheses to be developed and tested separately for W-F and F-W conflict. This can be done for both individual-level (e.g. negative spillover and resource drain) and couple-level (e.g. crossover) antecedents of conflict. By doing so, the model acknowledges the possibility that the permeability of work and family boundaries of an individual may be asymmetric.

Third, the separate frames (as shown by the shaded area in Figure 5.4) employed for men and women recognise the possible gender differences in an individual's experience of W-F and F-W conflict. In particular, the model allows gender differences to be empirically tested in two ways. Individual-level antecedents such as work and family hours, and organisational support that may influence an individual's experience of work and family conflict can be tested through this model. In addition, possible couple-level antecedents such as the crossover of the importance (i.e. salience) one partner attaches to their work and family roles on the other partner's experience of work and family conflict can also be empirically investigated through the proposed model.

Figure 5.4: Couples, Role Saliency, and Work and Family Conflict

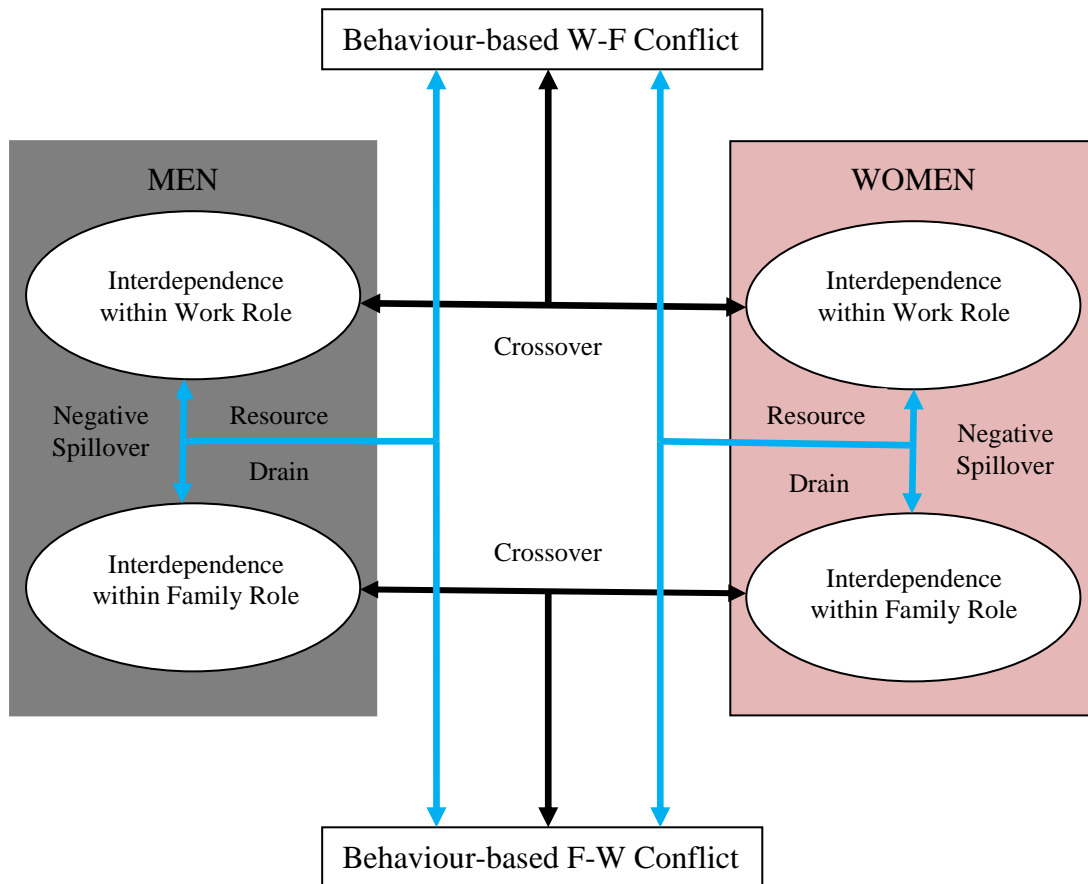


Adaptability of the Model

The proposed model can be used as a template to develop a number of ‘*mini-models*’ that can be utilised in empirically examining individual- and couple-level antecedents separately for time-, strain-, and behaviour-based forms of work and family conflict.

For example, the findings presented in this study indicate that the importance individuals attach to their work or family roles has a limited influence on their work and family conflict. However, individuals in occupations that require high levels of interdependence and responsibility for others have been found to experience more intense forms of behaviour-based work and family conflict (Dierdorff and Ellington, 2008). Figure 5.5 presents an example of how the model outlined in Figure 5.4. can be used in developing hypotheses for an individual’s behaviour-based work and family conflict, based on the influence of these occupational characteristics. The relationships represented by *blue* arrows depict individual-level effects of resource drain and negative spillover. The relationships represented by *black* arrows depict possible couple-level crossover effects.

Figure 5.5: Occupation and Behaviour-based W-F and F-W conflict



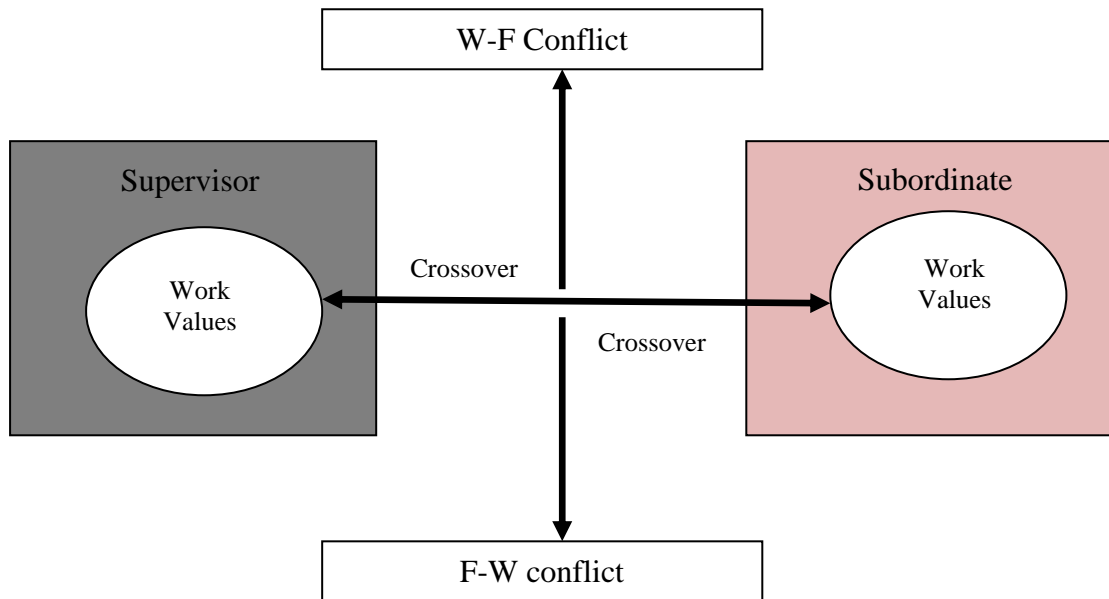
In Figure 5.4, only those relationships represented using solid arrows were empirically tested and reported in Chapter Four. Crossover effects of relationships *across* work and family roles can also be tested using this framework. In addition, the framework can be used to examine crossover effects between partners of life roles other than work and family. For example, hypotheses can be generated and empirically tested for crossover effects between men and women's parental, leisure, religious roles and so on. This model can also be used to examine crossover effects of other forms of psychological attributes (e.g. relationship satisfaction, positive/negative affect etc.) shared by partners on their experience of work and family conflict. Although this study examined an individual's experiences of W-F and F-W conflict as outcomes, the model can easily be adapted to test

under-researched areas, such as work and family enrichment (i.e. the degree to which positive crossover and spillover effects of work (family) roles between partners enhances an individual's ability to satisfy demands in each role).

