WORKING TO LIVE, NOT LIVING TO WORK: A STUDY OF WORK FAMILY CONFLICT AMONG SRI LANKAN BANKING EMPLOYEES

NAVANEETHAKRISHNAN KENGATHARAN

THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS OF KINGSTON UNIVERSITY FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

OCTOBER 2014

ABSTRACT

Background and purpose

Work family literature demonstrates the great vitality and diversity of scholarship in the field and it is an omnipresent factor in the study of contemporary organizations and society. The majority of work family interference studies have been conducted in nations with individualist culture and the resultant prevalent conceptualisations and models mostly reflect such cultural contexts. Unfortunately, little work has been carried out in countries with collectivist culture and the research that has been done has applied the conceptualisations and models developed in individualist cultural contexts without question. This study therefore focused on Sri Lanka, a collectivist cultural nation. Its aims were to identify the prevalent forms of work family conflict (WFC) and to construct a model of WFC relevant to collectivist culture by identifying the main factors that are associated with variation in WFC.

Method of investigation

The research was conducted in a higher status occupation, banking, which typically has higher levels of WFC. It was carried out in three stages: first, a small scale exploratory qualitative study amongst a range of bank employees showed that WFC was seen as an issue by all and the significance of time based, strain based and psychological based work family conflict was apparent. Second, on the basis of the exploratory study, a self report questionnaire was developed based on the most commonly used scale of Carlson, Kacmar and Williams but adding a psychological dimension, and piloted with 20 employees in 7 banking organisations. Finally, it was revised and sent to a sample of 843 employees in 12 banks, of which 569 usable questionnaires were returned (response rate 67%). Data analysis included descriptive statistics, factor analysis, confirmatory factor analysis, correlation, stepwise regression, and structural equation modelling.

Findings

Results confirmed the existence of time based and strain based both work to family conflict and family to work conflict in the study sample. However, there was no evidence of behavioural based work family conflict found in the West. The existence of the proposed new dimension of psychological based work family conflict was confirmed and these findings are consistent with the differences between collectivist and individualistic cultures noted in the literature. Therefore, the original Carlson, Kacmar and Williams' work family conflict model was revised by replacing the behavioural with the new psychological based dimension. It was found that:

(1) Work to family conflict was determined by work demand, and that work demand was predicted by working hours, tenure, gender, income, formal work life policies and supervisory status. Work support was shown to act as a moderator between work demand and work to family conflict. Overall, these variables accounted for 85.4 % of variance in work to family conflict.

(2) Family to work conflict was determined by family demand, and that family demand was predicted by hours spent on household chores, hours spent on childcare, hours spent on dependents, formal work life policies, informal work life policies, and gender. Family support was shown to act as a moderator between family demand and family to work conflict. Overall these variables accounted for 82.2 % of the variance in family to work conflict.

(3) The results further revealed that gender role ideology moderated the relationship between family demand and family to work conflict: the relationship between family demand and family to work conflict was stronger for women who reported a high level of gender role ideology than for those who reported lower level of gender role ideology.

Contributions

This study made theoretical, parametric, geographical and methodological contributions to the WFC literature.

Keywords: Work to family conflict; family to work conflict; work demand; family demand; gender role ideology; banking sector; collectivist culture.

Acknowledgements

The completion of this thesis would never have been to fruition without the support and contribution of many people. I take the pleasure of thanking them.

I owe a deep debt of gratitude to my outstanding research supervisor Emeritus Professor Christine Edwards for her intellectual guidance, constructive comments and super fast feedback throughout my thesis. I greatly appreciate her personal support and genuine friendship. This thesis would not be materialized without her unceasing support. I would like to express sincere thanks to the director of studies, Dr Miao Zhang for her valuable guidance, unstinting support and feedback. I feel privileged to have had them as my supervisors.

I am thankful to all the participants in this research study for sparing valuable time in their busy lives to share their thoughts and insights. My special thanks to Professor Manikkam Nadarajasundaram University of Jaffna for his encouragement and the inspiration to undertake a PhD. I am thankful to the University of Jaffna, Sri Lanka for granting leave for the doctoral study.

I am very grateful to the University of Kingston, London and the National Centre for Advanced Studies in Humanities and Social Sciences, Sri Lanka for their financial support. Last but not least, I acknowledge with great respect for my mother, wife, daughter Aatushie, siblings and friends for their encouragement, support and sacrifices.

Declaration

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma of the university or other institute of higher learning, except where due acknowledgment has been made in the text.

Full name of student: Navaneethakrishnan Kengatharan

Date of submission: 31.10.2014

Table of Contents

List of Tables

List of Figures

CHAPTER ONE
INTRODUCTION

1.0 Chapter overview

This chapter introduces the subject matter of work family conflict and its relevance, the research site together with the research aims, significance and the originality, and in the final section a structure of the thesis is presented.

1.1 Introduction

The work family literature demonstrates the great vitality and diversity of scholarship in the field (Bianchi and Milkie, 2010) and it is an omnipresent factor in the study of contemporary organizations and society. Notwithstanding humans are social beings intertwined with their family structure, work generates sources of income necessary for family functioning and thus, work and family are said to be inextricably interwoven in human life. Generally, work allows families to support themselves, and offers many psychological rewards for individual family members (Kossek and Ozeki, 1998). Thus, work and family are interdependent and where performance of work roles impacts on family roles or family roles on work roles, work family conflict is generated.

Work family conflict has been defined as 'a form of inter role conflict in which the role pressures from the work and family domains are mutually incompatible in some respects' (Greenhaus and Beutell, 1985, p.77). Thus, work family conflict (WFC) focuses on the difficulties employees have in balancing their work and family responsibilities (Adams, King and King, 1996). In the last five decades, there have been many changes that have blurred the boundaries between work and family such as cutting edge technology, increasing women's educational attainment, dual career families, policies that allow workers more flexibility, and changing role expectations for both the employee and the organization (Parasuraman and Greenhaus, 2002). Therefore, research findings on the WFC sphere in the past may not hold water today. Notwithstanding the concept of WFC emerged in 1960s, the need for WFC scholarship is still imperative in the contemporary world.

Many research scholars have contended that WFC is a deleterious factor, with negative effects on organizations, employees and society. The factors determining WFC and its magnitude are subject to variation in national context. The national influences on WFC are connected with both cultural and institutional factors including labour legislation: working

hours, employment laws, women's education, dual earner families etc. Culture is the most significant determinant the way people live by spelling out their norms, behaviour, and credo. It intrudes into work and family as such. In the taxonomy of culture used by researchers, each country simply falls into individualism and collectivism (Hofstede, Hofstede and Minkov, 2010), and does not take into account the extent and intensity of cultural difference found both within the same culture and across nations. It is certain that although there are certain similarities across nations, dissimilarities are extant. Therefore, findings from a single study cannot be generalised to a dissimilar setting (e.g., Choi, 2008, Hassan, Dollard and Winefield, 2010). Thus, WFC might be expected to be particularly prone to national influences.

The preponderance of work family research has been conducted within affluent countries predominantly in Europe, America and Australia. These countries tend to have cultures that value individualism (Hofstede, Hofstede and Minkov, 2010), and many have governmental and corporate work family resources and policies to support individuals in their aspirations to be successful in both their occupational and family lives. They also tend to espouse the value of gender egalitarianism, and thus support the idea that both men and women apparently engage in fulfilling not only work but also home related activities (Hofstede, Hofstede and Minkov, 2010). Nonetheless, this scenario is completely different in the case of Asian countries with collectivist culture (Hofstede, Hofstede and Minkov, 2010). In many Asian countries, traditional gender role ideology still dominates (e.g., Dasgupta, 1998; Kulik, 2004; Nameda, 2013). The concept of traditional gender role ideology specifies separate roles for men and women where men are the breadwinners and women are the homemakers (Gutek, Searle and Klepa, 1991; Kite, 1996). The massive influx of women into labour market found in economically developed countries due to women's higher educational achievements, and laws enforcing gender equality or other external forces (e.g., increasing living costs) has eroded this concept. Nonetheless, the pattern in countries with collectivist culture is still unknown. In most collectivist cultural nations, the family culture is "patriarchal" where men's "headship" and women's "submission" is accepted (Hofstede, Hofstede and Minkov, 2010). However, no quantitative studies have been carried out to establish the relationship between gender role ideology and work family conflict in Asia.

In a collectivist culture, the way an individual is connected with work, family and society are different from an individualist culture. In collectivistic culture, a paternalistic role is adopted at the work place (Abdullah, 1996; Javidan and House, 2001). In contrast, a cost-benefit relationship between employer-employee is typical of an individualist culture (Restubog and Bordia, 2007). In collectivist culture, work is viewed as a way of supporting the family more than it does in individualist culture (Hassan, Dollard and Winefield, 2010) and the harmonious workplace relationships are considered more important than tasks in collectivist cultural organisations (Hofstede, Hofstede and Minkov, 2010). Thus, the collectivist's view is 'working to live not living to work' (Hassan, Dollard and Winefield, 2010). The cultural connection between family and work would therefore be expected to uniquely contribute to WFC. However, there is a deficit of WFC studies that have attempted to explore the cultural influences on the nature of WFC (e.g., Joplin et al., 2003; Lu et al., 2006).

Shaffer, Joplin and Hsu (2011) identified 49 studies in Asian countries during the last 50 years, in line with Chang, McDonald and Burton's (2010) findings that only 5 % of WFC studies were conducted in Asian. These studies mostly investigated in China, Hong Kong, Iran, Japan, Malaysia, Singapore, Taiwan and India. Moreover, researchers of such cultural nations were frequently criticised by many scholars for their adoption of work family conflict models and theory developed in the West, and note that the Western findings cannot be generalised to other culturally dissimilar societies (e.g., Hassan, Dollard and Winefield, 2010). As a result, voluminous studies would be needed in exogenous countries so as to establish the effect of culture on WFC (Hassan, Dollard and Winefield, 2010). Moreover, those who have researched collectivist cultural nations have measured work family conflict using scales developed in individualistic culture (e.g., Burke, Weir and DuWors, 1979; Bohen and Viveros-Long, 1981; Kopelman, Greenhaus and Connolly, 1983; Gutek, Searle and Klepa, 1991; Frone, Russell and Cooper, 1992; Netemeyer, Boles and McMurrian, 1996; Thompson, Beauvais and Lyness, 1999; Carlson, Kacmar and Williams, 2000; Greenhaus, Parasuraman and Collins, 2001; Hill, Ferris and Martinson, 2003) rather than developing or adapting scales to fit their own culture. It is argued that consistent use of such questionnaires developed in another culture is problematic (e.g., Gelfand and Knight, 2005; Hassan, Dollard and Winefield, 2010) and needs scrupulous attention and care in its use.

Therefore, studying WFC in a previously unexplored national setting would contribute to the work family literature in general. The research on which this thesis is based seeks to help fill critical gaps identified in extant WFC literature by exploring country-culture specific factors.

1.2 The research Site: Sri Lanka

Sri Lanka is an island lying off the southern tip of India separated by the Palk Strait on the Asian continent. It was subject to three eras of colonial rule by **the Portuguese** (1500s), **the Dutch** (1650s) and **the English** (1790s). It gained its full independence on 4th of February, 1948. The total area of Sri Lanka is 65610 sq km with length of 435 km and width of 225 km. The population of Sri Lanka was 20 271 464 as in 2012, the majority women (51.6%) and men the remaining 48.4%. As to literacy rate, males are slightly more literate (96.8%) in comparison with females counterparts (94.6%).

Sri Lanka is culturally distinct country in comparison with well developed counties such as the UK, the USA, Australia, Sweden, and Germany. Many scholars have argued that the national culture of a country influences the individual way of life and the way organisations work. Unfortunately, the national culture of Sri Lanka was not studied by Hofstede, Hofstede and Minkov (2010) in their seminal studies of national culture, nonetheless, researchers have noted that Sri Lanka is culturally similar to India (Kailasapathy, Kraimer and Metz, 2014). Sri Lanka is a collectivist cultural nation with an extended family structure where not only the parents and siblings but also grandparents, uncles, aunts, cousins etc live together (Hofstede, Hofstede and Minkov, 2010). According to the Central Bank of Sri Lanka (2013), average household size was 4.0 in 2009/10 which is greater in comparison with many developed countries, such as 2.4 in the UK (Macrory, 2012) and 2.63 in the USA in 2009 (Nasser and Overberg, 2011).

Respect for parents and family members is lifelong, children are a source of old age security, and the majority of marriages are arranged by parents and close relatives. Men delay their marriage until his sisters have married and have been provided with dowry. Thus, family life in Sri Lanka is very different from that in individualist cultural nations such as the United States, Australia, Great Britain, Sweden, and Germany. There are several implications for these differences for work family conflict. Thus, on the one hand, family support from extended family members would be greater in comparison with individualistic cultural nations. On the other hand, extended family members could cause extra family demand in the form of eldercare and other obligations. Thus, it would be critical to look at family demand

and the role of family support on work family conflict in a new and culturally different setting, Sri Lanka.

Furthermore, in terms of Hofstede's cultural framework, Sri Lanka is a large power distance country. Power distance is "the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally" (Hofstede, Hofstede and Minkov, 2010, p.61). Moreover, Hofstede, Hofstede and Minkov (2010) suggest that unequal relationships between superiors and subordinates and hierarchical systems are more prevalent in a large power distance country. The hierarchical system engenders large numbers of supervisory personnel and the boss is a benevolent autocrat or "good father". Moreover, in a large power distance country, subordinates are more dependent on superiors and thus they are often afraid of disagreeing with them. The relationships between superior and subordinate are emotional. Thus, the employer-employee relationship is said to be basically moral like a family link, and thus relationships prevail over tasks. Therefore, organisational factors such as work support; superior subordinate relationships and higher dependency would be typical in Sri Lanka and potentially influence work family conflict.

Besides cultural milieu, the macro environment, social, economic, political, technological and legal, put more pressure on balancing work and family roles in Sri Lanka than ever before. The population is aging: in 1980 life expectancy was 68.1 years, and in 2013 it went up to 75.1 years (UNDP, 2013). As discussed earlier, since individuals are culturally bound to look after aged relatives, it may increase the burden of executing the family role.

Moreover, during the last few decades, the labour force participation rate of women has been rising owing to increased attainment of educational qualifications and living costs. For instance, the percentage of women entering universities increased from 42% in 1989 to over 55% in 2012 (De Soysa, 2000; Haraldstad, 2012). According to the 2013 labour force survey in Sri Lanka, the participation rate of men and women was 74.4% and 34.7% respectively, and the majority of labour force was between ages of 35 to 44 years (Department of Census and Statistics, 2013). Thus, there are increasing numbers of dual earner families portending change in the traditional division of labour (men breadwinners and women homemakers) in Sri Lanka. Thus, studying the pervading nature of gender role ideology and its consequent impact on work family conflict would be seminal in conceptualising work family conflict in collectivist cultures.

Moreover, the Sri Lankan civil war fought between the government of Sri Lanka and Liberation Tigers of Tamil Eelam (LTTE) (beginning on 23 July 1983 and formally ended in May 2009) had a major impact on women (Sajanthan et al., 2014). The Child Development and Women's Affairs Minister of Sri Lanka Tissa Karalliyadda identified over 59 000 war widows, many of whom are young, in the Northern and Eastern Provinces alone, not counting the numbers in the other parts of Sri Lanka (ColomboPage, 2011). This might cause a deleterious effect on women in balancing work family life that is peculiar to Sri Lanka.

The employment legal system of Sri Lanka is not robust compared with developed economies. The majority of jobs are outside the purview of labour regulations, for example the women engaged in the garment industry are prone to suffer physical disabilities, long hours and very low pay. For instance, according to Department of Census and Statistics (2013), 68.8% of employees were working more than 40 hours in Sri Lanka and average monthly income was low (Rs. 25 778; Department of Census and Statistics, 2013). Moreover, organisational work life policies to reduce work family conflict are in an embryonic stage in Sri Lanka.

Overall, Sri Lanka is a culturally dissimilar country in comparison with individualist cultural nations where the theories and models of work family conflict were developed. Thus, variation in characteristics such as support from members of the extended family and paradoxically the potential burden of eldercare, the dominance of patriarchy, traditional gender role ideology, the dependency nature of relationship between employer-employee, greater work support, long working hours, the virtual absence of formal organisational work life policies, and national characteristics (such as laws, income, women's labour force participation, education and household size), are particular to Sri Lanka. It has been argued by many scholars that the majority of research findings from culturally different nations would not be generalisable to culturally dissimilar societies and they call for studies across different countries (e.g., Choi, 2008, Hassan, Dollard and Winefield, 2010). Thus, studying work family conflict from the view of Sri Lankan would theoretically and geographically make a contribution beyond the extant Asian work family conflict literature.

Thus the research aims were to:

- Investigate the extant forms of work family conflict in Sri Lanka.

  Six forms of work family conflict have been widely accepted as present in individualistic culture. However, there has been little research investigating the existence of these forms of WFC in a collectivistic cultural context. Thus, investigating the extant forms of work family conflict in Sri Lanka contributes to the Asian WFC literature.

- Construct a model of WFC in Sri Lanka by identifying factors that are associated with variation in and forms of WFC.

  Many research scholars have found that WFC is influenced by various factors reflecting national cultural differences. That is, the factors and their impacts may not be similar across nations and cultures. Thus, this study aims to construct a comprehensive model of WFC to explore the determinants of WFC in Sri Lanka.

1.3 Significance of the Study

Imbalance between the demands of work and family generates a 'conflict' that leads to detrimental effects on organizations, individuals and families. The possible outcomes of work family conflict can be physical (e.g. poor appetite, headache, stomach upset, fatigue), psychological (e.g. depression, marital satisfaction and life satisfaction), behavioural related (e.g. heavy drinking, cigarette use, anger), and work related (e.g. job satisfaction, absenteeism, tardiness and poor work-related role performance, commitment) (e.g., Adams, King, and King, 1996; Netemeyer, Boles and McMurrian, 1996; Frone, Russell and Cooper, 1997; Greenhaus et al., 1997; Kossek and Ozeki, 1998; Allen et al., 2000; Glaveli, Karassavidou and Zafiropoulos, 2013). This study focused on an unexplored collectivist nation is therefore significant in providing evidence which can be used to design strategy for tackling work family conflict in collectivist cultures. This study has further developed and validated a scale that might also be of use beyond the culture in which it was originally developed.

This study investigates the applicability of the forms of WFC developed in the West, and proposes a new form of psychological based WFC from the seminal works of Willmott (1971), Clark (2000), Ashforth, Kreiner and Fugate (2000), Carlson and Frone (2003) and Lu et al. (2006). The development and testing of this new dimension should also

be of use to future researchers and it adds to the literature supporting the existence of an additional dimension. Although the addition of an under-researched form of WFC – psychological- that seems particularly appropriate to exploring WFC in collective culture, it is probably relevant to all cultures.

The way work family conflict has been studied has changed over the years. Families are increasingly diverging from with the traditional male- breadwinner and female- homemaker model as women are increasingly drawn into the labour market, and raise their aspirations for educational attainment, careers and financial independence (e.g., Kulik, 2004; Lafreniere and Longman, 2008). However, the role of men and women in balancing work and family in less developed economies has not been explored. Moreover, factors influencing work family conflict such as work-related and family-related factors are strongly anchored in country-culture specific factors. For instance, work support for employees could be greater in collectivist culture as the employer-employee relationship is more friendly and extends beyond the organisation (Hofstede, Hofstede and Minkov, 2010) attending a birthday party, wedding, puberty ceremony, house-warming etc. And family support was expected to be greater in collectivist culture due to the extended family members living in a household, sharing household chores, childcare etc or, conversely, extended family members could cause extra burdens such as in the form of eldercare (Agarwala et al., 2014). Therefore, this detailed study investigating the factors influencing work family conflict would be seminal in theorizing and developing policies to balance work and family life.

1.4 Originality of the research

This research investigated the dimensions of work family conflict and found evidence of a new form of work family conflict reflecting nations with collectivist culture. The research also shed new light on three variables that moderate the relationship between the demands of work /family and work family conflict: work support, family support and gender role ideology. It further found the factors that predicted work to family conflict and family to work conflict in an unexplored collectivist cultural nation, Sri Lanka. Thus, this research is original in its nature and contributes beyond extant literature of work family conflict in Asia.

1.5 Structure of the thesis

The thesis is organised as follows.

Chapter 2 provides the theoretical underpinnings of the study including conceptualising work family conflict, work family border theory, measurement of work family conflict, gender role ideology and work family conflict, work-related and family- related factors and work family conflict, and the research model.

Chapter 3 presents the research design and methodology including the philosophy of the research design, exploratory study, data collection (target population, sampling, research instrument, tackling potential biases, and piloting), analytical strategy (data analysis, assessment of nonresponse bias, data needs matrix), and ethical considerations.

Chapter 4 reports on the findings of the descriptive analysis of the survey responses including characteristics of the survey respondents (general, family-related and work-related characteristics), level of variance in work family conflict and its predictor and outcome variables, and analysis of difference.

Chapter 5 presents the results of the factor analysis and confirmatory factor analysis of the survey data. The underlying assumptions, assessment of the suitability of the data for factor analysis (sample size, factorability of the correlation matrix), factor extraction (Kaiser's criterion, Scree test and Parallel analysis) and factor rotation and interpretation are described. This is followed by details of the first and second order confirmatory factor analysis (CFA), and a comparison of the hypothesised model with Carlson, Kacmar and Williams' six dimensional model. In the penultimate section, the predictive validity is confirmed.

Chapter 6 explores the factors related to work to family conflict and family to work conflict. It starts with findings of the application of correlation analysis, and multiple regression analysis which identify the predictors of work demand and predictors of family demand. Finally, it reports on the assessment of the model of work family conflict using structural equation modelling (SEM) and the analysis of moderating effect.

Chapter 7 The final chapter discusses the findings in relation to the research questions, the contributions and implications of this study, outlining limitations and directions for future research. The thesis ends with a conclusion.

CHAPTER TWO

THEORETICAL UNDERPINNINGS OF WORK FAMILY CONFLICT

2.0 Chapter overview

The purpose of this chapter is to identify the known and unknown spheres of work family conflict by reviewing extant knowledge from previous studies. The discussion is organised under the following themes: conceptualising work family conflict, a fourth form of psychological based work family conflict, measurement of work family conflict, gender role ideology, and work-related and family-related factors and work family conflict. A conceptual model is developed on the basis of the review and hypotheses are proposed.

2.1 Conceptualising work family conflict

The changing nature of workforces has increased the amount of research looking at how people manage the demands of both work and family. The meaning and the nature of work and family and their relationship to each other are of utmost importance in understanding work family conflict. The review starts by examining the terminology used to define 'work' and 'family'. Work is defined simply as 'paid employment'. Hanson (2001) defines family as "two or more individuals who depend on one another for emotional, physical, and economical support" (p.6) and "conflict" as 'mutual interferences' or 'disharmony'. During their life span, individuals will perform a variety of family and work related roles and work family conflict (WFC) can be defined as the mutual interference between work and family roles in their execution.

Role theory

The core conception of work family conflict emanated from role theory developed 50 years ago (Kahn et al., 1964). Work and family can be conceptualised as role systems and the role process is an interaction between role performer (focal person) and role sender. In a workplace, the role system mainly encompasses the employee-employer relationship however; it might be extended among colleagues, managers and customers as well. The "simultaneous occurrence of two (or more) sets of pressures such that compliance with one would make more difficult compliance with the other" (Kahn et al., 1964, p.19) creates role conflict. Thus in the case of WFC interrole conflict arises when pressures from the work role are incompatible with the pressures arising from the family role and vice versa.

Based on this deep rooted idea, the most widely accepted definition of work family conflict was postulated by Greenhaus and Beutell (1985) as "a form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respects" (p.77). Therefore, the interrole conflict occurs when participation in one role consumes more resources (e.g., working long hours), which is incompatible with performance of another role (say leaving less time available for performing family role). And thus, Lobel (1991) defined WFC as "a condition that arises when participation in either role (work and non work) is incompatible with participation in the other role" (p.509). Nonetheless, while definitions and explanations vary, most agree that WFC occurs when the demands of work are in disharmony with the demands of family (Bruck, Allen and Spector, 2002). Across many disciplines, the term 'work family conflict' is interchangeably denoted as work home interference (e.g., Geurts et al., 2003), work family interference (e.g., Carlson, Kacmar and Williams, 2000), and work non work interference (e.g., Dikkers et al., 2005).

Based on theoretical discourse on WFC, the conceptualisation of WFC between 1980 to date has been changed. In 1980s, WFC was considered as a "unidirectional and one dimensional construct" by many researchers (e.g., Kopelman, Greenhaus and Connolly, 1983; Cooke and Rousseau, 1984; Bedeian, Burke, and Moffett, 1988). In terms of dimensions, Greenhaus and Beutell's (1985) scholarship was revolutionary in bringing three forms of work family conflict to light: time-based conflict, strain-based conflict, and behaviour-based conflict.

Time-based conflict occurs because "time spent on activities within one role generally cannot be devoted to activities within another role" (Greenhaus and Beutell, 1985, p.77). It is the time interference on performing either work or family role, for example, working more than eight hours or working on more than five days might interfere with his/her ability to get things done at home. Time is therefore disproportionately spent on work related matters compared to family related matters.

Strain-based conflict occurs when strain from one role makes it difficult to perform in another role. For example, anxiety and fatigue caused by strain from the work role might make it difficult to perform in a family role. Strain based WFC is when "roles are incompatible in the sense that the strain created by one makes it difficult to comply with the demands of another" (Greenhaus and Buetell, 1985, p.80).

The third form of WFC defined by Greenhaus and Buetall (1985) is ***behaviour-based conflict,*** in which "specific patterns of in-role behaviors may be incompatible with expectations regarding behavior in another role" (p.81). Behaviour based conflict occurs when the employee behaves the same way at home and work. For example, a male managerial business executive might be expected to be aggressive and objective on the job, but his family members expect love and kindness. Therefore, the different behaviour expected of work and family members can cause for this form of conflict.

Turning to the direction of the relationship, during the 1990s, the unidirectional model of WFC was replaced by a bidirectional model in terms of the sources of the conflict: work to family conflict (work interference with family) and family to work conflict (family interference with work) (e.g., Gutek, Searle and Klepa, 1991; Frone, Russell and Cooper, 1992; Williams and Alliger, 1994; Netemeyer, Boles and McMurrian, 1996; Kelloway, Gottlieb and Barham, 1999; Carlson, Kacmar and Williams, 2000).

Among many seminal studies, Carlson, Kacmar and Williams (2000) brought the constructs of directions and dimensions together in a six dimensional model of WFC: work to family conflict including three forms (time- based, strain-based and behaviour- based) and family to work conflict including three forms (time-based, strain- based and behaviour-based). Consequently, work to family conflict is used to describe conflict that is perceived to originate in the work domain and family to work conflict is used to describe conflict that is perceived to originate in the family domain. The bidirectional nature of the WFC is important because the consequences of the conflict are dependent on where the conflict originates (work or family). Thus, many researchers assert that both directions of WFC need to be examined to fully understand the work family interface (e.g., Gutek, Searle and Klepa, 1991; Frone, Russell and Cooper, 1992; Carlson, Kacmar and Williams, 2000; Anafarta, 2010). The six dimensional model of WFC is presented in below table 2.1

Table 2.1: Six dimensional model of work family conflict

Forms of work family conflict	Directions of Work family Conflict: *Work interference with family*	Directions of Work family Conflict: *Family interference with work*
Time	Time-based work interfering with family	Time-based family interfering with work
Strain	Strain-based work interfering with family	Strain-based family interfering with work
Behaviour	Behaviour-based work interfering with family	Behaviour-based family interfering with work

Source: Six dimensional model of WFC (Carlson, Kacmar and Williams, 2000, p.251)

All these directions and forms of WFC have been developed from studies carried out in nations with individualist cultures, predominantly in Europe, Latin America and North America. However, studies in collectivist cultures have been very few. More recently, Shaffer, Joplin and Hsu (2011) have identified 49 research papers carried out in collectivist cultural nations in Asia: China, Hong Kong, India, Iran, Japan, Malaysia, Singapore and Taiwan, none of which have confirmed the existence of three forms of WFC. For instance, albeit Spector et al. (2007), Hassan, Dollard and Winefield (2010) and Fiksenbaum et al. (2010) employed the Carlson, Kacmar and Williams' (2000) measure, they have not attempted to confirm or reject the existence of those three forms of work family conflict. Of late, Kailasapathy, Kraimer and Metz (2014) conducted a study of the interactive effects of leader–member exchange, gender and spouse's gender role orientation on conflict arising from work interference with family. Their study has shortcomings and failed to confirm the extant forms of work family conflict. In their analysis, they only considered one direction of work family conflict (work to family conflict) with three forms. Moreover, they discarded the behaviour based dimension (items) for further analysis with the view to improving model fit even though behaviour based items clumped together as a separate dimension. In nutshell, while some research has explained WFC in collectivist cultures, they have not undertaken

analysis in order to identify extant forms of bidirectional WFC. Thus, this study extends beyond all studies carried out in nations with collectivist cultures by investigating the extant forms of bidirectional WFC using a sample from Sri Lanka.