Finally, in addition to testing crossover effects within married or *de facto* couples, this model can also be used to test crossover effects of work values similarity/differences between a supervisor and subordinate which can have significant implications for a number of individual-level outcomes for the subordinate (e.g. job satisfaction, intentions to quit, organisational commitment, productivity etc.). For example, the congruence (i.e. similarity) between CEOs and vice presidents (VP) on the importance attached to a given organisational goal (e.g. improving financial performance) have been found to influence the relationships between the CEOs leadership style and the VPs attitudes towards work (Colbert et al., 2008).

In a similar vein, it is possible to hypothesise that the similarity between the work values (e.g. priority should be given to work duties over personal responsibilities) of a supervisor and a subordinate can have a significant influence on the subordinate's experience of work and family conflict. Figure 5.6 provides an example in how the proposed model can be used to develop and empirically examined such hypotheses. Inferences drawn from such research hypotheses will provide valuable insight in informing organisational human resource management practices such as job design, recruitment and selection, performance appraisal and so on.

Figure 5.6: Work Values, W-F and F-W Conflict



By addressing the shortcomings identified in Greenhaus and Beutell's (1985) seminal model, the new model proposed within this study provides a number of avenues in which future work-family research can be undertaken. In particular, the model provides a conceptual framework in which an individual's experience of W-F or F-W conflict (or enrichment) is not viewed in isolation at the individual-level but in conjunction with couple-level effects of crossover. In addition, the proposed model can be adapted to examine crossover relationships in other dyads such as those between a supervisor and a subordinate. The proposed model therefore, provides a substantial theoretical contribution to work-family research.

5.5 Practical Implications

The findings of this study have important practical implications for public policy, organisations and managers, as well as employees and their families. Previous research undertaken on work and family conflict has highlighted depression, physical health complaints, hypertension, and greater alcohol consumption (Frone, Russell et al., 1997); anxiety, mood, and substance abuse disorders (Frone, 2000); greater stress (Kelloway et al., 1999; Parasuraman and Simmers, 2001); and lower life satisfaction (Bedeian et al., 1988; Parasuraman et al., 1992; Perrewe et al., 1999) to be consequences of W-F and F-W conflict. The findings of this study indicate an individual's experience of conflict, especially in the W-F direction, is likely to be dependent upon the crossover effects of the importance partners within a couple attached to their respective work roles. Therefore, decisions pertaining to men and women's work and family lives taken at the public policy, organisational, and employee levels should consider the extent to which support is provided to couples or households, rather than individual employees (Westman, Vinokur et al., 2004). The aim of this section is to explore these implications more closely.

Public Policy Implications

At the public policy level, both state and federal governments should work towards legislating minimum family-supportive benefits such as paid maternity and paternity leave in Australia. Despite the advances made towards a more egalitarian division of paid and unpaid labour between men and women over the past quarter-century, women continue to undertake the majority of the unpaid family work regardless of their employment status (Hewlett, 2002; Hochschild, 1990; Pocock, 2003). Therefore, women are more vulnerable

to stresses arising from competing work and family demands than men (Demerouti et al., 2005; Rothbard and Edwards, 2003).

A recent study undertaken by the Human Rights and Equal Employment Opportunity Commission attributed growing concerns regarding the declining quality of life for most Australian families to the increasing levels of work and family conflict (Squire and Tilly, 2007). Similarly, an inquiry undertaken by the House of Representatives Standing Committee on Family and Human Services (2006) highlighted the economic necessity to ensure better support for Australian families, particularly working mothers in assisting them to better balance their work and family responsibilities. The findings of this study also indicate that the degree of organisational support received by women is likely to influence both their own and their partner's experience of W-F conflict. As such, by legislating basic parental rights such as paid maternity and paternity leave rather than leaving it to the discretion of individual employers, the state and federal governments can significantly reduce the level of stress and increase the overall quality of life for majority of working Australians and their families.

In addition to providing economic support, public policy can be developed towards debunking the individualism norm prevailing within society in relation to balancing between competing work and family responsibilities (Drago, 2007). That is, encouragement should be provided through public policy for employers, unions, non-profit organisations, and local governments to make a collective commitment to identify policies than can generate mutually beneficial outcomes for employers, employees, and the community. This in turn will result in the gradual elimination of the individualism norm

and the acceptance of collective responsibility to assist those members of the community who require assistance in managing competing work and family demands.

Organisational and Managerial Implications

At the organisational level, the findings lend support for treating employees in married or *de facto* relationships at the couple-level rather than at the individual-level. In managing employee grievances relating to conflicting work and family demands, organisations should aim to train its managers and supervisors to better understand the significant influence an employee's partner has on their work performance. Specifically, those employees whose partners are also in paid employment and have limited organisational support to balance between competing work and family demands might experience greater difficulties in spending additional hours at work due to greater demands and expectations from the family domain (i.e. F-W conflict). As such, organisations should strive to incorporate specific training and development programs within their human resource management policies to enhance managers' and co-workers' understanding of the influence an individual's partner has on their work performance. This can reduce stress experienced by employees due to competing work and family demands.

However, it should be noted that most organisations would be reluctant to undertake this recommendation due to a number of factors. First, matters relating to an individual's family domain have always been treated as a private issue that organisations should not get involved with. Fears relating to privacy and confidentiality are also likely to restrain employees from disclosing personal issues relating to their partner with their immediate managers or supervisors. Second, organisations, especially small to medium sized ones may not have the financial resources nor the competencies to provide adequate

professional assistance to employees and their partners to better manage competing work and family demands. Therefore, in order initiate couple-level approaches to solving work and family issues, it is imperative that organisations are able to earn the trust of their employees first. Furthermore, organisations should actively lobby local, state, and federal governments to enact public policies that provide assistance in acquiring financial and competency resources to successfully implement couple-level approaches to addressing work and family issues within organisations.

In addition to decreasing family satisfaction (Bedeian et al., 1988; Parasuraman et al., 1992) high W-F conflict has been found to be related to a number of occupational outcomes such as lower job satisfaction (Bedeian et al., 1988; Burke and Greenglass, 1999), greater turnover intentions (Greenhaus et al., 2001; Kelloway et al., 1999), and lower career satisfaction (Martins et al., 2002). Therefore, it is imperative that organisations understand and address all variables that influence employees' experience of work and family conflict.

In summary, there is both theoretical and empirical support for a 'business case' on work-family conflict. In response, firms have typically invested in individuals, but the findings of this study suggest a better return on investment requires couple-level solutions.

Employee Implications

Finally, at the employee level, the crossover effects of the importance attached to their respective work (family) roles by partners within a couple on an individual's W-F (F-W) conflict was greater for women than men. Women appeared to be more vulnerable to the importance their partner placed on his/her own work (family) role than men. While lower

in magnitude to women, men's W-F conflict was also influenced by the work role importance crossover between partners. These findings indicate both men and women's experience of W-F (F-W) conflict can be managed by the importance partners placed on their respective work (family) roles. Therefore, couples should actively engage in communicating with each other on the relative importance of their work and family roles to their concept of self. Communicating and negotiating with their partner would ensure both individuals within a couple are able to minimise conflict arising from competing work and family responsibilities. Furthermore, findings in this study indicated men and women employed in organisations that do not expect employees to place a greater importance on work responsibilities than family responsibilities (i.e. organisational support), experienced less W-F and F-W conflict.

In addition to reducing their own W-F and F-W conflict, the degree of organisational support received by their partners was found to reduce men's experience of F-W conflict. However, no such relationship was found for women. It is possible that the greater organisational support received by women enables them to devote greater personal resources to fulfil family demands thus reducing the demands and expectations placed on men, decreasing their experience of F-W conflict.

Overall, in addition to individual-level coping strategies, these findings provide strong support for the need for men and women in married or *de facto* relationships to develop couple-level coping strategies for individual-level experiences of W-F and F-W conflict. When making decisions regarding their work/career and family life, individuals in dual-earner relationships should do so subject to the relative importance each partner places on their respective work and family roles. For example, if both partners attached a high

importance to their respective work roles, personal resources available for shared family responsibilities at the couple-level would be limited and likely to cause high W-F conflict for both. In this instance, a number of alternatives are available for partners at an individual-level: ignore family responsibilities (i.e. avoidance), try to fulfil both work and family demands, or put pressure on the partner to fulfil majority of the family responsibilities. None of these options are likely to produce an amicable outcome for both partners and could possibly result in lower relationship quality and satisfaction.

In contrast, through communicating with their partner, individuals could utilise couple-level coping mechanism such as reassessing and lowering the importance placed on their work role (and hence investment of personal resources in it), take turns periodically (e.g. every other week) in fulfilling majority of shared family responsibilities, hire domestic help, or renegotiate expectations held of each other with regards to family demands (e.g. how clean should the house be? Is it better to eat out during weekdays and cook only over the weekend? etc.). Such coping strategies are likely to produce outcomes that are more satisfactory to both partners within a couple and possibly enhance overall relationship satisfaction.

5.6 Limitations

The theoretical and practical contributions of this study should be viewed in light of several limitations. The research design and methodology employed in this study has three key shortcomings. First, the sample was recruited based on their availability to participate in the study (i.e. a convenience sample). As such, generalising findings beyond the sample should be done with caution. However, given the difficulty in reaching all married or *de facto* heterosexual couples residing in Australia, it was necessary to sample the population.

While the sub-samples recruited through the law firm, childcare centre and private school were achieved through formal negotiations between the researcher and the organisations, the snowballing sample were recruited through informal networks. Due to the difficulty in collecting data from matched pairs of couples it was necessary to recruit participants through both formal and informal networks. A number of studies conducted within the work-family framework have used a combination of formal and informal techniques to recruit participants (Allen and Armstrong, 2006; Blair-Loy, 2003; Jones and Fletcher, 1993; Martins et al., 2002; Westman, Etzion, and Gortler, 2004). While the use of a convenience sample does not control for researcher bias in selection and makes it difficult to calculate sampling error, this method in some aspects is more representative of the target population compared to a sample drawn from a single organisation or occupational group (Allen and Armstrong, 2006; Singleton and Straits, 2005). Furthermore the targeting of working couples with young dependent children was intentional given the greater level of W-F and F-W conflict experienced by them (Eby et al., 2005; Greenhaus and Parasuraman, 1986; Hochschild, 1990).

An associated limitation of the non-random sampling technique used for this study was the relatively small sample size. Despite the use of replied-paid envelopes, weekly reminders and organisational support, the final sample size was still considerably small. Although this sample is larger than (Acitelli, 1988; Bodenmann, Pihet, and Kayser, 2006; Jones and Fletcher, 1993) or similar (Gareis et al., 2003; Matthews, Del Priore, Acitelli, and Barnes-Farrell, 2006; Westman et al., 2001; Westman, Etzion, and Horovitz, 2004) to a number of previous work-family research employing couple-level data, the overall statistical power of the sample is still limited (Cohen, 1992).

A number of studies within crossover research have employed alternative techniques to polynomial regression analysis such as hierarchical linear modelling (HLM) (Barnett et al., 1995; Gareis et al., 2003; Raudenbush et al., 1995) and structural equation modelling (SEM) (Demerouti et al., 2005; Westman et al., 2001; Westman and Vinokur, 1998; Westman, Vinokur et al., 2004) to analyse couple-level data. However, the majority of these studies collected data from much bigger samples, thus enabling the use of the above techniques (Bickel, 2007). Furthermore, polynomial regression analyses catered better for the research hypotheses developed for this study than HLM or SEM (Edwards and Rothbard, 1999; Kreiner, 2006). Although the sample size was sufficient to conduct polynomial regression analysis, a larger sample would have allowed more control variables (i.e. antecedents other than the role salience variables) to be included in the quadratic equation. As such, the findings of this study should be corroborated through future research using a variety of multi-level analytical techniques employing much larger samples.

The second limitation concerns the use of self-report data which can result in a number of biases. Common method variance, where the variance found in the dependent variables due to the measurement method rather than the actual constructs is one such bias (Podsakoff et al., 2003; Spector, 2006). However, the use of data collected from matched pairs of couples to conduct polynomial regression analysis significantly reduces the issue of common method variance. Furthermore, common method variance is more likely to occur with single-item or unsubstantiated scales than conceptually pertinent, and well validated multi-item scales (Spector, 1987). This study did not employ any single item measures or unsubstantiated scales for the dependent or independent variables. The only variables that were single item measures were control variables such as age and work/family hours.

Finally, despite the reduction in the overall variance explained, common method variance does not invalidate research findings (Doty and Glick, 1998).

The final limitation is in relation to the generalisability of the study findings. The study was conducted with a sample of couples drawn from high income households (i.e. average household income above \$ 100,000) in Australia. Therefore, the findings of the study might not necessarily be representative of working couples from other cultures or from lower economic backgrounds within Australia. In a sample of 20 European countries, Lyness and Kropf (2005) found the degree to which gender equality is upheld at a national level to have a significant bearing on employee ability to manage competing work and family demands. Similarly income has been attributed as a potential buffer to the degree of work and family conflict, especially F-W conflict experienced by individuals (Wallace, 1999). Greater levels of income enable individuals, especially women, to seek paid assistance in fulfilling domestic chores and childcare/eldercare responsibilities (Parasuraman et al., 1992; Wiersma, 1994). As a result, higher levels of income have been found to help individuals better manage competing demands from their work and family life leading to a decrease in overall work and family conflict (Chapman, Ingersoll-Dayton, and Neal, 1994; Huang et al., 2004). Hence, caution should be exerted when extrapolating the findings of this study to men and women from different cultural backgrounds or lower income status within Australia.

5.7 Future Research

Consistent with Edwards and Rothbard's (2000) assertion, the findings of this study support the significant influence of the levels of importance an individual's partner attached to their own work (family) roles has on an individual's experience of W-F (F-W) conflict. That is, in addition to the individual-level effects of resource drain and negative spillover from W-F and F-W, men and women in married or *de facto* relationships are found to experience couple-level negative crossover effects between partners. The study findings indicate both men and women's experience of W-F conflict to be significantly dependent upon their own as well as their partners' work role importance. This was especially strong for women. Given the majority of research concerning work-family linkages over the past quarter-century have focused on within-person effects (Casper et al., 2007), future research should incorporate more couple-level research designs to enhance our understanding of the work-family linkages within dual-earner relationships (Edwards and Rothbard, 2000; Neal and Hammer, 2007; Parasuraman and Greenhaus, 2002).

As noted earlier, this study was conducted from a sample of couples drawn from high income households in Australia. Limited research has investigated couple-level effects of work and family conflict from non-western samples. However, the priority placed on work and family domains have been found to differ across different cultural milieu, especially in relation to gender role expectations (Rajadhyaksha and Bhatnagar, 2000). As such, it is plausible that the influence of work (family) role salience crossover between partners on their experience of W-F (F-W) would be significantly different for couples drawn from a non-western context. In their study of 92 dual-career couples in India, Rajadhyaksha and Bhatnagar (2000) found the widespread extended family structure incorporating parents and in-laws found in India to both support (i.e. through free reliable childcare) and hinder

(i.e. responsibility for eldercare) women in balancing competing work and family responsibilities. In addition to focusing on samples drawn from non-western cultural settings, future research should also seek to investigate the influence of couple-level role salience crossover effects on low-income as well as same-sex couples' experience of work and family conflict.

In addition to the cultural differences between western and non-western couples in the importance placed on work and family roles, Rajadhyaksha and Bhatnagar (2000) highlight the influence of life-cycle stage [i.e. early adulthood (17-45 years), middle adulthood (45-65 years), and late adulthood (65 years and above)] has on the salience men and women attach to their work and family roles. For example, given the traditional male breadwinner and female nurturer roles, men are more likely to attach a greater salience to their work role during early adulthood years while women place a great importance to their family role. Conversely, once the children have left home and a couple has reached the 'empty nester' stage (i.e. middle-to-late adulthood), the importance placed on work and family roles by men and women may change. Being free of childcare responsibilities, women may chose to commit more to their work role and reduce their involvement within the family domain. In contrast feeling relieved of financial responsibility for their family, men may reduce their involvement within the work domain and chose to support their partner's career by increasing participation within the family domain (Rajadhyaksha and Bhatnagar, 2000). Research conducted by Martins et al. (2002) and Crouter (1984) also reports the salience attached by men and women to their work and family roles to vary according to their life cycle stage. Therefore, future research should seek to explore the influence of life cycle stage on the relationship between work (family) role salience crossover and men and women's W-F (F-W) conflict.