Therefore, since all three forms of work family conflict developed are based on individualist cultures, the existence of those forms of WFC is an unidentified **gap** in extant collectivistic cultural WFC literature.

This raises the question:

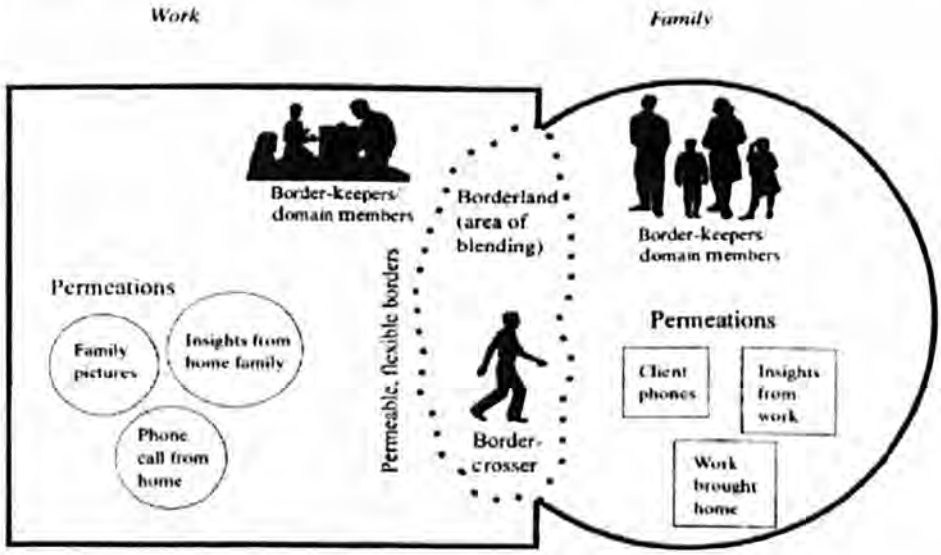
> **RQ_1:** Are the three forms of work family conflict developed from research in individualistic cultures applicable in Sri Lanka?

2.2 A fourth form of WFC: Psychological- based WFC

Work/family border theory

In an advancement of work family research, Clark (2000) introduced a theory of work/family border. Work/family border theory explains "how individuals manage and negotiate the work and family spheres and the borders between them in order to attain balance" (Clark, 2000, p. 750). Clark's work/family border theory has four major characteristics: the work and home domains, the border between work and home, the border-crosser and the border-keepers. The model of the work/ family border theory is shown in figure 2.1

Figure 2.1: Clark's (2000) work/ family border theory



Source: Work/family border theory (Clark, 2000, p.754)

Of the work and family domains, work primarily satisfies the goals of providing an income and giving a sense of accomplishment and home that of attaining close relationships and personal happiness (Clark and Farmer, 1998 cited in Clark, 2000). According to border theory, the boundaries between work and family domains form a continuum from complete segmentation to complete integration of roles: high segmentation implies work and family domains are separate in terms of physical, temporal and psychological boundaries whereas in high integration there is no distinction between the work and family domain (Clark, 2000). Physical borders can be the location or walls of a workplace or home, temporal borders are set working hours, and psychological borders are thinking patterns, behaviour patterns and emotions (Clark, 2000).

Research has found that flexibility of temporal borders (for instance flexible working hours) and physical borders (for instance can work in any location) are more prevalent in economically developed countries than less developed countries. Thus, the permeability of borders in less developed nations indicates the potential for mutual intrusion of work and family domains that could cause imbalance between work and family to a greater extent than in the West. While physical and temporal borders are reflected in time based and strain based work family conflict, the psychological border has not been fully researched in theoretical models of work family conflict or even in measurement of work family conflict (e.g., Carlson, Kacmar and Williams, 2000). The psychological border permeates spillover of negative emotions and attitudes from work to home and vice versa (Evans and Bartolome, 1980) that could prevent one in his/her performance of either work or family role. Willmott (1971) found that 96% of senior staff (such as assistant general managers, marketing managers, works managers, research engineers), 79% of junior staff (such as technical assistant, maintenance foremen) and 39% of works (such as instrument makers, adhesive process workers) were thinking about the work when at home. Therefore psychological based WFC has been identified as an important fourth dimension of WFC.

Renowned researchers on WFC in the West have been looking at special features of WFC from collectivistic cultures. More recently 23 research scholars on WFC collectively conducted a research study on 'cross-national differences in relationships of work demands, job satisfaction and turnover intentions with work family conflict' (Spector et al., 2007). They suggest that there are likely to be **unidentified factors** that have stronger effects on WFC in the collectivistic than the individualistic world. Owing to closely ***tied up social***

connections and networks, collectivists are more sensitive to **interpersonal problems and other interpersonal conflict**. Thus, high integration makes it difficult for one to decouple roles psychologically and completely disengage from one in favour of another (Ashforth, Kreiner and Fugate, 2000). Therefore, this psychological aspect might make them more susceptible to WFC (Spector et al., 2007).

'One cannot stop thinking or ruminating about work when he or she is at work' (Carlson and Frone, 2003, p.518). More specifically, in collectivistic cultures, common features are cohesive groups (extended families), sense of identity and belonging, and loyalty (Hofstede, Hofstede and Minkov, 2010) typifying that a family living in a house in collectivist culture would include the extended family members like parents, aunts, uncles, cousins, sisters in law, and brother in laws. Moreover, workplaces in collectivistic cultures are seen as having a 'paternalistic role' (Abdullah, 1996) reflecting the fact that the supervisor is presumed as a 'father or mother' not only taking care of work related but also personal issues (Abdullah, 1996) and thus, the relationships go beyond the workplace, for example, the supervisor can be invited as a guest of honour for the family ceremonies (weddings, house-warming, birth of a child or puberty ceremonies). The nature of such relationships was noted in the cultural studies of Hofstede, Hofstede and Minkov (2010) where they explained that relationships prevail over tasks in collectivist cultural organisations, which is different from individualistic cultures where organisations tasks take precedence over personal relationships. Moreover, the majority of countries with collectivist cultures are typified by large power distance creating unequal relationships between superiors and subordinates within the hierarchical system. And employees are dependent on superiors and thus often afraid of disagreeing with their superiors. The relationships of superior and employee are emotional (Hofstede, Hofstede and Minkov, 2010). Thus, Mesquita (2001) explained that emotion in collectivist cultures is a relational phenomenon that reflects the state of relationship. Collectively, filial piety and 'father or mother' connectedness at the workplace are the hallmarks of collectivist culture. On this ground, any conflict created either by family or work roles execution would psychologically interfere with the performance of the other role. It implies that the psychological preoccupation with either work or family role interferes with performance of the opposite role. ***Thus, the possibility of psychological based work family conflict needs to be tested and empirically established.***

In line with this argument, Lu et al. (2006) proposed a new form of 'worry based' work family conflict relating to collectivist culture. They argued that persistently high unemployment rates, increasing living costs, marital distress, and parental stress may damage the stability of family life causing worries which interfere with work (Lu et al., 2006). Thus, in the contemporary world, macro (for example, economic recession) meso and micro environment uncertainty can also lead to psychological based work family conflict. Although strain based work family conflict seems to be related to psychological based work family conflict, they are conceptually different. The crux of psychological based work family conflict is the distractions/preoccupations that affect the performance of work role on family role or family role on work role. That is, the mind becomes preoccupied and this can distract focus on the task at hand. Cardenas, Major and Bernas (2004) pointed out that "distractions as a specific type of interruption in the workplace" (p.351) that interrupt focused concentration on a task by affecting a person's cognitive processes by diverting attention. However, strain based is a specific form of work family conflict where stress or anxiety arising from home or work affects performance in the other role. That is stress and anxiety that prevents one's state of total involvement in any task being performed (Jett and George, 2003). Therefore as explained, the distractions (i.e., thinking/preoccupation carries over to interrupt focus on a task) and the nature of stress (i.e., overburdening / strain) which affects the capability to perform a role are different concepts per se (Greenhaus and Buetell, 1985; Jett and George, 2003; Cardenas, Major and Bernas, 2004). Thus, *the working definition of strain based conflict is one's strain experience in one role, for example, fatigue, affects performance (or active participation) in another role. That is, either a work or family role exhausts one and that prevents the performance of another role, i.e., work role on family role or family role on work role.* In contrast, psychological based conflict can thus be defined as *one's psychological preoccupation with one role affects performance in another role. That is, thinking about either work or family distracts one's attention while performing in another role.*

In nutshell, albeit there is a piecemeal approach to the concept of psychological matters related to work family conflict (e.g., Willmott, 1971; Clark, 2000; Ashforth, Kreiner and Fugate, 2000; Carlson and Frone, 2003; Lu et al., 2006), there is no systematic body of research conceptualising the new form of psychological based work family conflict with extant forms of time based, strain based and behavioural based work family conflict. Moreover, it has been argued that the specific characteristics of collectivist cultures would

make them particularly prone to this type of WFC. However, currently there has been little empirical investigation of this form of WFC. Thus, **a gap** in conceptualising WFC in collectivist culture has been identified, leading to the second research question:

RQ_2: Is psychological based work family conflict apparent in Sri Lanka?

2.3 Measurement of work family conflict

A number of WFC measures have been developed by many researchers. As explained earlier, initially researchers gauged WFC as 'unidirectional' and they presumed conflict occurs when work interferes with family, but later studies recognised that WFC can occur in both directions: work interference with family and family interference with work (e.g., Gutek, Searle and Klepa, 1991; Duxbury, Higgins, and Mills, 1992). Consequently, measurement has focused on the multidimensional form of WFC (Carlson, Kacmar and Williams, 2000) as shown in figure 2.1. More than 20 different measures have been used by work family researchers (Shaffer, Joplin and Hsu, 2011) including: Burke, Weir, and DuWors (1979), Kopelman, Greenhaus, and Connoly (1983), Loerch, Russel, and Rush (1989), Small and Riley, (1990), Frone, Russell, and Cooper (1992), Williams and Alliger (1994), Netemeyer, Boles and McMurrian (1996), Carlson, Kacmar and Williams (2000), Matthews, Kath and Barnes-Farrell (2010). Several standard measures of WFC are now prevalent.

The most consistently citied in the 1980s was Kopelman, Greenhaus and Connolly's (1983) whereas in the 1990s it was Netemeyer, Boles and McMurrian's (1996) 10- item measure of WFC (Shaffer, Joplin and Hsu, 2011). However, Carlson, Kacmar and Williams' (2000) multidimensional measure of WFC has recently become more popular and their research has been cited over 1005 times in published peer reviewed studies.

The WFC concept emerged in 1960s (e.g., Kahn et al, 1964) and its history in the literature spans more than 5 decades. Although fifteen cross cultural studies (15) and seven cross national studies (7) and forty nine (49) studies on WFC have included collectivistic cultures, a valid measure of WFC in collectivist cultures has yet to be developed, despite the fact that many Asian research scholars argue that using questionnaires developed in another culture is problematic (e.g., Gelfand and Knight, 2005; Hassan, Dollard and Winefield, 2010). Moreover, while researchers are in consensus over the definition of WFC, they are not in agreement about how to best measure it (Shaffer, Joplin and Hsu, 2011). Thus, researchers have chosen WFC measures from a diverse pool. Therefore, it is difficult to compare,

generalise and interpret results across studies in a meaningful way (Shaffer, Joplin and Hsu, 2011).

Even in seminal studies conducted in advanced economies have experienced difficulties in applying Carlson, Kacmar and Williams' (2000) work family conflict measure. For instance, Lapierre et al. (2005) carried out a study among Canadian and New Zealand samples of managers for assessing the generalisability of the six factor structure beyond American samples and had problems in distinguishing both directions of behaviour based conflict. They called for further study across different national samples.

Many WFC researchers in collectivistic cultures used Carlson, Kacmar and Williams' (2000) multidimensional WFC questionnaire during the last decade and a summation of the work to family conflict and family to work conflict score was used to interpret results (e.g., Spector et al., 2007; Hassan, Dollard and Winefield, 2010; Fiksenbaum et al., 2010; Kailasapathy, Kraimer and Metz, 2014). However, although Carlson, Kacmar and Williams' WFC questionnaire is widely used in collectivist cultures, none of the studies attempted to validate this questionnaire to see its appropriateness. Thus, the six factor structure of the WFC scale developed by Carlson, Kacmar and Williams in individualist culture may require substantial adaptation for use in a collectivist cultures. Thus, further validation of Carlson, Kacmar and Williams' (2000) work family conflict questionnaire outside of the culture in which it was developed would be a methodological contribution leading to the third research question:

RQ_3: How far is Carlson, Kacmar and Williams' (2000) work family conflict questionnaire developed in individualist culture valid for investigating WFC in Sri Lanka?

2.4 Gender role ideology and work family conflict

The perception of gender role ideology influence on work family conflict is one of the major cultural differences between the East and the West. Generally, gender egalitarianism is more pervasive in the West than the East (Hofstede, Hofstede and Minkov, 2010). This section discusses the role of gender role ideology on work family interference in the extant literature.

Social role theory and cognitive theories of gender development

Gender and gender role ideology are two different constructs. The first refers to biological sex whilst the second is an attitudinal identification in performance of roles (e.g., Livingston and Judge, 2008). Social role theory suggests that there are gender differences in occupational roles suggesting that women are more likely to be homemakers and men are more likely to be the breadwinner (i.e., employed outside of the home) (e.g., Gutek, Searle and Klepa, 1991; Kite, 1996). Slan-Jerusalim and Chen (2009) demarcated gender role ideology as "along a continuum from traditional (family responsibilities are primarily for women; work responsibilities are men's obligations) to egalitarian (belief in an equal role distribution for men and women)" (p.493). Further , women are assumed to have traits such as kindness, nurturance, sensitivity to the needs of others, termed as "feminine" traits whilst men are tended to occupy agentic traits such as self confidence, assertiveness aggressiveness, decisiveness, independence, achievement), termed as "masculine" traits (Kite, 1996; Powell and Greenhaus, 2010).

As to **status characteristics theory**, the positions of power that a person receives in society are determined by gender and typically males are considered to be more valuable in society than females (e.g., Eagly and Wood, 1982; Ridgeway, 1991). Thus, consensual cultural beliefs have a substantial influence on social role theory. In collectivist cultural nations, women are more likely to see the family role as part of their social identity than men do and the majority of the families are "patriarchal" where men's "headship" and women's "submission" is the norm (e.g., Fernando and Cohen, 2011). **Cognitive theories of gender development** suggests that children acquire gender belief systems from the environment that surrounds them and interpret what they see and hear (Martin and Ruble, 2004). Thus, in collectivist cultures, as a child grows up among grandparents, uncles, aunts, cousins etc (within extended family structure) (Powell, Francesco and Ling, 2009), the nature of such collectivist cultural identity is passed through generation by generation.