This study used Amatea, Cross, Clark and Bobby's (1986) marital role to represent the importance attached by men and women to their family role. However, it is unrealistic to assume an individual's time and other personal resources to be exclusively divided between paid work and their marriage/relationship. Duties and responsibilities relating to additional life roles such as parental, homemaker, friend, religious devotee, and leisure (i.e. member of a social club/sporting team etc.) are also likely to absorb a proportion of an individual's personal resources. Rothbard and Edwards (2003) postulate time and other personal resources expended in life roles other than work and family to significantly influence an individual's experience of work and family conflict. Given the positive relationship found between role salience and the investment of personal resources in a given life role (Stets, 2006), future research should investigate the influence of the importance attached by men and women to life roles other than work and family on their experience of work and family conflict.

Finally, in their influential review of work-family research, Parasuraman and Greenhaus (2002) highlight the over emphasis placed on conflict rather than enrichment between work and family domains. The current study too focuses on the conflict perspective given the paucity of research that has utilised couple-level analysis to examine W-F and F-W conflict (Casper et al., 2007). However, in a similar vein to negative crossover it is equally possible to envisage positive crossover between partners. That is, positive experiences in an individual's work or family domain can in turn have a positive influence on their partner. For example, in a study of business school alumni, Friedman and Greenhaus (2000) found experiences, involvement and attitudes at the individual-level in one role to have both negative (i.e. conflict) as well as positive (i.e. enrichment) effects in another role. Given the degree of involvement (i.e. importance) has been found to be critical in

determining conflict between work and family domains, it is possible that the relative importance attached by partners' to their respective work and family roles can also influence their degree of W-F and F-W enrichment through positive crossover. Therefore, future research should endeavour to build upon the conceptual framework presented earlier in this chapter to examine positive crossover effects between partners on their W-F and F-W enrichment.

5.8 Conclusion

This chapter has drawn together the major findings concerning crossover effects of work (family) role salience congruence/incongruence between partners on men and women's experience of W-F and F-W conflict. A number of important themes emerged from the study findings.

First, when partners within a couple attached an equal (i.e. congruent) importance to their work roles, crossover effects were found on an individual's W-F (F-W) conflict. Although some gender differences were evident, this was found to be true for both men and women. Second, when the importance attached to their respective work and family roles by partners were different (i.e. incongruent), contrasting crossover effects were found for W-F and F-W conflict. That is, while couple-level family role importance crossover effects appeared to offset individual-level effects of resource drain and negative spillover on W-F conflict, this was not the case with work role importance crossover effects and F-W conflict. Once again, these findings were true to both men and women. Third, as expected, couple-level crossover effects of work (family) role importance on W-F (F-W) conflict were greater for women than men, indicating a gender asymmetry. Fourth, although not hypothesised, role importance crossover effects on conflict were linear for men and curvilinear for women.

This pattern was especially prevalent in relation to work role importance crossover effects on men and women's W-F conflict. Fifth, crossover effects of work role importance on W-F conflict were greater than the crossover effects of family role importance on F-W conflict, indicating an asymmetry in the permeability of work and family boundaries. This was more prevalent in men than women. Finally, compared to other types of W-F (F-W) conflict, work (family) role importance crossover between partners did not have a significant effect on men and women's behaviour-based W-F (F-W) conflict.

Four key theoretical implications for work-family research were raised from the findings of this study. First, limited research has explicitly examined antecedents of behaviour-based conflict within work-family research. The findings of this study indicate while contributing to time-based and strain-based work and family conflict, the relative importance men and women attach to their respective work and family roles appear not to necessarily attract conflicting behaviours between the two domains. These findings highlight the need for further research exploring antecedents of behaviour-based work and family conflict.

Second, couple-level work (family) role importance crossover effects on an individual's W-F (F-W) conflict corroborate the asymmetric permeability between work and family roles found in previous work-family research conducted at the individual-level. However, this knowledge is extended in this study through the gender effect found on the permeability of work and family boundaries. That is, couple-level crossover effects appeared to result in greater W-F conflict for men (i.e. asymmetrically permeable), while for women, crossover effects appeared to have an approximately equal influence on both W-F and F-W conflict (i.e. symmetrically permeable).

Third, by examining the influence of gender in conjunction with the higher order psychometric measure of role importance, the findings of this study enhance our knowledge on the role of gender on work and family conflict. When partners within a couple attached equal or different levels of importance to their respective work (family) roles, crossover effects on an individual's W-F (F-W) conflict appeared to be gender asymmetric. That is, crossover effects were greater for women than men.

Finally, based on these findings, a new conceptual model that allows the effects of couple-level attributes on individual-level work and family outcomes to be empirically examined was presented. This represents a substantial theoretical contribution to work-family research.

In addition to the above theoretical implications, this study provides two significant methodological contributions to work-family research. First, despite an abundance of research investigating work-family linkages over the past quarter-century, there is a significant paucity of research employing couple-level analysis. This study employed a dyadic research design aimed at exploring couple-level crossover effects of work (family) role importance on men and women's W-F (F-W) conflict, thereby addressing a significant gap within work-family literature. Second, the majority of work-family studies use simple inferential statistics rather than advanced statistical techniques to examine work-family linkages. The use of polynomial regression analysis and response surface methodology to examine both linear as well as curvilinear relationships between the levels (i.e. equal/different) of importance partners within a couple attached to their respective work (family) roles and an individual's W-F (F-W) conflict, thus, provides a significant methodological contribution to existing work-family research.

The findings reported in this study raise a number of practical implications for public policy, organisations and managers, and employees and their families. At the public policy level, both state and federal governments should work towards legislating minimum family supportive benefits such as paid maternity and paternity leave to enable dual-earner couples to minimise the experience work and family conflict. Organisations should develop training and development programs to ensure both managers and co-workers have a sufficient understanding of the impact an individual's partner has on their work performance. Finally, at the employee level, men and women in dual-earner relationships should strive to actively communicate the importance of work and family roles to their concept of self (i.e. identity). This would enable individuals to negotiate with their partner in developing couple-level coping strategies for managing competing work and family demands.

A number of limitations need to be observed in interpreting the findings of this study. First, the sample drawn for the study was a convenience sample. Furthermore, while being larger than samples used in previous work-family research, the study sample was relatively small, reducing its effect size. However, convenience samples have been found to be more representative of the target population than a sample drawn from a single organisation or occupation. Second, the use of cross-sectional data can also result in common method variance which can undermine or inflate the current study findings although this was minimised by the use of data collected from matched pairs of couples. Finally, caution should be exercised when generalising the findings of this study. The study was conducted with a sample of couples drawn from high income households in Australia. As such, care should be taken when extrapolating these findings to individuals from different cultural contexts or lower income status within Australia.

Finally, future work-family research should incorporate more dyadic-level research designs to enhance our understanding of factors influencing men and women's experience of W-F and F-W conflict. Furthermore, research should investigate the influence of role salience on work-family conflict for couples drawn from different generations, low-income, same-sex, as well as non-western samples. Future studies should also attempt to build upon the new conceptual framework presented in this chapter to investigate the influence men and women's other life roles such as parental, homemaker, friend, religious devotee, and leisure would have on their experience of work-family conflict. Lastly, work-family researchers should attempt to explore whether couple-level crossover effects of work (family) role importance would produce positive outcomes in men and women's work and family domains (i.e. work-family enrichment).

The next chapter will summarise the major arguments presented in the preceding chapters and provide a final conclusion.

6 CONCLUSION

The primary aim of this study was to examine the proposition that the experience of work and family conflict (at the individual-level) is in part the result of interactions between individuals at the couple-level. In particular, the study sought to investigate the extent to which crossover effects were evident in relation to the relative salience (i.e. importance) each individual within a couple placed on their work and family roles.