"Women have made great strides in gaining entrance to firms and cracking the glass ceiling...."(Mainiero and Sulliva, 2005, p.118). In the contemporary world, women became well educated, they go to work, look after their children and they can operate independently. So the role of the women seems to changing in the past decades resulting in a more egalitarian gender ideology implying that men and women are actively participating in both work and family roles (Minnotte, Minnotte, and Pedersen, 2013).

Albeit a relaxing of the separation of gendered roles (Livingston and Judge, 2008) pervades across many developed countries with individualist cultures, the traditional gender role ideology is still prevalent in nations with collectivist cultures (Hofstede, Hofstede and Minkov, 2010). It was opined that while the majority of women may perceive work as essential for economic benefits (family functioning) in less developed economies, they nonetheless see the family as their central role (e.g., Livingston and Judge, 2008). Thus, working women would experience a greater amount of family to work conflict in absence of reduced family role (Livingston and Burley, 1991; Hochschild cited in Grandey, Cordeiro and Crouter, 2005). In 2006, Noor also stated that despite women being employed, they continue to be predominantly responsible for household matters. Hence, when women try to fulfil the responsibilities of both family and work roles, the conflict would become unavoidable. For instance, Japanese working mothers reported higher WFC than men (Matsui, Ohsawa and Onglatco, 1995), as do women in Malaysian dual career couples (Ahmad, 1996) and married female professionals in Hong Kong (Lo, 2003).

A number of studies have explored the degree of difference in WFC between men and women. However, the findings are not consistent. Some studies have found that women report more conflict between work and home than men (e.g., Loerch, Russell and Rush, 1989; Gutek, Searle and Klepa, 1991; Lundberg, Mardberg and Frankenhaeuser, 1994; Nielson, Carlson and Lankau, 2001) whereas others have found that men and women report similar levels of conflict (e.g., Eagle, Miles and Icenogle, 1997; Emslie, Hunt and Macintyre, 2004; Winslow, 2005). In contrast, some of the studies revealed that men experience higher WFC than women (e.g., Parasurman and Simmers, 2001). Others however, have not found any significant differences between gender in the experience of WFC (e.g., Duxbury and Higgins, 1991; Frone, Russell and Cooper, 1992; Eagle, Miles and Icenogle, 1997; Grandey and Cropanzano, 1999).

Notwithstanding, the conflicting conclusions of these studies, there is still good ground to suggest that where there is a higher degree of family to work conflict among women as they perceive themselves as primarily responsible for household activities. In contrast, men would perceive a higher level of work to family conflict as they perceive themselves as primarily responsible for work outside of the family (work demand). Thus, the degree of gender role traditionalism would be expected to determine the strength of work family conflict. However, no studies have examined the influence of men and women's perceptions of traditional

gender role ideology on work family interference in nations with collectivist cultures. Thus, this research focuses on how gender role attitudes moderate the relationship of work and family demand with work family conflict. Therefore, this study has the potential to add to our understanding of gender role ideology and WFC in Asian culture leading to fourth research question:

RQ_4: To what extent does traditional gender role ideology exist in Sri Lanka and if so, what is the consequent impact on WFC?

2.5 Work-related and family-related factors and work family conflict

The nature of WFC varies across nations and cultures and thus, it is problematic to generalise such findings from one nation to another nation (e.g., Choi, 2008). It is argued that the factors determining WFC and its effects are specific to nations. National studies on WFC conducted in Asia are very few in comparison with nations outside of Asia (e.g., Hassan, Dollard and Winefield, 2010). Consequently, research scholars call for more studies to reflect distinct nations and diverse cultures to capture the overall arena of WFC. Thus, this research attempts to fill the gap by identifying country-culture specific factors determining work family conflict in Sri Lanka and they are organised under work-related factors and family-related factors.

Work-related factors and work family conflict

In this section, work-related factors including work demand, supervisor/co-worker supports, working hours, organisational HR policies, education and income, tenure and workgroup behaviour/role that support individuals in their aspirations to be successful in both their occupational and family lives are examined. Such factors are expected to vary across national cultures.

Work demand

Yang et al. (2000) define work demand as "pressures arising from excessive workloads and typical workplace time pressures such as rush jobs and deadlines" (p.114). Many studies have been conducted in order to establish the relationship between work demand and WFC (e.g., Lu et al., 2006; Schieman, Whitestone and Van Gundy, 2006; Spector et al., 2007; Boyar et al., 2008; Choi, 2008). For instance, Lu et al. (2006) carried out a cross cultural study of work/family demands, WFC, and wellbeing, on samples of full time employees in Taiwan and UK. Results showed that work demands were positively related to WFC both in Taiwan and the UK. In 2008, Choi studied the effects of work demands on the life stress of Chinese

employees. His findings revealed that work demand was related to life stress. And thus, most recently, Bagger and Li (2012) defined work to family conflict as "conflict caused by demands from the work domain that limits one's abilities to meet responsibilities in the family" (p.474). Work demand was found as a predictor of work to family conflict and the relationship was stronger for the individualist British compared to the collectivist Taiwanese (Lu et al., 2006; Spector et al., 2007). The relationship of work demand with work to family conflict has never been explored in Sri Lanka although such relationship is not even clear in nations with collectivist cultures. Work support would be expected to influence the relationship of work demand and work to family conflict in nations with collectivist cultures owing to higher level of work support (Powell, Francesco and Ling, 2009) as explained below.

Work support

In line with Griggs, Casper and Eby's (2013) discussion, work support embraces supervisors support and co-workers support. Support from supervisors to subordinates can be instrumental and emotional and such support has been found to lower the work to family conflict (Kossek et al., 2011). Co-workers engage in helping one another in dealing with incompatible work and family demands. Such co-workers provide both emotional support (e.g., offering emotional support those who struggle in meeting the demands of work and family) and instrumental support as well (e.g., temporarily covering co-worker's job) (Mesmer-Magnus et al., 2010). It has been noted that work support is as a matter of culture (Major et al., 2008). Sri Lanka is a high power distance country in comparison with countries with individualist cultures like the UK, USA (Kailasapathy, Kraimer and Metz, 2014). Moreover, the relationship between supervisors and subordinates goes beyond the workplace and thus, higher levels of work support in comparison with developed countries would be expected.

Prior studies found that supervisors /co workers support was negatively associated to work interference with family (e.g., Thomas and Ganster, 1995; Frone, Yardley and Markel, 1997; Carlson and Perrewé, 1999; Anderson, Coffey and Byerly, 2002; Thompson and Prottas, 2005; Major et al., 2008). Carlson and Perrewé (1999) found that social support was an antecedent to perceived stressors and suggested that individuals who acquire greater social support at work perceive less WFC. It shows that employees who experience high levels of perceived social support at the workplace from colleagues and supervisors will experience

lower levels of interference between work and family domains. Frone, Russell and Cooper (1997) found that work related support (i.e. supervisor support and co-worker support) was a predictor of WFC. Their findings were consistent with Adams, King and King (1996) and Moen and Yu (2000).

However, as in the recent **Job Demands-Resources model**, job resources buffer the impact of job demands on job strain by moderating the relation between job demands and stress (Bakker et al., 2003; Bakker and Demerouti, 2007). Of the predictors of job resources, the support of supervisors and co-workers is cited as one of the primary job resources. Thus, it was expected that in cases of high levels of job demand, supervisor support would ameliorate work to family conflict. Drawing on the job demands-resources model (Bakker and Demerouti, 2007) and given the higher amounts of work support expected in nations with collectivist cultures, this study will investigate how co-worker/supervisor support moderates the relationship between work demand and work to family conflict, and thus this study goes beyond previous research on the effect of the influence of co workers/supervisor support on WFC.

Working hours

Variation in legislation with regard to working time would appear to be particularly important. Several findings show that working long hours serious affect the balance between work and family (e.g., Pleck, Staines and Lang, 1980; Shamir, 1983; Greenhaus, Bedeian and Mossholder, 1987; Carlson and Perrewé, 1999; Grzywacz and Marks, 2000; Nielson, Carlson and Lankau, 2001; Fagan, 2001; Keene and Quadagno, 2004; Voydanoff, 2004; MacInnes, 2005; Russell, O'Connell and McGinnity, 2009) and some studies have found that men tend to report more hours than women (e.g., Cousins and Tang, 2004; Martinengo, Jacob and Hill, 2010). For instance, Cousins and Tang (2004) conducted a study on Netherlands, Sweden and the UK to find out working time and the experience of WFC. Working hours were different in three different countries. Males working hours were 40.5 hours, 41.7 hours and 43.5 hours per week respectively in the Netherlands, Sweden and the UK. Correspondently, females working hours were 26.0 hours, 36.5 hours and 29.1 hours per week respectively. According to the Department of Census and Statistics (2003), 68.8% of employees were working more than 40 hours per week in Sri Lanka.

It is thus obvious that the gap between men's and women's average working hours is much dissimilar across many countries reflecting national differences (i.e., employment law,

tradition, economic status and culture). Nonetheless, the relationship of working hours on work to family conflict would not be expected to produce similar impact on nations with collectivist cultures and individualist cultures owing to the influence of extended family members sharing family demand in collectivist cultures. Thus, the influence of working hours on work demand/WFC is vital in conceptualising WFC.

Organisational work life policies

Since WFC is associated with severe negative consequences for both organisation and family, organisation responsiveness to work family issues is of significant importance. In 1990s, large numbers of organisations started to fashion ways to accommodate family obligations of employees and employers focused on maternity and parental leave, child and dependent care programmes, alternative work schedules and work stations, and employee assistance and relocation programmes (Zedeck and Mosier, 1990). The wide range of responses designed to attenuate work family conflict now include temporal and operational flexible work options (e.g., Milliken, Martins and Morgan,1998; Baltes et al., 1999; Clark, 2001; Allen, 2001), compressed week (e.g., Baltes et al., 1999), financial work family benefits (e.g., Milliken, Martins and Morgan, 1998), informal work accommodation such as rearranging work schedules, taking work home, bringing children to work (e.g., Behson, 2002), childcare (e.g., Goff, Mount and Jamison, 1990; Kossek and Nichol, 1992), eldercare assistance (e.g., Wagner and Hunt, 1994; Goodstein, 1995), telecommuting (e.g., Bailey and Kurland, 2002) and flexible career paths (e.g., Honeycutt and Rosen,1997). However, these formal work life policies are very rare in less developed countries. Beyond these formal policies, informal practices, for instance, allowing lateness to work or early going home to deal with family problems could also be available at superior discretion in organisations. Thus, it would be envisaged that formal and informal organisational policies will influence WFC.

Education and income

According to Sok, Blomme and Tromp (2014), the term higher education refers to employees who have completed a bachelor or master level educational programme. Many studies assume that the highly educated tend to hold professional jobs that generate more income and pressure and thus they experience greater conflict than the less educated (e.g., Grzywacz, Almeida, and McDonald, 2002; Voydanoff, 2004; Mennino, Rubin and Brayfield, 2005; Nomaguchi, 2009). Recently, Schieman and Glavin (2011) found that education was associated with higher work demand contributing to higher levels of work to family conflict,

because highly qualified employees occupy higher status jobs with more pressures, responsibilities and accountability.

The level of pay is strongly dependent on **justice theory:** distributive justice (what they get) and procedural justice (how it is given) (e.g., Sweeney and McFarlin, 1993; Colquitt et al., 2001). A few studies conducted in the past have established positive linkage between pay level and work family conflict (e.g., Boyar et al., 2008; Bhave, Kramer and Glomb, 2013). Notwithstanding, the nature of relationship of education and income with work to family conflict has not been established in countries like Sri Lanka.

Job status

Employees with supervisory positions are more responsible and accountable than employees who do not hold supervising roles (Frone, 2000; Boyar et al., 2008). Moreover, employees with longer tenure would expect to experience less work to family conflict in comparison with less experienced employees as experienced employees become attuned to performing the job.

In sum, WFC was found to be associated with work demands, work support, working hours, organisational work life policies, education and income, tenure and supervisory status across many studies (e.g., Goff, Mount and Jamison, 1990; Frone, Yardley and Markel, 1997; Yang et al., 2000; Parasurman and Simmers, 2001; Behson, 2002; Spector et al., 2007). However, all these factors appear to vary across countries. Thus, such unexplored work-related variables in Sri Lanka are of substantive importance in conceptualising work family conflict

Family-related factors and work family conflict

Family-related factors are another important domain needs investigating in conceptualising WFC. Family-related factors that include family demand, family support, age, marital status, family structures, number of children, number of dependents, household chores vary across nations and cultures.

Family demand

Yang et al. (2000) defined family demand as "primarily time pressures associated with tasks like housekeeping and childcare" (p.114). Studies have found that family demand impacts positively on family to work conflict (e.g., Korabik, Lero and Ayman, 2003; Lu et al., 2006). And thus, most recently, Bagger and Li (2012) defined family to work conflict as "conflict caused by demands from the family domain that limits one's abilities to meet responsibilities

at work" (p.474). However, the strength of the relationship between family demand and WFC would not be similar across nations; for instance, some studies have found family demand as a predictor of family to work conflict stronger for the individualist British compared to the collectivist Taiwanese (e.g., Lu et al., 2006; Spector et al., 2007). Moreover, Yang et al. (2000) found that American employees reported greater family demands than Chinese employees, and consequently family demands had a greater effect on WFC among Americans employees. The level of family demand could be less in nations with extended family structure as members of the extended family take on domestic responsibilities and would reduce the amount of demand from the family. The relationship of family demand with family to work conflict has not been explored in Sri Lanka, and there is a paucity of such research in nations with collectivist cultures.

Family support

Many researchers have found that family support is a dominant factor influencing WFC. Generally, family support occurs when either an employed or unemployed member of the family helps an employed family member. Adams, King and King (1996) found that the effects of family support were dependent on the direction of the conflict. Specifically, low levels of family support were related to high levels of work to family conflict and high levels of family support were related to lower levels of family to work conflict. In 1999, Carlson and Perrewé in their study of "the role of social support in the stressor-strain relationship: An examination of work family conflict" found that family support was negatively associated with WFC. Moreover, some studies specifically found that spousal support was negatively associated with family to work conflict (e.g., Burke, 1988; Voydanoff, 2005). It was strongly argued that the individualist cultural findings would not necessarily be the same as collectivist cultural findings as the typical level of family support is higher owing to the prevalence of "extended family structure" in collectivist culture. On the one hand, it is expected that members of the extended family would provide higher physical and mental support; for instance, members from extended family would share child caring responsibility, household chores etc. On the other hand, extended family members could be an extra burden when demanding caring for themselves, and/ or adding financial and social obligations (Poster and Prasad, 2005). In line with this argument, Frone, Russell and Cooper (1997) found that parental stressors are related to WFC. For example, parents of respondents may

provide childcare for grandchildren; however, in contrast add to the burden for caring as they become aged.

A few studies have found that family support moderates the relationship between family demand and family to work conflict (e.g., Fu and Shaffer, 2001). However, strength of family support in collectivist cultures is greater because of the prevalent extended family structure. For example, as discussed earlier, American employees reported greater family demands than Chinese employees, and consequently family demands had a greater effect on WFC among Americans employees (Yang et al., 2000). However, Choi (2008) argued that the findings from individualist cultures are not generalisable to collectivist cultures. Of late, Griggs, Casper and Eby (2013) supported previous studies in an examination of important of extended family members in work family studies and opined that they were not aware of any published studies investigating extended family support and work family conflict. *Thus, the position of family support needs to be studied in collectivist culture in order to strengthen Asian work family literature and conceptualising WFC.*

Age and marital status

A number of previous studies have investigated experience of WFC between men and women at different ages and status (e.g, Chandola et al., 2004; Emslie, Hunt and Macintyre, 2004). Recently, Emslie and Hunt (2009) conducted semi structured interviews specifically with middle aged men and women (aged 50 to 52 years). They found that the women perform varieties of tasks at home (despite having no young children at home) and thus experience more WFC than men. Albeit some studies found that age was positively related to WFC (e.g., Voydanoff, 2005), a certain number of studies did not find any significant relationship between age and work to family conflict or family to work conflict (e.g., Frone, Russell and Cooper, 1997). In 2000, Grzywacz and Marks found that younger men reported more work to family conflict and family to work conflict than older men and younger women reported more family to work conflict than older women. Notwithstanding, the conflicting conclusions of previous studies in identifying the relationship between age and WFC, family demand would be expected to increase as individuals get aged.

It would be expected that married individuals will have more family demand in form of family obligations as a spouse than individuals who are not married (Boyar et al., 2008). A few studies found marital status would determine family demand (e.g., Schieman, Whitestone and Van Gundy, 2006; Boyar et al., 2008). Nonetheless, the relationship of age

and marital status on WFC has not been established in Sri Lanka, and research into such relationships is scant in nations with collectivist cultures.

Family structure

Previous studies lent credence to the view that the presence of children and dependent care increase family demand/work family conflict (e.g., Goff, Mount and Jamison, 1990; Hammer, Allen and Grigsby, 1997; Carlson, 1999; Grzywacz and Marks, 2000; Foley, Hang-Yue and Lui, 2005; Lu et al., 2006; Boyar et al., 2008; Hoobler, Wayne and Lemmon, 2009). In culture with extended family structure, it was expected that hours spent on family activities (e.g., time spend on household chores, childcare and dependent care) would determine family demand rather absolute number of children and dependent at home denoting to the fact that extended family members at home would share child caring and elder caring. In contrast, dependent care would be addition burden within an extended family structure. Recently, Agarwala et al. (2014) found that childcare and elder caring responsibilities were greater in India (collectivist cultural nations) than Spain and Peru. Moreover, Lu et al. (2006) found household chores predict family demand. Therefore, there is an unexplored gap identified in WFC research in collectivist countries in identifying the impact of family structure on family demand.

Thus it can be concluded that these variables have not been fully explored in a collectivist cultural nation or at all in Sri Lanka viz., family demand, family support, age and marital status and family structure (number of children, number of dependents, hours on household chores, hours on children and dependents). They are of substantive importance in conceptualising work family conflict.

Overall, this study will shed new light on the predictors of WFC in Sri Lanka leading to fifth research question

RQ_5: What are the main factors influencing WFC in Sri Lanka?

2.6 Work family conflict and job satisfaction and family satisfaction

The main aim of this study is to explore the nature of work family conflict rather than its consequences. Nonetheless, linking it to some outcome variables of work family conflict is vital for interpretative and predictive validity purposes in a complete model. Albeit work family conflict has been found to be related to many outcomes viz., job satisfaction, family satisfaction, absenteeism, tardiness and poor work-related role performance, marital

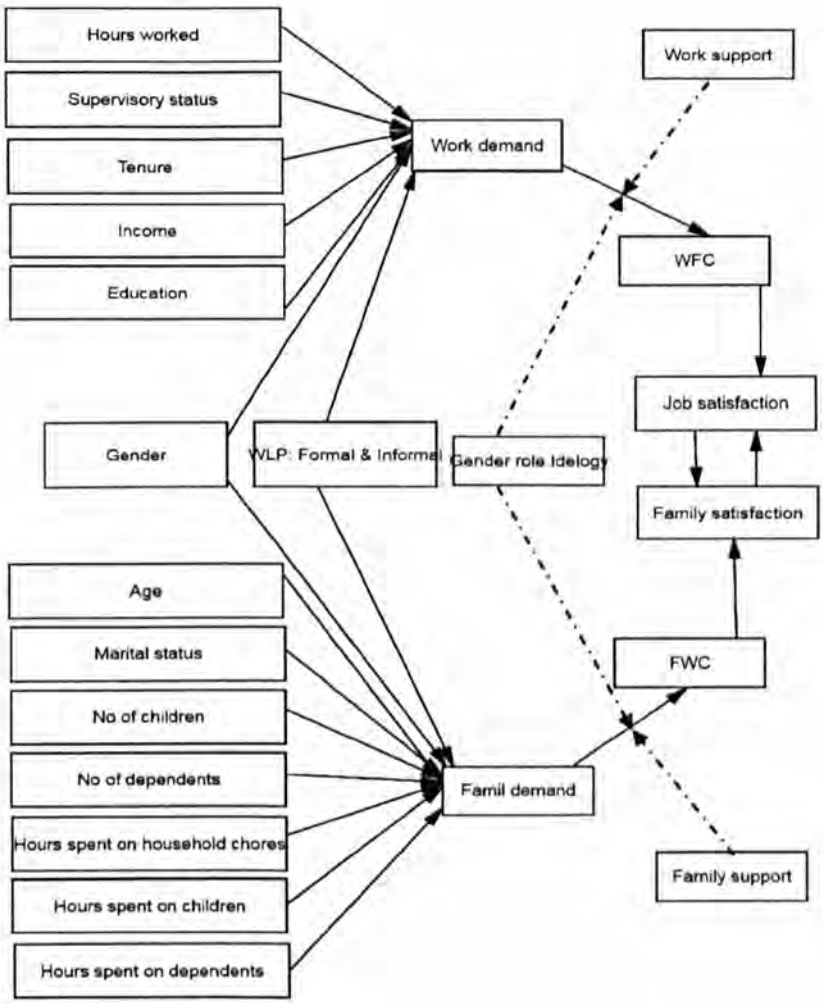
satisfaction, commitment, heavy drinking, cigarette use, anger, poor appetite, headache, stomach upset, fatigue and depression (e.g., Adams, King, and King, 1996; Netemeyer, Boles and McMurrian, 1996; Frone, Russell and Cooper, 1997; Greenhaus et al., 1997; Kossek and Ozeki, 1998; Allen et al., 2000; Glaveli, Karassavidou and Zafiropoulos, 2013), the most frequently cited bottom line outcomes of work family conflict are job and family satisfaction (e.g., Adams, King, and King, 1996; Bruck, Allen and Spector, 2002; Lo, Wright and Wright, 2003; Brough, O'Driscoll and Kalliath, 2005; Ford, Heinen and Langkamer, 2007; Boyar and Mosley, 2007; Rathi and Barath, 2013).

Many seminal studies have claimed that work to family conflict is negatively related to job satisfaction, and in a similar vein, family to work conflict is negatively related to family satisfaction (e.g., Thomas and Ganster, 1995; Anderson, Coffey and Byerly, 2002; Boyar and Mosley, 2007; Brough, O'Driscoll and Kalliath, 2005; Rathi and Barath, 2013). Similarly, Kossek and Ozeki (1998) found a negative relationship between all forms of work to family conflict and job satisfaction. Eminent research scholars in terrain of work family conflict connote that job satisfaction and family satisfaction are positively and reciprocally related implying a crossover effect (e.g., Lambert, 1990; Frone, Russell and Cooper, 1994). Consequently, in the research model as depicted in figure 2.2, work to family conflict is related to job satisfaction and family to work conflict is related to family satisfaction. Moreover, both job satisfaction and family satisfaction are reciprocally related to each other.

2.7 The research model

A research model was devised to investigate the research questions posed above. It is based on the discussion of theories and previous studies. The research model diagrammatically portraying relationships among variables developed is presented in figure 2.2.

Figure 2.2: Research model



The following hypotheses were developed in order to answer the research questions raised

H_1 : The Six factor structure of Carlson, Kacmar and Williams' (2000) scale of work family conflict developed in individualist culture will exist in Sri Lanka.

H_{2a} : Men will experience a higher level of time based work to family conflict than women.

H_{2b} : Men will experience a higher level of strain based work to family conflict than women.

H_{2c} : Men will experience a higher level of behaviour based work to family conflict than women.

H_{2d} : Men will experience a higher level of psychological based work to family conflict than women.

H_{2e} : Women will experience a higher level of time based family to work conflict than men.

H_{2f} : Women will experience a higher level of strain based family to work conflict than men.

H_{2g} : Women will experience a higher level of behaviour based family to work conflict than men.

H_{2h} : Women will experience a higher level of psychological based family to work conflict than men.

H_{2i} : Men will experience a higher level of work to family conflict and women will experience higher level of family to work conflict.

H_{3a} : Working hours will have a positive impact on work demand.

H_{3b} : Supervisory status will have a positive impact on work demand.

H_{3c} : Working experience will have a negative impact on work demand.

H_{3d} : Level of income will have a positive impact on work demand.

H_{3e} : Educational qualification will have a positive impact on work demand.

H_{3f} : Formal and informal WLP will have a negative impact on work demand.

H_{3g} : Work demand will be significantly higher among men than that of women.

H_{4a} : Age of the respondents will have a positive impact on family demand.

H_{4b} : Being married will have a positive impact on family demand.

H_{4c} : Number of children and dependents living at home will have a positive impact on family demand.

H_{4d} : Hours spent on household chores, hours spent on children and hours spent on dependents will have a positive impact on family demand.

H_{4e} : Formal and informal WLP will have a negative impact on family demand.

H_{4f} : Family demand will be significantly higher among women than that of men.

H_5 : Work demand will have a positive impact on work to family conflict.

H_6 : Family demand will have a positive impact on family to work conflict.

H_7 : Work related support will moderate the relationship between work demand and work to family conflict such that the relationship between work demand and work to family conflict will be weaker for employees who receive a high level of work related support than for those who experience a low level of work related support.

H_8 : Extended family support will moderate the relationship between family demand and family to work conflict such that the relationship between family demand and family to work conflict will be weaker for employees who receive high level of extended family support than for those who experience low level of extended family support.

H_{9a} : Gender role ideology moderates the relationship between work demand and work to family conflict such that the relationship between work demand and work to family conflict will be stronger for men who report high level of gender role ideology than for those who report lower level of gender role ideology.

H_{9b} : Gender role ideology moderates the relationship between family demand and family to work conflict such that the relationship between family demand and family to work conflict will be stronger for women who report a high level of gender role ideology than for those who report lower levels of gender role ideology.

2.8 Summary

The concept of work family conflict is based on role theory. WFC refers to the mutual interference of work role (family role) with family role (work role). Conceptually, there are three forms of WFC: time based; strain based; and behaviour based, with two directions: work to family conflict; and family to work conflict. Drawing on work/family border theory and previous seminal studies, a new form of psychological based work family conflict was devised. In line with previous studies, differences in factors determining work family conflict between individualist cultures and collectivist cultures were found. Moreover, robust evidence was found in support of national influences on WFC. The review of previous theories and studies in this area has revealed several gaps in the WFC literature. Thus, filling those gaps would contribute knowledge to increase understanding of the relationship between work and family. Finally, a research model has been developed and series of hypotheses were postulated in order to answer the research questions raised.

CHAPTER THREE
METHODOLOGY

3.0 Chapter overview

This chapter describes the context of the research, and presents a detailed discussion of the methodology that underpins the study. The choice of the appropriate methodology followed throughout the research was determined by the overall aim and the context of the research. The primary aim is to shed new light on the nature, forms and the determinants of work family interference in a collectivist cultural milieu. This chapter paves the way to achieve this aim systematically. It begins with the fundamental research philosophical assumptions and followed by a justification for the choice of the research approach and strategy. A section on data collection describes the target population, sampling method, research instruments used, tackling potential biases in a self administered questionnaire, piloting and the data collection procedures. Succeeding sections describe the data analysis techniques and ethical considerations. This chapter ends with a brief summary.

3.1 The philosophy of the research design

3.1.1 Research Philosophy

Research philosophies tell about the world of reality, the nature of knowledge and the approach to the study of the particular phenomena. One of the research philosophies is the ontological assumption that we make about the 'nature of reality', and it is pivotal for the study, otherwise, a study is treated as "blinded" (Easterby-Smith, Thorpe and Lowe, 2002, p. 27). This research assumes the ontological belief that the real world is made of people's experiences of Work Family Conflict (WFC). Work and family are two different constructs but they are interdependent. Theory presumes that consumption of resources (for example, time spent on work/family) will compete with the execution of work and family roles. It further holds that the nature of work demands and family demands have effect on WFC but the nature and the extent of its effect would not be similar across nations. Therefore, it is an objective reality that independently exists, not an illusion in the contemporary world.

Thus this research assumes that the knowledge on WFC can be identified, measured and described in different scenarios. It further assumes that not all individuals will experience the same level of conflict which varies in terms of national, organisational and family (individual) characteristics. Consequently, the research was designed to explore the nature of

WFC in different settings. Thus, since this study presumes that a world exists external (separate to the researcher) and theory neutral, this research adopts an objective (positivist) epistemology. Positivism assumes that the real world exists externally and its properties can be measured in terms of objective rather subjective methods such as through sensation, reflection or intuition (Easterby-Smith, Thorpe and Lowe, 2002).