The motivation for examining these questions reflected two observations. First, the available evidence indicates that work and family conflict has become a significant personal, organisational and public issue in the Australian context (and elsewhere). As a consequence, the question of why work and family conflict has become so prevalent – along with its consequences for families, business organisations and society – is a significant issue that warrants research attention. Second, a review of the now voluminous work and family research literature suggests a number of important gaps, one of which is whether it is most appropriate to examine the causes of conflict at the individual-level only, or whether some explanation is needed on couple-level aspects of the problem. Here it was observed that, notwithstanding the progress made in understanding the determinants of an individual's experience of work and family conflict, much of this work had proceeded on the implicit assumption that individuals generally make decisions about the allocation of time, effort and emotion to life roles independently. It was argued that this was a faulty assumption when understanding the experience of work and family conflict in relation to individuals who are part of a couple-dyad. In these circumstances, there are likely to be crossover effects between individuals in a couple such that each individual's experience of work and family conflict is likely to be a consequence of the choices and importance placed on different life roles by the other person within that dyadic

relationship. A key motivation was therefore to address this apparent gap in our knowledge of the determinants of work and family conflict.

Chapter One began by examining the contextual background to understanding work and family conflict. The focus was on identifying key factors that have been associated with the growth in work and family conflict in the Australian context. This chapter addressed two dimensions which help explain the growth in work and family conflict: changes in the labour market; and changes in the family.

Two key changes within the labour market over the past three decades have contributed to the growth in work and family conflict reported in Australia. First, male and female labour force participation rates have converged, where men's participation has decreased while women's participation has increased. Most significantly, there are more women with high levels of care responsibilities participating in paid work. However, compared to men, the majority of women are employed in part-time jobs with little job security and entitlements. Second, increasing international and domestic competitive pressures has resulted in an increase in work hours and work intensity. As a consequence, the proportion of men and women who experience a lack of personal resources such as time and energy to fulfil family commitments has increased.

Concurrent to changes witnessed in the labour market, the Australian family has also undergone a number of changes that have contributed to the increase in work and family conflict reported. Declining fertility rates, and increasing female educational attainment and qualifications have resulted in smaller households. This has resulted in a reduction of informal social support (through relatives and extended family) previously available to employed individuals in fulfilling family responsibilities. Social changes witnessed in the

late-1960s and 1970s and greater participation of women in paid work has re-defined the roles of men and women in families, and society. While women continue to perform the majority of unpaid household duties such as childcare and cooking, men's participation in these activities have increased over the past three decades. The increase in the labour force participation of women in prime child rearing ages has resulted in a decline of the traditional male breadwinner and female carer nuclear family. As a consequence, there are now twice as many dual-earner families than single-earner (i.e. male breadwinner-female carer) families with dependents in Australia.

The evidence indicates that during the period over which many of these labour market and family changes have occurred have also been associated with a growing problem of work and family conflict. Recent research undertaken by the Human Rights and Equal Opportunity Commission (Squire and Tilly, 2007) and the House of Representatives Standing Committee on Family and Human Services (Australian-Parliament, 2006) found growing concerns regarding rising levels of work and family conflict experienced by working Australians and their families. This was especially prevalent among working mothers. In the context of these developments, it is not surprising to observe that work and family conflict has become a major topic of research in a number of disciplines, including management and organisational studies.

The review of the work-family literature reported in **Chapter Two** indicated that considerable progress has been made in developing a clear conceptual framework that identifies the main mechanisms linking work and family domains. Nonetheless, this review also highlighted the fact that a number of important issues were still to be adequately addressed.

The research hypotheses established in Chapter Two were based on two of the gaps identified in the literature review. First, little attempt has been made to conceptually or empirically evaluate the extent to which couple-level effects influence the level and type of work and family conflict experienced at the individual-level. The dominant theoretical frame used by researchers highlights a number of *intra*-personal explanations of work and family conflict, with a focus on two mechanisms in particular: *resource drain* and *negative spillover* (Eby et al., 2005; Edwards and Rothbard, 2000). While clearly important, this work ignores couple-level mechanisms that might explain differences in the experience of work and family conflict. These couple-level explanatory mechanisms reflect *inter*-personal *crossover* effects between individuals within a couple have on their experience of work and family conflict at the individual-level. Second, only a few studies were found to have moved beyond examining simple role membership (e.g. gender) to more theoretically advanced constructs, such as role salience, to investigate gender differences in the experience of work and family conflict.

Based on the conceptual grounding of identity theory, existing work-family research was reviewed to generate five main research hypotheses:

- (1) When the work role saliences of couples are congruent, W-F conflict would be greater at higher levels of congruence than at lower levels of congruence.
- (2) When the work role saliences of couples are incongruent, W-F conflict would increase as one's own work role salience increase towards the partner's work role salience, decreasing when one's own work role salience exceeds the work role salience of the partner substantially.
- (3) When the family role saliences of couples are congruent, F-W conflict would be greater at higher levels of congruence than at lower levels of congruence.

- (4) When the family role saliences of couples are incongruent, F-W conflict would increase as one's own family role salience increase towards the partner's family role salience, decreasing when one's own family role salience exceeds the family role salience of the partner substantially.
- (5) Couple-level crossover effects of work (family) role salience congruence/ incongruence between partners on W-F (F-W) conflict would be greater for women than men.

In order to examine these hypotheses, data was collected from 94 heterosexual couples with at least one partner in full-time paid employment. Given the anticipated difficulties in gathering data from matched pairs of couples, a decision was taken to gather data from multiple sites to arrive at a reasonable sample size. The research designed involved collecting data from matched pairs of couples drawn from four sources: a law firm, childcare centre, a school community, and a snowball sample. The details of this research design are described in Chapter Three.

As the hypotheses to be tested sought to determine the extent to which couple-level crossover effects of role salience determines work and family conflict, an analytical technique that allowed for such effects to be examined was necessary. Accordingly, this study used polynomial regression analysis and response surface methodology to examine the hypotheses postulated. Polynomial regression analysis allows the use of both component measures (i.e. linear) and their squared and product terms (i.e. curvilinear) to examine the effects of crossover between two predictor variables on a given outcome. Although interpreting regression coefficients from linear equations are fairly simple, coefficients from quadratic (i.e. curvilinear) equations are often difficult to interpret.

Response surface methodology facilitates an easier interpretation of quadratic regression equations by mapping the coefficients of the regression equation onto a three-dimensional surface. The details of this statistical procedure are also described in Chapter Three. Here it is sufficient to note that the procedure allows for a number of effects to be examined. Most significantly, the crossover effects of work (family) role salience congruence/incongruence between couples on men and women's experience of W-F (F-W) conflict can be examined through this procedure.

The data analysis undertaken in Chapter Four produced a number of important findings. First, when partners within a couple attached equal levels of importance (i.e. congruent) to their work roles, as expected, men's W-F conflict was greater at high values than low values of importance. However, when partners within a couple attached equal levels of importance to their family roles, only marginal crossover effects were found on men's F-W conflict, indicating men's experience of F-W conflict to be largely independent of couple-level crossover effects of family role salience. Contrary to expectations, women's W-F conflict was equally high when the importance attached to their work roles by both partners were high or low. Findings relating to women's F-W conflict were also not as expected. Women's experience of F-W conflict was greater when partners within a couple attached an equally low importance to their family roles.

Second, when partners within a couple attached different (i.e. incongruent) levels of importance to their work and family roles, findings only supported the hypothesised relationship between the effects of family role salience crossover and F-W conflict. This was true for both men and women. As predicted, the level F-W conflict experienced by an individual decreased as the difference in the importance attached to their family roles between partners increased. Contrary to expectations, an individual's experience of W-F

conflict increased as the difference in the importance attached to their work roles between partners increased.

Third, as predicted, when partners within a couple attached equal or different levels of importance to their work (family) roles, crossover effects on an individual's W-F (F-W) conflict were greater for women than men. This was especially prevalent in relation to crossover effects of work role importance between partners on an individual's W-F conflict. Although not statistically significant, surface plots corresponding to men and women's F-W conflict also indicated greater crossover effects of family role importance between partners on women's F-W conflict than men's F-W conflict.