3.1.2 Research Approach

A research approach can be a deductive or inductive (Saunders, Lewis and Thornhill, 2007). Gilbert (2001) opined that the deductive approach is the mainstay to develop valid and reliable ways of collecting facts about the social phenomena that facilitate to use of statistical analysis to make explanations about how the social world operates. An inductive approach on the other hand, is used to gain deep understanding of human behaviour regarding people's values, interpretive schemes and belief systems (Cavana, Delahye and Sekaran, 2001). The philosophies underpinning this research are objectivistic and positivist in nature, and adopts a deductive approach. The knowledge therefore can be discovered through categorization and scientific measurement leading to use of quantitative methods and statistical analysis to achieve determined research aims (Saunders, Lewis and Thornhill, 2007).

This deductive study passes through five sequential stages as recommended by Cavana, Delahye and Sekaran (2001) and Robson (2002): deducing a hypothesis from the theory (chapter 2), expressing the hypothesis in operational terms (measuring) (chapter 2 and 3), testing this operational hypothesis (chapter 4, 5 and 6), examining the specific outcome of the inquiry (chapter 4, 5, 6 and 7), and if necessary, modifying the theory in the light of the findings (chapter 7). Furthermore, this hypothetico – the deductive method of inquiry requires sufficient sample size so as to generate conclusions and generalise the findings (see discussion on 3.3.2).

Notwithstanding, there is not a great deal of WFC research in nations with collectivist culture, and thus initially a more exploratory, qualitative approach was carried out to investigate the phenomenon in the particular context in order to clarify and adapt existing concepts. The exploratory research took the form of in-depth qualitative interviews with employees as proxy of the target population. The results of exploratory qualitative research were proffered insights and contributed to the development of a WFC measure.

3.1.3 Research strategy

Research strategy states the 'general plan of how you will go about answering your research question(s)' (Saunders, Lewis and Thornhill, 2007, p.131). It takes many forms such as experiment, survey, case study, action research, grounded theory, ethnography and archival research and used for exploratory, descriptive and explanatory research. Albeit there are number of research strategies, researchers have to choose the best strategy that would answer the research questions. Since research questions can be answered by testing hypotheses using statistical means (hypothetico –deductive), a "survey" with a cross sectional time horizon is the most commonly used strategy.

The survey collects quantitative data from a sample of a population that enables analysing the collected data by means of descriptive and inferential statistics in order to test relationships between variables and produce models of the relationships (Saunders, Lewis and Thornhill, 2007). The survey method investigates phenomena in their normal setting (Verma and Beard, 1981) and is the mainstay of research strategy in business and management studies.

The foregoing discussion encapsulates that this research has an objective reality and the research questions can be answered by adopting positivist, hypothetico –deductive approach using a survey strategy with a cross sectional time horizon. Notwithstanding, as there was a scarcity of studies in Sri Lanka, initially an exploratory study was conducted to collect qualitative data to capture any issues specific to the Sri Lankan context.

The research was conducted in three stages, an exploratory study, a pilot of the survey questionnaire and the main survey.

3.2 Exploratory Study

Since there are very few studies of work family conflict in Sri Lanka and little research has been undertaken in similar Asian countries, it was decided to conduct an exploratory study as a preliminary step. The purpose was twofold: one was designed to understand the nature of work and family; the second was sought to explore the extant form of work family conflict. As discussed in chapter 2 (p.14), drawing on seminal works of Willmott (1971), Clark (2000), Ashforth, Kreiner and Fugate (2000), Carlson and Frone (2003) and Lu et al. (2006), a new form of WFC- psychological based bidirectional work family conflict was proposed in a collectivist culture, Sri Lanka. Therefore, an exploratory study was necessary to gain in

depth understanding of the issues and to provide material for the development of a structured questionnaire for the collection of quantitative data.

A sample of fifteen bank employees (i.e. from a higher status occupation) was chosen to cover a range of variation in role, gender and potential experience of work family conflict and in depth interviews were conducted. Thus, input from experienced participants would impart great insight into the nature and context of work family conflict. Initial approval was sought from managers for the selection of potential participants and finally the participants made up with managers (2), senior assistant managers (2), assistant managers (5), executive manager (1), staff assistant (1), management trainee (1), multi duty assistant (1), bank assistant (1) and a cashier (1). Of them, men accounted for 60% (N= 9) whilst women accounted for 40% (N= 6). Highest number of informants fell between 36-45 age group (5), followed by an equal number of informants between 36-35 (4) and over 45 age groups (4) and (2) informants were from 18-25 years. Informants were also with years of experience between 3 to 20 years. On average, monthly pay of the managers, senior managers and executive managers fell over Rs. 60 000; however the assistant manager's pay fell between the range of Rs. 40001-60000. All varying characteristics of the participants such as age groups, gender, educational qualifications, banking organisations, position/job status, experience and average monthly income were shown table 1 (appendix E).

Semi-structured questions were combined with open ended questions that covered the core themes of work family conflict (see appendix B). Interviews were mainly conducted in the workplace and 4 in the participant's home. Prior to commencing interview the researcher established good rapport and assured privacy, anonymity and confidentiality. Consequently, trust and a friendly atmosphere encouraged the participants to talk freely. All interviews were held between July 2012 to August 2012 and each lasted about 30 to 60 minutes. They were conducted and transcribed in Tamil and then translated into English by the researcher.

Interview transcripts were analysed using thematic content analysis. Based on strong theoretical grounds, themes were brought to the data in coding and thus, the coding was "Deductive coding" of both manifest and latent nature. Manifest content is something that can be easily observed within the data. For example, work family conflict related to time dimension can be directly identifiable; in contrast, the proposed dimension of psychological based work family conflict is not easily identifiable requiring latent coding. NVivo 10 was used to assist with the coding and data analysis.

With the view to ensuring validity of the research, two approaches were adopted; avoidance of leading questions and cumulative validation (a participatory approach where findings are evaluated by participants). Moreover, dependability (reliability) was confirmed by dint of observed stability and consistency across interviews, for instance, the semi structured questionnaire included some similar types of questions reflecting the same concept; one question asked about "Do you experience any problems with managing housework such as cooking and cleaning, and working? And another question also asked about "Do you feel you have plenty of time to look after household chores and tasks at work?" Furthermore, the face to face interviews enabled a rapport to be established and reassurances of confidentiality made which further strengthened the validity.

Findings and discussion

The analysis confirmed the prevalence of the extended family structure, consisting of father, mother, father in law, mother in law, brother in law, sister in law and sibling of participants. The participants expounded that the extended family members were supportive in performing household chores and childcare, although some of the participants deliver eldercare for them. The reported men's working hours per week was greater (M = 48.78) in comparison with female counterparts (M =44.67). In contrast, women spent greater numbers of hours in doing household chores (M =2.33) and childcare (M =2.91) than men spent on household chores (M =1.44) and childcare (M =2.00). Only 40% of participants deliver eldercare with average hours of 1.25 on a working day. The pattern of hours spent on family and work are depicted in table 2 (appendix E). The majority of participants interviewed agreed that there is conflict between work and family.

As discussed in chapter 2 (p.12), the findings of the exploratory study was consistent with previous studies in that that the work family conflict can be originated from either work or family (e.g., Gutek, Searle and Klepa, 1991; Frone, Russell and Cooper, 1992; Kelloway, Gottlieb and Barham, 1999; Carlson, Kacmar and Williams, 2000). Overall, the vast majority of participants agreed the existence of time, strain and psychological based work family conflict; however, there was little evidence in support of the behavioural form of work family conflict. Formal organisational support for reducing work family conflict was found to be only at an embryonic stage. The participants said they would like to have far more support from their organisation including: transportation facilities, medical benefits, educational

benefits for children, child school benefits, relocation benefits, nursery for children, flexible working hours and days, pay increases, compression week, counselling services, and training.

Overall, despite differences in family structure and culture, work family conflict was seen as an issue by all participants and the factors associated with variance in work family conflict appear to be consistent with studies carried out in the West. Further, this study confirms the significance of time based, strain based and psychological based work family conflict in this unexplored area paving the way for continuing quantitative extended research in this field. Moreover, on the basis of this study nine new pertinent questions for measuring the psychological dimension of work family conflict were devised:

- When I am at work I see things that need doing at home; planning and scheduling family related activities that prevent me doing the tasks at work
- I am often not in good mood at work due to the preoccupation with family responsibilities that prevent me doing the tasks at work
- I often think about work related problems at home that prevent me doing the tasks at home
- I often think about work matters at home that prevent me doing the tasks at home
- I often think about family related problems at work that prevent me doing the tasks at work
- When I am at home I see things needs doing at work; planning and scheduling work related activities that prevent me doing the tasks at home
- I often think about family matters at work that prevent me doing the tasks at work
- I am often not in good mood at home due to the preoccupation with work responsibilities that prevent me doing the tasks at home
- I take work home that prevents me from doing family responsibilities

A brief summary of the findings is shown in table 3.1.

Table 3.1: A brief summary of the findings

Work family interference	General description	Sample of verbatim quote
Time spent on work interference with family activities	**Household activities** It was the opinion of the majority of participants interviewed that working long hours inhibits their engagement on doing household chores. 67% of participants work six days a week and working overtime was compulsory. Tasks performing at work include: *supervising, authorising payment, pawning, engaging with promotional activities, cheque management/ clearing/posting/cash management, personnel management tasks (e.g., leave approval, recording, updating and keeping all staff related information), safety locker facilities, verifying all loans applications, customer service , credit evaluation, foreign currency exchange, loan approval and evaluation, customer complaint handling, bringing customers complain to management, dealing with customer complains, loan inquires and estimation and related field visit, achieving branch loan portfolio target, canvassing potential customer and cross selling.* Most employees wanted to stay on beyond their working hours. However, most informants articulated that working overtime causes difficulties in doing household chores.	*"I haven't got enough time for doing household chores, and for looking after children. Most of the tasks at home would usually be left or planning to do next day. It's common if both are working, everything doesn't look like the way it looks like to be. I feel I let my family down due to the long hours spent on work." (Assistant Manager, People's Bank)* *".....I have got too much responsibility at work. I work roughly 49 hours per week. ..... hunting time for doing household chores is like a wild goose chase. I hardly find time to do household chores because I spent many hours at work. I ain't really supporting in doing household chores....." (Senior Assistant Manager, National Savings Bank).* *"I do overtime, I think it is necessary to make reasonable earnings, But if I would manage without it, it would be better, I am able to avail myself of extra hours with my family....." (Bank Assistant, Commercial Bank).*
	Childcare The majority of participants interviewed agreed that the wife was the prime carer for their children. However, extended family members' support for looking after children was also found. Paid carer was seldom available. The majority of participants articulated that they were struggling in managing childcare and they wish they had more time to spend with children.	*"....We do work for earning money needs for running our family. Children are ours riches. Family is most important. I wish I had more time to spend with them...." (Assistant Manager, Seylan Bank)* *"..I am feeling guilty that I couldn't spend enough time with my child. Most of the time my mum looks after my baby. I feel sometimes my baby might feel she is her mum (her grandma)" (Assistant Manager, Sampath Bank)* *"I didn't really have much time to spend with my son, however, he has grown up and old enough to look after himself. Time for childcare used to be big challenge when he was too little..." (Manager, National Savings Bank)*

	Eldercare Informants have expressed their respect and willingness to look after their parents. 40% of participants interviewed agreed that time spent on work affects looking after their parents, however, informants showed their priority in looking after them. Eldercare was found to be collective responsibility of family members. In general, filial piety, respecting elders and giving them care are the key elements of collectivist cultures. No one has expressed any burden or dislike looking after them.	*"My dad and mum are living with us. They are too old to look after themselves. My first job in mornings is to support them for making their morning better. I am so proud of caring them. My wife always supports them and does whatever they needed. So, in fact we are looking after them very well. My children love them very much. This is the way we respect our parents."* (*Bank Assistant, Commercial Bank*) *"... Staying long hours at work really causes much more difficulties in looking after our parents. I am a manager, I have got to do lots of tasks at work, and am accountable for this branch. I have no time, stress, depressed, and sometimes bad emotion. I spend more hours with them on Sundays. However, I would like to engage more hours with them on weekdays as well" (Manager, National Savings Bank)*
Time spent on family interference with work activities	Participants perform variety family responsibilities: household chores including cooking, *cleaning, teaching children, shopping, laundering, tiding up, washing, ironing, sweeping, taking children school, feeding pets, vehicle maintenance, watering plant, and gardening at home;* childcare; *and* eldercare. More such household chores were mainly carried out by women and thus, the majority of women expounded that hours spent on family responsibilities inhibits the performance at work. Interesting, the majority of men interviewed said that they did not know cooking but they deliver a significant amount of support in doing other family related tasks. Of paramount importance is the role of extended family members notably in providing support by taking on family responsibilities.	*"I've got too much responsibility at family. ..cleaning, shopping , taking children to school.. all tasks take more time. I am a senior assistant manager, I have more work responsibilities at bank too, want to spend more hours, but I am really struggling due to family involvement."* (Senior Assistant Manager, People's Bank)
Strain based work family interference	The majority of participants expounded that strain on the performance of work and family roles mutually interfere with each other. On one hand, participants opined that work overload, working long hours, stress, workplace pressure, and tiredness at work affect the execution of family activities. On the other hand, energy spent on doing household chores, childcare and eldercare would prevent the performance of work responsibilities. However, most participants reported that they were physically and mentally exhausted when getting home from work.	*"I am really got tired when I get home from work. It is difficult to do household chores straight away from work. I often feel I need a rest after coming home from work."(Cashier, Bank of Ceylon).* *"I get physically and mentally exhausted when get home from work, mostly because of work responsibilities ...."(Executive Manager, Bank of Ceylon)* *"I am really worn out when I get work from home. I do lots of household chores everyday and getting my children ready for school. Family responsibilities interfere in doing work responsibilities. So I can't perform well on my job."(Assistant Manager, People's Bank)*