Fourth, although not hypothesised, a distinct gender effect was found on crossover effects of work (family) role importance between partners on men and women's W-F (F-W) conflict. That is, crossover effects were linear for men and curvilinear for women.

Fifth, the findings of the study reaffirmed the asymmetric permeability of work and family boundaries found at the individual-level in previous work-family research. That is, the influence of couple-level crossover effects of work role importance between partners on an individual's W-F conflict was greater than the influence of crossover effects of family role importance between partners on an individual's F-W conflict. This was the case for both men and women. However, further analysis of surface plots indicated this difference was not as significant for women.

Finally, compared to other types of W-F conflict, crossover effects of work role importance between partners on an individual's behaviour-based W-F conflict appeared to be minimal. This was true for both men and women. While some crossover effects of

family role importance between partners on women's behaviour-based F-W conflict were found, for men's behaviour-based F-W conflict, crossover effects were minimal.

These findings have profound theoretical implications for research conducted within the work-family framework, and were discussed in **Chapter Five**. First, couple-level crossover effects on men and women's behaviour-based work and family conflicts were not significant. It is possible that while influencing men and women's time-based and strain-based work and family conflict, the crossover effects of the importance partners attached to their work and family roles do not necessarily instigate conflicting behaviours between their work and family domains. Although an abundance of studies have examined the antecedents of time-based and strain-based work and family conflict, research investigating antecedents of behaviour-based conflict is sparse. Therefore, further research is necessary to understand what types of work and family variables of partners would crossover at the couple-level to influence men and women's behaviour-based work and family conflict.

Second, the findings corroborate the asymmetric permeability of work and family boundaries found in previous research conducted at the individual-level. That is, at the individual-level, both men and women reported greater interference from paid work to family (W-F conflict) than from family to paid work (F-W conflict). However, this difference was not significant for women, indicating the permeability of work and family boundaries to be gendered. At the individual-level women appeared to treat work and family boundaries as symmetrically permeable (approximately equal levels of W-F and F-W conflict), while for men, work boundaries appeared to be less permeable than family boundaries (greater W-F than F-W conflict.)

This gender effect found at the individual-level was further supported by the findings of couple-level crossover effects. At the couple-level, crossover effects were found for both work and family role importance between partners on women's W-F and F-W conflict. However, crossover effects were only found for work role importance between partners on men's W-F conflict. That is, at the couple-level, women appear to treat boundaries between work and family roles as symmetrically permeable. In contrast, men appear to treat the boundaries between work and family as asymmetrically permeable. These findings have not been previously established, and thus add to the existing knowledge within work-family research on the permeability of work and family boundaries.

Third, this study extends our collective knowledge on the influence of gender on work and family conflict by developing a conceptual framework combining two separate, yet associated strands of research in work and family conflict and crossover. Findings of this study indicate a significant gender effect on an individual's experience of work and family conflict due to couple-level crossover effects. Crossover effects of the importance partners within a couple attached to their work and family roles on an individual's work and family conflict were greater for women than men. That is, couple-level crossover effects on an individual's work and family conflict appeared to be gender asymmetric. Moreover, these findings are consistent with the majority of crossover literature which report women to be more influenced by their partner's work and family circumstances than men. It is possible that despite the advances made in egalitarian gender role ideologies, women still perform the majority of duties relating to the family domain. The responsibilities of paid employment in addition to these domestic responsibilities, has lead to women's experience of work and family conflict to be more dependent upon the support they received from their partners in sharing work and family responsibilities than men's experience of work and family conflict.

Finally, the literature review undertaken in Chapter Two identified the majority of existing work-family research to be founded on Greenhaus and Beutell's (1985) seminal conceptual framework of work and family conflict. While being enormously beneficial to the growth of our collective knowledge on work and family conflict over the past three decades, this model was found to be based on the erroneous assumption of individuals in married or *de facto* relationships to make decisions regarding their work and family roles independent of their partner. Based on the key findings of this study, a conceptual model (and mini-models that can be extracted from it) that allows the effects of couple-level attributes on individual-level work and family outcomes to be empirically tested was proposed. This provides a substantial contribution to work-family research.

In addition to the above theoretical implications, a number of practical implications were also raised by the findings of this study. First, at the public policy level, the findings indicate the necessity for family supportive laws such as paid maternity and paternity leave to reduce the high levels of stress reported by working Australians due to conflicting work and family responsibilities. Addressing these issues at the federal and state level will increase the quality of life for the majority of working Australians and their families. Second, employers should seek to educate managers as well as co-workers on the influence an individual's partner has on their work performance. Furthermore, for those employees in married or *de facto* relationships experiencing high conflict between work and family demands, organisations should seek to develop solutions at the couple-level. Finally, in addition to developing individual-level coping strategies to manage work and family conflict, individuals in dual-earner relationships should seek to develop couple-level solutions by communicating and negotiating with their partner.

To conclude, this study highlights the importance of couple-level analysis within work-family research. In order to enhance our understanding of men and women's experience of work and family conflict, it is necessary to view those individuals who are married or in *de facto* relationships as part of a dyad rather than as independent individuals. The findings, it was argued, also have a number of important theoretical and practical implications, and point to new direction in which work-family research should be conceptualised at the couple-level. The following quote taken by a study commissioned by the Human Rights and Equal Opportunity Commission (2007) epitomizes the conflicts experienced by Australian couples in attempting to cope with competing work and family responsibilities.

“When my wife and I were at that stage [starting a family] we looked at all the finances and decided that if we had three kids then it would be worthwhile her quitting work because the child care would be too much. The other side then is you have a wife with knowledge and skills who then can't re-enter the workforce 10 years out.”

Squire and Tilley (2007, p. 38)

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8 APPENDICES

Appendix A: Explanatory Statement

MONASH University



How Couples Experience Work-Family Conflict

My name is Lakmal Abeysekera and I am conducting a research project with Associate Professor Peter Gahan in the Department of Management, towards a PhD in Management at Monash University. This means that I will be writing a thesis which is the equivalent of a 300 page book.

The aim of this research study is to examine the manner in which couples experience and negotiate the competing demands of their work and family roles. While the conflicting demands between work and family roles have been examined widely as individuals experience it, very little is known about how couples experience and manage conflict. However, If you are a single person and do not have a spouse/partner at present, we are still keen to hear your views to understand how work impacts on your life outside of work. The insights gained by both couples as well as individuals will somewhat address this gap in the academic literature. In practical terms, we aim to help business organisations develop new ways that will enable employees to better balance work and family responsibilities. Findings may also provide insight for couples as well as individuals to how best manage competing work and family demands.

This study involves the completion of a survey questionnaire which will take approximately 20 to 30 minutes of your personal time. Although there are no risks of harm or discomfort foreseeable, you may avoid answering any questions that are deemed too personal or intrusive. Your participation in this study is completely voluntary and you will receive no financial payment. In order to respect your privacy and protect your confidentiality and anonymity, the data will only be collected, coded, and handled by Lakmal Abeysekera. A report of the study may be submitted for publication or used for other research purposes or projects, however, individual participants will not be identifiable in such reports. For your information, the handling and storage of the data

collected will adhere to University regulations and be retained on University premises for five years. Electronic information will be stored on a password-protected computer. All data and results will be kept by Monash University. If you would like to be informed of the aggregate research findings, please contact Lakmal Abeysekera on 9903 4066. The findings will be accessible in late-2008.

Each of your responses is very important. Please check that you have answered all questions. Your time and participation is greatly appreciated.

If you would like to contact the researchers about any aspect of this study, please contact the Chief Investigator:	If you have a complaint concerning the manner in which this research (CF07/1334 – 2007/0353LIR) is being conducted, please contact:
A/Prof. Peter Gahan Telephone: +61 3 9903 4156 Fax: +61 3 9903 2718 Email: peter.gahan@buseco.monash.edu.au	Human Ethics Officer, Standing Committee on Ethics in Research Involving Humans (SCERH), Building 3d, Research Office, Monash University, Vic., 3800 Telephone: +61 3 9905 2052 Fax: +61 3 9905 1420 Email: scerh@adm.monash.edu.au

Thank you.

Mr. Lakmal Abeysekera
PhD Student

A/Prof. Peter Gahan
Supervisor/Chief Investigator

Appendix B: Ethics Approval

Standing Committee on Ethics in Research Involving Humans (SCERH)

Research Office

Assoc Prof Peter Gahan
Department of Management
Faculty of Business and Economics
Caulfield Campus

11 July 2007

CF07/1334 - 2007/0353LIR: How couples experience work-family conflict

Dear Researchers,

Thank you for the information provided in relation to the above project. The items requiring attention have been resolved to the satisfaction of the Standing Committee on Ethics in Research Involving Humans (SCERH). Accordingly, this research project is approved to proceed.

Terms of approval

1. This project is approved for five years from the date of this letter and this approval is only valid whilst you hold a position at Monash University.
2. It is the responsibility of the Chief Investigator to ensure that all information that is pending (such as permission letters from organisations) is forwarded to SCERH, if not done already. Research cannot begin at any organisation until SCERH receives a letter of permission from that organisation. You will then receive a letter from SCERH confirming that we have received a letter from each organisation.
3. It is the responsibility of the Chief Investigator to ensure that all investigators are aware of the terms of approval and to ensure the project is conducted as approved by SCERH.

4. You should notify SCERH immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.
5. The Explanatory Statement must be on Monash University letterhead and the Monash University complaints clause must contain your project number.
6. **Amendments to the approved project:** Changes to any aspect of the project require the submission of a Request for Amendment form to SCERH and must not begin without written approval from SCERH. Substantial variations may require a new application.
7. **Future correspondence:** Please quote the project number and project title above in any further correspondence.
8. **Annual reports:** Continued approval of this project is dependent on the submission of an Annual Report. Please provide the Committee with an Annual Report determined by the date of your letter of approval.
9. **Final report:** A Final Report should be provided at the conclusion of the project. SCERH should be notified if the project is discontinued before the expected date of completion.
10. **Monitoring:** Projects may be subject to an audit or any other form of monitoring by SCERH at any time.
11. **Retention and storage of data:** The Chief Investigator is responsible for the storage and retention of original data pertaining to a project for a minimum period of five years.

All forms can be accessed at our website

www.monash.edu.au/research/ethics/human/index.html

We wish you well with your research.

Cc: Mr Lakmal Abeysekera



Dr Souheir Houssami

Executive Officer, Human Research Ethics (on behalf of SCERH)

Postal – Monash University, Vic 3800, Australia
Building 3E, Room 111, Clayton Campus, Wellington Road, Clayton
Telephone +61 3 9905 5490 Facsimile +61 3 9905 1420
Email scerh@adm.monash.edu.au www.monash.edu/research/ethics/human/index/html
ABN 12 377 614 012 CRICOS Provider #00008C

Appendix C: Survey Questionnaire



Survey Questionnaire

How Couples Experience Work-family Conflict

Directions

- The survey pack contains **two** separate questionnaires.
- Please complete the two surveys **independently**.
- However, if you are a single person and do not have a partner, we are still very keen to hear your views to understand how work impacts on your life outside of work.
- Please answer the questions by selecting the most appropriate response or by filling in the answer in the space provided.
- The responses to this questionnaire will be held in **STRICTEST CONFIDENCE** and data will be published in aggregate form only. All survey responses are **ANONYMOUS**.
- Please return **BOTH** completed surveys in the **reply paid envelope** provided by **2nd May 2008**.

This Research Project is funded by the Department of Management, Monash University.

SECTION 1 – BACKGROUND

Please answer the following questions by either circling (eg. ①) the most appropriate response or filling in the answer on the space provided.

1. What is your gender?

Female	0
Male	1

2. What is your age in years? _____

3. What is your marital status?

Single	1
Married	2
Cohabiting/Defacto	3
Widowed	4
Separated/Divorced	5

4. What is the highest level of education you have attained?

Some secondary school	1
10 years completed	2
12 years completed	3
Technical college course	4
Associate diploma	5
Diploma	6
Undergraduate degree	7
Honours/Graduate diploma	8
Masters degree	9
PhD	10

5. How many dependent children are you responsible for? (If None, please move to question 8)

None	0
One	1
Two	2
Three	3
Four	4
Five	5
Six or more	6

6. Please record the number of dependent children you care for in each age group.

No, I don't have any dependent children

Aged 0 to 4 years: _____

Aged 5-12 years: _____

Aged 13-17 years: _____

7. What is the age of the youngest child you are responsible for? _____

8. How many elderly dependents (i.e. above 65 years) are you responsible for?

9. What is your employment status?

Full-time	1
Part-time	2
Casual	3
Not in paid employment	4
Other (please specify): _____	

10. What is your occupation? _____

11. How long have you been working at your current job? _____

YEARS

12. What is your annual income before tax and other deductions are taken out?

Less than \$25,999	1
Between \$26,000 and \$51,999	2
Between \$52,000 and \$77,999	3
Between \$78,000 and \$103,999	4
Between \$104,000 and \$125,999	5
Between \$126,000 and \$151,999	6
\$152,000 or more	7

13. During the past 12 months which of the following have you taken to accommodate family responsibilities?

Carers Leave	1
Sick Leave	2
Annual Leave	3
Other (please specify) _____	

14. On average how many hours per week do you spend on paid work (including those brought home at night and/or weekends) activities? _____

15. Please indicate on average, how many hours you spend performing the following tasks per week.

Household chores (e.g. cooking, cleaning, laundry etc.): _____

Household maintenance (e.g. gardening, household repairs etc.): _____

Childcare: _____

Eldercare: _____

Shopping (e.g. groceries and other household needs such as light bulbs, dishwashing liquid, cleaning detergent etc.): _____

SECTION 2 – Work-Family Conflict

Please indicate your extent of agreement or disagreement with these statements (please circle ONLY ONE response for each statement).							
	Strongly Disagree	Disagree	Slightly Disagree	Neither Disagree nor Agree	Slightly Agree	Agree	Strongly Agree
1) My work keeps me from my family activities more than I would like.	1	2	3	4	5	6	7
2) The time I must devote to my job keeps me from participating equally in household responsibilities and activities.	1	2	3	4	5	6	7
3) I have to miss family activities due to the amount of time I must spend on work responsibilities.	1	2	3	4	5	6	7
4) The time I spend on my family responsibilities often interfere with my work responsibilities.	1	2	3	4	5	6	7
5) The time I spend with my family often causes me not to spend time in activities at work that could be helpful to my career.	1	2	3	4	5	6	7
6) I have to miss work activities due to the amount of time I must spend on family responsibilities.	1	2	3	4	5	6	7
7) When I get home from work I am often too exhausted to participate in family activities/responsibilities.	1	2	3	4	5	6	7
8) I am often so emotionally drained when I get home from work that it prevents me from contributing to my family.	1	2	3	4	5	6	7
9) Due to all the pressure at work, sometimes when I come home I am too stressed to do the things I enjoy.	1	2	3	4	5	6	7
10) Due to stress at home, I am often preoccupied with family matters at work.	1	2	3	4	5	6	7

	Strongly Disagree	Disagree	Slightly Disagree	Neither Disagree nor Agree	Slightly Agree	Agree	Strongly Agree
11) Because I am often stressed from family responsibilities, I have a hard time concentrating on my work.	1	2	3	4	5	6	7
12) Tension and anxiety from my family life often weakens my ability to do my job.	1	2	3	4	5	6	7
13) The problem-solving behaviours I use in my job are not effective in resolving problems at home.	1	2	3	4	5	6	7
14) Behaviour that is effective and necessary for me at work would be counterproductive at home.	1	2	3	4	5	6	7
15) The behaviours I perform that make me effective at work do not help me to be a better parent and spouse.	1	2	3	4	5	6	7
16) The behaviours that work for me at home do not seem to be effective at work.	1	2	3	4	5	6	7
17) Behaviour that is effective and necessary for me at home would be counterproductive at work.	1	2	3	4	5	6	7
18) The problem-solving behaviour that work for me at home does not seem to be as useful at work.	1	2	3	4	5	6	7