Behaviour based work family interference	The majority of participants would not express any needs for changing behavioural pattern between work and family. That is, participants expressed that the behaviour at work and home are mostly similar; we are more openness and treat each other as family members but are more serious on our tasks at work.	*"I don't think there is a need for behavioural adjustment between work and home. We treat, be treated as family members in workplace. We work as team and have a complete openness among us" (Senior Assistant Manager, National Savings Bank)* *"I am at the lowest level in the bank. Almost everyone is my boss. I don't feel any behavioural issue in my experience. I observed the way we ask our children to get things done is virtually similar way supervisors ask me to do things. Friendly life in both places, however, I know I need to be more serious at working place. Needs completing task in time." (Multi duty Assistant, Seylan Bank.)* *"I don't think the way I behave at family affects the workplace. We are working together happily, we respect each other. You know the way I am speaking to is the way I behave at work and home."* (Assistant Manager, Commercial bank).
Taking work home	Some of the participants said that they were doing work related tasks at home and showed its interference with family. For example, doing work related tasks at home would prevent doing household chore, playing with children and teaching them, helping their parents and so on. Participants were not willing to do work related tasks at home and understand its consequences on family.	*"My wife gets tempered if she sees me doing any work's tasks at home. She always says don't be stupid! Once you finish your work, leave it there, don't take home. I am cooking, washing, and putting the children to bed... but you do not really understand the burden and warn me I am better to be at work rather coming home....." (Senior Assistant Manager, People's Bank)*
Psychological based work family interference	The majority of participants said that they were thinking of work matters at home, for example, planning and scheduling the work matters, any rows/problems at work, bad mood and tempered etc and family related matters at work, for example, any rows/ problem at family, planning and scheduling the family activities, bad mood and tempered etc. Thus, the majority of participants agreed that the psychological preoccupation of work matters at family and family matters at work inhibit the performance work and family activities.	*"When I am at work I see something needs doing at home, I make plan and schedule to do things. Sometimes, leave some things for tomorrow, but it easily distracts me from work." (Manager, Hatton National Bank)* *"I would have a list of things to be done at home. I ponder my mind in arranging things when at work..... If sometimes, any of my children come down with illness or any other problem, my mind get wandering and wanting to know their progress." (Executive Manager, Bank of Ceylon)* *"If any row with family, it lets me pondering on the matter at work. I would be thinking and judging myself and trying to find the solution when engaging with work. It disturbs my active participation on work and cause bad mood. I really understand it should not be blended with work matters, but I could not! (Assistant Manager, People's Bank)*

		"...You know if any problems at home, I am of course breathing of it, I can't offer my best to work. An interesting example, I strongly argued with my husband about buying a new car, but he did not agree with me. Then I came in to work, and thinking of the matter we discussed, and I thought I didn't wake up and smell the coffee and then phoned husband. So you know I killed many working hours on phoning and thinking the matter. It's the life. Isn't it? I would say, I think many kinds of the problems raised home at work." (Manager, National Savings Bank) *"I am getting on well with colleagues and boss, if any unpleasant incident happened at work would really affect me and let me look back. If I have got any problem inside me, I cannot listen what my family is telling to, I always was thinking of work issues, it really causes many problems at home." (Assistant Manager, Seylan Bank)* *"I enjoy doing the tasks at work, so it is difficult for me to be without thinking of work matters at home. I sometimes plan and schedule work related tasks beforehand at home. Sometimes work related matters don't let me sleep well at night." (Senior Assistant Manager, National Savings Bank)* *"I am mulling over some deep work related problem. Sometime in past, I had marvellous solution when thinking the work problem at home. Mind wandering with work matters affects the work I enjoy at home." (Manager, Hatton National Bank)* *"Any problem or arguments at work left me ruminating at home. We have sense, feeling and intuition. Any conflict or misunderstanding at work pulls us to think about the feeling of others, let say, what they feel? How they feel? Am I right? ..... (Assistant Manager, Commercial Bank)*

3.3 Data Collection

The main objective of this study was to investigate the prevailing direction and the dimensions of work family conflict in a collective-cultural nation. Greenhaus and Beutell (1985) proposed three forms of work family conflict and two directions of work family conflict on the basis of several seminal studies (e.g., Netemeyer, Boles, and McMurrian, 1996; Carlson, Kacmar and Williams, 2000; Wayne, Musisca and Fleeson, 2004; Haines et al., 2013; Allen et al., 2013). Albeit there are a number of work family conflict measures across work family studies (e.g., Bohen and Viveros-Long, 1981; Kopelman, Greenhaus, and Connolly, 1983; Gutek, Searle, and Klepa, 1991; Frone, Russell and Cooper, 1992; Netemeyer, Boles, and McMurrian, 1996; Carlson, Kacmar and Williams, 2000), only Carlson, Kacmar and Williams' multidimensional measure of work family conflict is robust representing entire theoretical constructs and has been used in many seminal studies (e.g., O'Driscoll et al., 2003; Allen and Armstrong, 2006; Spector et al.,2007; Matthews, Kath and Barnes-Farrell, 2010; Halbesleben, Wheeler and Rossi, 2012; Liu, et al., 2013; Cowlishaw et al., 2014). Thus, the multidimensional measure developed by Carlson, Kacmar and Williams (2000) was used as main vehicle for the data collection in this study.

3.3.1 Target Population

Respondents for this study were selected from a higher status occupation that has been found to have high levels of WFC in other studies. Higher status occupations are characterised by large amounts of responsibility, longer working hours, tight working schedules and high pay (e.g., Schieman, Whitestone and Van Gundy, 2006), leading to cause WFC (e.g., Grzywacz and Marks 2000; Major, Klein and Ehrhart, 2002; Bellavia and Frone, 2005; Schieman, Whitestone and Van Gundy, 2006). It has been further argued that employees in the higher status occupations feel greater devotion and commitment to their work as a source of identity (Bielby, 1992; Hodson, 2004), and have obligations and affiliation to the organisation (Bielby, 1992; Hodson, 2004) that impinges on their life. However, there is a dearth of empirical studies on work family conflict within higher status occupations (e.g., Schieman, Whitestone and Van Gundy, 2006).

The major higher status occupations in Sri Lanka are banking, medicine, education, engineering, law, accountancy, and Sri Lankan administrative service (SLAS). Among these spectra, the banking sector is gaining prominence, being technology driven, customer centric

and engaging in cut throat competition. A striking feature of the banking service is a 24/7 service with call centres, ATMs and internet banking, and at least a 6 days working week at branches. Thus characteristics of work in the sector include high levels of responsibility, long working hours, tight working schedules and high paid. Moreover, the recruitment system in banking sector is highly formal with selection criteria; mostly in terms of educational qualifications, experience, performance of the interview, and in theory, without any discrimination. On these grounds, the banking sector can be seen as a typical of higher status occupation.

The licensed commercial banks in Sri Lanka are classified into local banks and foreign owned banks. Local banks take the form of either private or state owned banks. There are 24 licensed commercial banks in Sri Lanka as at September 2012 (Central Bank of Sri Lanka, 2012), of which 12 banks are local (10 private banks and 2 state banks) and the remaining 12 banks are the foreign owned. According to Fitch rating (2012), six local banks are more dominant and operating widespread business across many districts in Sri Lanka: Bank of Ceylon (BOC), People's Bank (PB), Commercial Bank of Ceylon Plc (CB), Hatton National Bank Plc (HNB), Sampath Bank Plc (SAMB) and Seylan Bank Plc. The largest foreign bank in Sri Lanka is the Hongkong & Shanghai Banking Corporation Ltd (HSBC) (Thalgodapitiya and Bhoumik, 2012).

3.3.2 Sampling

The target population of this study were the employees (N=123793) from all licensed commercial banks in Sri Lanka. However, it is impractical to survey all the employees working in banking sector due to the time, accessibility, cost and other resource constraints and, thus sampling was chosen (Bryman and Bell, 2007). Sampling is "the segment of the population that is selected for investigation and it is a subset of the population" (Bryman and Bell, 2007, p.182). In the first stage, the selection of banking organisations was chosen in terms of number of branches, employees, business performance and widespread operations (presence nationwide) to cover the range of variation in the banking sector. Considering all these features resided in the 2012 Fitch rating report (Thalgodapitiya and Bhoumik, 2012), twelve banks were purposively chosen from it for this study. The details of banks are depicted in the table 3.2 below.

Table 3.2: Types of the banks selected for this study

No	Name of the bank	Nature of Bank	Population
1	Commercial Bank of Ceylon PLC	Private Bank	4602
2	Hatton National Bank PLC	Private Bank	4352
3	Sampath Bank PLC	Private Bank	3688
4	Seylan Bank PLC	Private Bank	3061
5	DFCC Vardhana Bank PLC	Private Bank	750
6	National Development Bank PLC	Private Bank	1583
7	Bank of Ceylon	State bank	8968
8	People's Bank	State bank	7823
9	National savings bank (licensed specialised bank)	State bank	3128
10	The Hongkong & Shanghai Banking Corporation Ltd (HSBC)	Foreign owned	1700
11	Citibank	Foreign owned	724
12	Standard Chartered Bank	Foreign owned	496

This study employed a non probability sampling, convenience sampling for selecting branches of all 12 banks by virtue of accessibility and time, a sampling technique often used in management and business research (Bryman and Bell, 2007; Blumberg, Cooper and Schindler, 2008). Once branches were chosen, 843 potential respondents were randomly selected according to the proportion of employees working in each bank. Of which, 582 were returned the questionnaire, yielding a return rate of 69 %. Of the returned questionnaires, unfortunately, a few important questions were left blank and these were excluded from the study. Finally, sample made up of 569 respondents yielding a rate of 67% of distributed.

A note on the size of the sample

The adequate sample for a given size of a population has been defined by many eminent research scholars. If the population elements equal to 5000, the required sample size would be 357 at 95 % confidence level, however if the population is 1 000 000, the recommended minimum sample size is 384 at 95 % confidence level (Sekaran and Bougie, 2010). It is interesting point that if the elements in a population increases, the required sample size will also increase, but at a diminishing rate. This research had a sample of 569 respondents which is sufficient as the population is equal to 123793.

It is further important to satisfy the adequacy of sample size in terms of the analysis requirement. The aim of the research required use of advanced quantitative analysis, viz.

exploratory factor analysis using SPSS and confirmatory factor analysis (CFA) and structural equation modelling (SEM) using AMOS. Before deploying such analysis, it is imperative to ensure sufficient respondents take part in the study. Exploratory factor analysis primarily depends on correlation coefficients among the variables. The correlation coefficients are much more sensitive to sample size, tending to fluctuate from sample to sample. In small samples, the correlation coefficients among the variables become less reliable than in large samples (Pallant, 2010). Thus, many authors say: the larger, the better, although, there is little agreement among them regarding the minimum sample size. On the one hand, Tabachnick and Fidell (2007) suggest that "it is comforting to have at least 300 cases for factor analysis" (p.183). Hair et.al (2010) put forward that researchers would not factor analyse a sample of fewer than 50 and preferably sample should be 100 or more. However, Comrey and Lee (1992) recommended that 300 as a good sample size, 100 as poor and 1000 as excellent. Thus, this study had a **good sample size** as having 569 cases (respondents).

On the other hand, some authors describe the minimum requirement of sample size in terms of respondents' ratio. Nunnally (1978) recommends that 10 to 1 ratio (10:1) which implies that ten cases for each variable (cited in Pallant, 2010, p.183). Kass and Tinsley (1979) recommend that having between 5 and 10 respondents for each variable up to a total of 300 (cited in Field, 2013) Since this study has 27 variables for factor analysis, the minimum sample size should be 270 (27 x 10 = 270). Consequently, it is fair to say that this study has sufficient sample size (569 > 270).

3.3.3 Research instrument

Owing to practical constraints of time, accessibility and the resources, a self administered questionnaire was employed in the main survey. This method of data collection is relatively unobtrusive and inexpensive (Zikmund et al., 2010). Moreover, as data collection focused on large and geographically dispersed locations, it limits face to face encounters in terms of time and cost (Babbie, 1995). In addition, self administrated questionnaire was the best method for eliciting frank responses as it is anonymous and properly administered can ensure confidentiality.

Self Administered Questionnaire

The self administered questionnaire consisted of two parts; Part I and Part II. The choice and the content of the questionnaire were dependent on the contextual relevancy of the literature.

Part I

Part I of the questionnaire assessed work family conflict, work demand and family demand, work support and family support, job satisfaction and family satisfaction, gender role ideology and workplace policies in forms of attitudinal statements. An attitudinal statement is "a single sentence that expresses a point of view, a brief, a preference, a judgement, an emotional feeling, a position for or against something" (Oppenheim, 1992, p. 174). These attitudinal statements that possessed explanatory power tackle subjective views and used for understandings of the phenomena enquiring that are difficult to observe.

Measuring work family conflict

Work family conflict was measured using twenty seven items. Of them, 18 questions were borrowed from Carlson, Kacmar and Williams' (2000) three forms (time based, strain based and behaviour based) of bidirectional (work to family conflict and family to work conflict) questionnaire (Appendix A; First 18 questions). Work to family conflict contains 9 items measuring three forms, each represented by equal three items. In a similar vein, family to work conflict contains 9 items measuring three forms, each represented by equal three items. An example of each form of work to family conflict is: time based- *My work keeps me from my family activities more than I would like*; strain based- *When I get home from work I am often too frazzled to participate in family activities/responsibilities*; behaviour based- *The problem-solving behaviours I use in my job are not effective in resolving problems at home.* An example of each form of family to work conflict is: time based- *The time I spend on family responsibilities often interferes with my work responsibilities*; strain based- *Because I am often stressed from family responsibilities, I have a hard time concentrating on my work* ; behaviour based- *The behaviours that work for me at home do not seem to be effective at work.*

In addition, 9 new items were added to the Carlson, Kacmar and Williams' (2000) work family conflict questionnaire that related to psychological based both work to family conflict and family to work conflict and typifying the collectivist cultural milieu. An example of psychological based work to family conflict is: "*I often think about work related problems at*

home that prevent me doing the tasks at home" and psychological based family to work conflict; *"I often think about family related problems at work that prevent me doing the tasks at work"*. All these nine questions were developed from the exploratory study in line with extant literature.

All work family conflict questions were assessed using a five point likert scale where respondents were asked to indicate to what extent they agree with each statement, ranging from strongly disagree (1) to strongly agree (5) with high scores indicating high levels of conflict. All these items were subjected to confirmatory factor analysis, and finally 18 items were retained and used for further analysis: $\chi 2$ (120) = 249.553, $p < 0.05$; CFI= .971; TLI = .963; RMSEA = .044; SRMR = .043 (The extraction method, techniques and reliability were presented in chapter 5).

Measuring work demand and family demand

Work demand and family demand were assessed using six questions, of which three questions measure work demand and other three measure family demand. Of six questions, three were originally developed by Boyar et al. (2008) and the remaining three were new items developed by researcher from previous studies. Items borrowed from Boyar et al. (2008) include *I feel like I have a lot of work demand, I feel like I have a lot of family demand* and *I have to work hard on family related activities.* New items include *I never seem to have enough time to get everything done at work, I never seem to have enough time to get everything done at home* and *I have a lot of responsibility at work.* Respondents were asked to indicate the extent to which they agree with the statements using a five point likert scale from strongly disagree (1) to strongly agree (5). The reliability coefficient Cronbach's alpha for work demand and family demand was .882 and .838 respectively.