SECTION 3 – Organisational Culture

Please indicate your extent of agreement or disagreement with these statements (please circle ONLY ONE response for each statement).	Strongly Disagree	Disagree	Slightly Disagree	Neither Disagree nor Agree	Slightly Agree	Agree	Strongly Agree
1) In general, managers in my organisation are quite accommodating of family-related needs.	1	2	3	4	5	6	7
2) Higher management in my organisation encourages supervisors to be sensitive to employees' family and personal concerns.	1	2	3	4	5	6	7
3) Middle managers and executives in my organisation are sympathetic toward employees' childcare responsibilities.	1	2	3	4	5	6	7
4) In the event of a conflict, managers are understanding when employees have to put their family first.	1	2	3	4	5	6	7
5) In my organisation employees are encouraged to strike a balance between their work and family lives.	1	2	3	4	5	6	7
6) Middle managers and executives in my organisation are sympathetic toward employees' eldercare responsibilities.	1	2	3	4	5	6	7
7) My organisation is supportive of employees who want to switch to less demanding jobs for family reasons.	1	2	3	4	5	6	7
8) In my organisation it is generally okay to talk about one's family at work.	1	2	3	4	5	6	7
9) In my organisation employees can easily balance their work and family lives.	1	2	3	4	5	6	7
10) My organisation encourages employees to set limits on where work stops and home life begins.	1	2	3	4	5	6	7

	Strongly Disagree	Disagree	Slightly Disagree	Neither Disagree nor Agree	Slightly Agree	Agree	Strongly Agree
11) In my organisation it is very hard to leave during the workday to take care of personal or family matters.	1	2	3	4	5	6	7
12) Many employees are resentful when men in my organisation take extended leaves to care for newborn or adopted children.	1	2	3	4	5	6	7
13) Many employees are resentful when women in my organisation take extended leaves to care for newborn or adopted children.	1	2	3	4	5	6	7
14) In my organisation employees who participate in available work-family programs (e.g. job sharing, part-time work) are viewed as less serious about their careers than those who do not participate in these programs.	1	2	3	4	5	6	7
15) To turn down a promotion or transfer for family-related reasons will seriously hurt one's career progress in my organisation.	1	2	3	4	5	6	7
16) In my organisation employees who use flexitime are less likely to advance their careers than those who do not use flexitime.	1	2	3	4	5	6	7
17) To get ahead in my organisation, employees are expected to work more than 50 hours a week, whether at workplace or at home.	1	2	3	4	5	6	7
18) Employees are often expected to take work home at night and/or on weekends.	1	2	3	4	5	6	7
19) Employees are often expected to put their jobs before their families.	1	2	3	4	5	6	7
20) To be viewed favourably by top management, employees in my organisation must constantly put their jobs ahead of their families or personal lives.	1	2	3	4	5	6	7

SECTION 4 – Life Role Importance

Please indicate your extent of agreement or disagreement with these statements (please circle ONLY ONE response for each statement).								
	Strongly Disagree	Disagree	Slightly Disagree	Neither Disagree nor Agree	Slightly Agree	Agree	Strongly Agree	Strongly Disagree
1) Having work/a career that is interesting and exciting to me is my most important life goal.	1	2	3	4	5	6	7	8
2) I expect my job/career to give me more real satisfaction than anything else I do.	1	2	3	4	5	6	7	8
3) Building a name and reputation for myself through work/a career is not one of my life goals.	1	2	3	4	5	6	7	8
4) 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	7	8
5) It is important to me to feel successful in my work/career.	1	2	3	4	5	6	7	8
6) I want to work, but I do not want to have a demanding career.	1	2	3	4	5	6	7	8
7) I expect to make as many sacrifices as are necessary in order to advance in my work/career.	1	2	3	4	5	6	7	8
8) I value being involved in a career and expect to devote the time and effort needed to develop it.	1	2	3	4	5	6	7	8
9) I expect to devote a significant amount of my time to building my career and developing the skills necessary to advance in my career.	1	2	3	4	5	6	7	8
10) I expect to devote whatever time and energy it takes to move up in my job/career field.	1	2	3	4	5	6	7	8
11) Although parenthood requires many sacrifices, the love and enjoyment of children of one's own are worth it all.	1	2	3	4	5	6	7	8

	Strongly Disagree	Disagree	Slightly Disagree	Neither Disagree nor Agree	Slightly Agree	Agree	Strongly Agree	Not Applicable
12) If I chose not to have children, I would regret it.	1	2	3	4	5	6	7	8
13) It is important to me to feel I am (will be) an effective parent.	1	2	3	4	5	6	7	8
14) The whole idea of having children and raising them is not attractive to me.	1	2	3	4	5	6	7	8
15) My life would be empty if I never had children.	1	2	3	4	5	6	7	8
16) It is important to me to have some time for myself and my own development rather than have children and be responsible for their care.	1	2	3	4	5	6	7	8
17) I expect to devote a significant amount of my time and energy to the rearing of children of my own.	1	2	3	4	5	6	7	8
18) I expect to be very involved in the day-to-day matters of rearing children of my own.	1	2	3	4	5	6	7	8
19) Becoming involved in the day-to-day details of rearing children involves costs in other areas of my life which I am unwilling to make.	1	2	3	4	5	6	7	8
20) I do not expect to be very involved in childrearing.	1	2	3	4	5	6	7	8
21) My life would seem empty if I never married or I'm not in an intimate relationship with someone I love.	1	2	3	4	5	6	7	8
22) Having a successful marriage/intimate relationship with the person I love is the most important thing in life to me.	1	2	3	4	5	6	7	8
23) I expect marriage/an intimate relationship with the person I love to give me more real personal satisfaction than anything else in which I am involved.	1	2	3	4	5	6	7	8

	Strongly Disagree	Disagree	Slightly Disagree	Neither Disagree nor Agree	Slightly Agree	Agree	Strongly Agree	Not Applicable
24) Being married/ in a relationship with the person I love is more important to me than anything else.	1	2	3	4	5	6	7	8
25) I expect the major satisfactions in my life to come from the relationship I have with my spouse/partner.	1	2	3	4	5	6	7	8
26) I expect to commit whatever time is necessary to making my spouse/partner feel loved, supported, and cared for.	1	2	3	4	5	6	7	8
27) Devoting a significant amount of my time to being with or doing things with a spouse/partner is not something I expect to do.	1	2	3	4	5	6	7	8
28) I expect to put a lot of time and effort into building and maintaining a marital/intimate relationship.	1	2	3	4	5	6	7	8
29) Really involving myself in marriage/an intimate relationship involves costs in other areas of my life which I am unwilling to accept.	1	2	3	4	5	6	7	8
30) I expect to work hard to build a good marriage/intimate relationship with the person I love even if it means limiting my opportunities to pursue other personal goals.	1	2	3	4	5	6	7	8
31) It is important to me to have a home of which I can be proud.	1	2	3	4	5	6	7	8
32) Having a comfortable and attractive home is of great importance to me.	1	2	3	4	5	6	7	8
33) To have a well-run home is one of my life goals.	1	2	3	4	5	6	7	8
34) Having a nice home is something to which I am very committed.	1	2	3	4	5	6	7	8

	Strongly Disagree	Disagree	Slightly Disagree	Neither Disagree nor Agree	Slightly Agree	Agree	Strongly Agree	Not Applicable
35) I want a place to live, but I do not really care how it looks.	1	2	3	4	5	6	7	8
36) I expect to leave most of the day-to-day details of running a home to someone else.	1	2	3	4	5	6	7	8
37) I expect to devote the necessary time and attention to having a neat and attractive home.	1	2	3	4	5	6	7	8
38) I expect to be very much involved in caring for a home and making it attractive.	1	2	3	4	5	6	7	8
39) I expect to assume the responsibility for seeing that my home is well kept and well run.	1	2	3	4	5	6	7	8
40) Devoting a significant amount of my time to managing and caring for a home is not something I expect to do.	1	2	3	4	5	6	7	8

Before you return the survey would you please check that you have answered all questions.

THANK YOU FOR COMPLETING THIS SURVEY.