Measuring work support and family support:

Work support was measured with six items, of which two items were adapted from Anderson, Coffey and Byerly (2002) and include *(1) My supervisor is supportive when I have a work problem* and *(2) My supervisor accommodates me when I have family or personal business to take care of-for example, medical appointments, meeting with child's teacher, etc.* The remaining four statements reflect special characteristics of the collectivist cultural context were developed by researcher on the basis of idea drew on previous studies and exploratory study, including; (1) *I feel my supervisor is like a family member and understands my family*

demands, (2) *My supervisors usually attend my family events such as marriage, birthday, funeral etc,* (3) *My colleagues are supportive when I have a work problem and* (4) *My colleagues usually attend my family events such as marriage, birthday, funeral etc*

As to the measure of family support, of four items, two were taken from King et al. (1995): (1) *My family members do their fair share of household chores,* and (2) *If my job gets very demanding, someone in my family will take on extra household responsibilities* and the remaining additional two items were new indicating characteristics of collectivist culture. They were (1) *Extended family members (parents or spouse parents/brother in law/sister in law etc) support in doing routine household chores* (2) *My relative supports looking after my children.* All of these statement were asked the respondents to indicate their level of agreement using a five point likert scale with ranging from strongly disagree (1) to strongly agree(5). The reliability coefficient Cronbach's alpha for work support and family support was .915 and .922 respectively.

Measuring job satisfaction and family satisfaction

Job satisfaction was measured using the Michigan Organizational Assessment Questionnaire (Cammann et al., 1979). The measure consists of three statement includes (1) *All in all I am satisfied with my job* (2) *In general, I like working here* and (3) *In general, I don't like my job.* Respondents were asked to indicate their level of agreement with the above three statements using a five point likert scale with response choices ranging from 1 (strongly disagree) to 5 (strongly agree). Despite the age of this measure, Bowling and Hammond (2008) have recently confirmed its reliability and construct validity. This measure is the most commonly used measure of job satisfaction in business and psychological studies.

Family satisfaction was assessed adapting the job satisfaction questionnaire by substituting the word "family life" instead of "job". This modification is prevalent in the area of work family research (e.g., Kopelman, Greenhaus, and Connolly, 1983; Aryee, Fields and Luk, 1999; O'Driscoll, Brough and Kalliath, 2004). An example item is "*All in all, I am satisfied with my family life*". Respondents were asked to indicate the extent of their agreement using a five point likert scale with response choices ranging from 1 (strongly disagree) to 5 (strongly agree). The reliability coefficient Cronbach's alpha for job satisfaction and family satisfaction were .849 and .819 respectively.

Measuring gender role ideology

Gender role ideology was assessed with adapting a four-item attitudinal scale that was originally developed by Spence and Helmreich (1978). Despite of the age of this measure, seminal recent studies have confirmed its validity and relevancy in the current context (e.g., Stevens, Kiger and Riley, 2001; Stevens et al., 2007; Minnotte et al., 2007; Minnotte et al., 2010). The selection of items was in terms of its appropriateness to the work family interference. Each item was measured using a five point likert scale where respondents were asked to indicate their level of agreement with the following items:"(1) *A woman should not expect to have quite the same freedom of action as a man;*(2) *A husband should earn more money than his wife;*(3) *A working mother can have just as good a relationship with her children as a mother who does not work* and (4) *Even if the wife works outside the home, the husband should be the main breadwinner and the wife should carry the responsibility for the home and children.* The reliability coefficient Cronbach's alpha for gender role ideology was .961.

Measuring workplace policies

A workplace policies' measurement scale was developed by the researcher using a five point likert scale ranging from strongly disagree (1) to strongly agree (5) Items include: *Generally speaking I am very satisfied with available work life policies, and Organisational work life policies alleviate family problems.* The reliability coefficient Cronbach's alpha for workplace policy was .728.

Respondents were asked to indicate available work life policies from a list provided, with a straightforward "yes" or "No". The list includes flexible working hours, compressed working week, paid leave to deal with family problems, unpaid leave, maternity leave paternity leave, part time working , eldercare, childcare, job sharing, working from home , transportation facilities, childcare advice and support, work training and returner schemes (career break/sabbatical).

Demographic and behavioural information

Part II of the questionnaire was designed by the researcher to elicit demographic and behavioural information (Appendix A). It covered information about respondents' age (group), gender, marital status, educational qualifications, main earner of a family, average monthly income, average monthly income of a family, members of a family (extended nature), number of children and their ages, childcare responsibilities and hours spend on

them, number of dependents, its nature and time spend on them, nature of work (full-time or part-time), hours spend on work per week, work responsibilities and reporting nature, work experience, mode of travelling to get in work place and hours spend on travelling, nature of bank (private, public, multi-national), nature of employment (permanent, temporary, and contract), details of spouse (working or not, full-time or part-time and hours per week), and details of domestic helper (hours spend with childcare, eldercare, and household chores). Of these questions, most of them are dichotomous choice questions, some are multi-option questions and filter (contingency) questions, and a few of them are open ended questions.

3.3.4 Tackling Potential Biases in the self administered questionnaire

Use of a self administered questionnaire is prone to three types of bias in situ: subject response pattern bias, social desirability bias and bias from semantic problems. Thus, tackling bias on a measurement instrument is of profound importance in assuring the validity and reliability of the research. The response pattern bias is related to the pattern of the question being asked, for example, the respondent finds some form of pattern in first part of the questionnaire and assumes the pattern will be repeated (Bennett, 1991). The response pattern bias can be attenuated using both positive and negative worded questions on a measurement instrument (Oppenheim, 1992; Rattray and Jones, 2007). Thus, the self administered questionnaire was designed blending positively and negatively worded items to avoid the danger of possible response pattern bias.

Social desirability bias can lead to misleading research results. Social desirability bias is a "systematic error in self-administered measures resulting from the desire of respondents to avoid embarrassment and project a favourable image to others" (Fisher, 1993, p.303) and thus some responses are more ego flattering (Podsakoff and Organ, 1986). All variables measured in this research are not considered socially sensitive, although, the importance of accuracy and genuine responses were emphasised on the front page of the questionnaire to minimise social desirability bias. Moreover, when distributing questionnaires, researcher said to the respondents that there is no best answer to the questions asked: I want data from the bottom of your heart!

Semantic problems arise when respondents interpret the question differently from the researcher's intention (May, 1997). To minimise the problems, the questionnaire was translated using the back translation method into the local language. Moreover, the translated questionnaire was also discussed with a few potential respondents with the original version to

ensure respondents understood the intended meaning. The pilot test found that there were no semantic problems.

3.3.5 The pilot study

It is of paramount importance to conduct pilot test to ensure that the questionnaire is clear to respondents before the survey is carried out (Adams et al., 2007). Blumberg, Cooper and Schindler (2008) note that the aim of the pilot test is to detect weakness in data collection instruments. Thus, pilot test is the pre-testing or 'trying out' of a particular research instrument (Baker, 1994). The pilot study was conducted in the same manner as a real study (Neuman, 2003) using paper based self administered questionnaires with a small sample.

Initially, permission sought from a branch manager to carry out a pilot test and twenty employees agreed to participate, of them male constituted 60% (N=12) and female were 40 % (N=08). In the pilot test, observing respondents when filling in questionnaire and having interviews with them are profoundly important (Adams et al., 2007). Of 20 respondents, five of them were agreed to be interviewed and fill in the questionnaire in the presence of researcher. Respondents were observed when filling in the questionnaire to see if respondents understood the questions being asked, instructions were clear and to see how long it took them to complete it. Respondents struggled in understanding questions 7 and 14 of the work family conflict questionnaire (translated version). Subsequently, both questions were fine tuned in meaningful way. Respondents were clear on the instructions provided. Moreover, it was observed that respondents spent, on average, 20 to 25 minutes in filling out the questionnaire. The respondents interviewed did not highlight any major issues. Most importantly, it was confirmed that the respondents interpreted the questions in the same way as the researcher intended. Careful review of the completed pilot questionnaire did not identify any problems.

A pilot test is also vital in business and management research for ensuring the reliability and validity of the questionnaire being used in main study. Reliability refers to whether the instrument is interpreted consistently across different situations and the validity is about how the instrument measures actually what it was intended (Field, 2013). Thus, in the pilot study, it was ensured that questions were understood by the respondents the way researcher intended and the responses were understood by the researcher the way respondents intended.

In order to ensure reliability of the instrument, test-retest reliability method was employed in that reliability was measured at two different points in time with the same respondents. To facilitate this process, the 20 respondents completed the questionnaire twice at an interval of two weeks. The results of the test retest reliability was presented in the below table 3.3.

Table 3.3: Test - retest reliability

Variables	Alpha (Time 1)	Alpha (Time 2)
Work demand	0.82	0.85
Family demand	0.81	0.80
Work Support	0.71	0.79
Family support	0.79	0.82
Job satisfaction	0.81	0.79
Family satisfaction	0.74	0.76
Gender role ideology	0.82	0.87
Workplace policies	0.73	0.77

In these two cases, the Cronbach's alpha (α) was greater than 0.70 indicating acceptable level of reliability score (Hair et al., 2010). However, in test retest reliability, it is advised that the higher the correlation the greater reliability (Hair et al., 2010). The correlation between two time slots was $r = 0.72$ indicating strong reliability of the instrument. However, reliability has not been calculated for the questions measuring work family conflict owing to the limitation in use of factor analysis with a small sample.

The Pilot test ensured that contents of the questionnaire were clearly understandable, capable of being answered by potential respondents and the analysis showed that the questionnaire was reliable and valid. Thus, the questionnaire revised in the pilot study is meaningful, understandable and applicable in this different cultural context.

3.3.6 Data collection procedures

As aforementioned, sample of 569 respondents were chosen from banking organisations in Sri Lanka that covered a range of variation. Initially, prior approval to access employees was sought from the managers who were in charge of the branches, by the researcher during a personal visit. The purpose of the study was clearly articulated and the majority of managers granted immediate permission to access their employees. Notwithstanding, a few branch managers advised the researcher to obtain permission from regional head office. Once permission to access potential respondents was granted, the researcher approached employees to explain the purpose of the study. Potential respondents were selected from the list of employees provided by managers of the respective banks. Most respondents showed their willingness to take part in this survey and only a handful of them refused to take part due to time constraints.

Originally, the survey questionnaire was developed in English since the banking business is international and English is used in day to day business. Employees who work in banks are ipso facto good at speaking, writing and understanding English, hence they would be able to understand the questionnaire.

However, the questionnaire was, in as a precautionary measure, translated into local language (Tamil language), to make sure respondents thoroughly captured the meaning of the questions asked, and the translated questionnaire was attached to the original questionnaire. This method is the "bilingual method" suggested by (Harpaz, 2003) where the both versions of questionnaires are sent to respondents. The "back translation method" was employed. Initially, the questionnaire was translated into Tamil by the researcher himself. Subsequently, the translated questions were translated back to English by an independent academic who was the senior lecturer in the department of English Language at the University of Jaffna, Sri Lanka. Then, the translated English version was compared with the original version of English to ensure robustness of the translation.

As discussed in earlier, before embarking on main data collection, an exploratory study and the pilot study were carried out. In the exploratory study, the translated questionnaire and original version was discussed with the bank's employees and their input was also accommodated before piloting the questionnaire. Then, the questionnaire was piloted with a sample of 20 employees working in the banking sector and the details of the pilot test elaborated on penultimate section and no major problem was reported on the pilot study.

Having confirmed all required standards of the questionnaire, the finalised questionnaire was directly distributed among the respondents who consented to participate, with a stamped, self-addressed envelope. The rationale behind choosing direct distribution of questionnaires was to elicit high response rate and encourage the participant's willingness to take part in this study. Respondents were informed and assured privacy and confidentiality in a statement declared on the front page of the questionnaire. Moreover, in the brief statement, the nature and purpose of the study, time taken to complete questionnaire, and the contact details of the researcher and the supervisors were informed. As Robson (2002) highlighted the subject bias regarding the pressure of authority was minimised and anonymity and confidentiality was assured to all respondents.

The questionnaire measures work family conflict, work demand, family demand, job satisfaction, family satisfaction, work support, family support, gender ideology and demographic profile of respondents. In each section, instruction and a concise description of the questions measuring concepts were provided. A copy of the questionnaire and instructions can be found in (appendix A). Two alternative options for returning completed questionnaire offered were subject to participant's convenience, viz. drop and pick method and direct distribution and returned post method.

Data collection was carried out during June 2013 to November 2013. The first returned questionnaire received in nine days after distribution and all returned questionnaires were accepted until November 2013. Meanwhile, four final year students at the University of Jaffna assisted data collection process and they were clearly instructed. They were only granted permission to access respondents to get back the returned questionnaire in a sealed envelope and they were not allowed to influence the participant's response at any time.

3.4 Analytical strategy

3.4.1 Data Analysis

This section discusses the use of statistical techniques in this study. The data from the self administered questionnaire were inputted onto IBM SPSS Statistics 19 for analysis. Each questionnaire was rechecked before doing statistical analysis. Inputted data were then analysed using a number of statistical techniques. Two types of analysis were carried out: descriptive statistics and inferential statistics. Mainly, descriptive statistics were used for preliminary analysis to describe characteristics of subjects and check the reliability and the

assumptions of parametric statistics. Inferential statistics were primarily used for testing hypotheses (Hair et al., 2010; Pallant, 2010; Field, 2013).

The results of the analysis are reported in three consecutive chapters, named descriptive analysis of the survey respondents (chapter 4), an assessment of the model of work family conflict (chapter 5) and exploring the factors related to work to family conflict and family to work conflict (chapter 6). The chapter 'descriptive analysis of the survey respondents' describes the main characteristics of sample using descriptive statistics such as percentages (%), frequencies (*N*) and graphs. Albeit mean (indicating average value of variable) and standard deviation (the deviation from the mean of the data set) were used to present the averages of work family conflict and its predictors and outcome variables, *t*-static and ANOVA were employed to capture the significant mean differences between the variables studied (Hair et al., 2010; Field, 2013).

The chapter 'an assessment of the model of work family conflict' included exploratory factor analysis and confirmatory factor analysis. Exploratory factor analysis is used for scale development by searching for structure among a set of variables (Hurley et al., 1997; Hair et al., 2010; Field, 2013). In this study, 27 items measuring work family conflict were subjected to exploratory factor analysis (EFA) to identify which variables make up a factor. Confirmatory factor analysis (CFA) is the most widely used technique during the scale development process for establishing the validity of a scale following an EFA (e.g., Bagozzi and Foxall, 1996; Worthington and Whittaker, 2006) and thus it was performed with the aid of AMOS 19 (Analysis of Moment of structures). In AMOS, data analysis is in the form of a path diagram which is a visual pictorial presentation of the model. The CFA path diagram consists of latent constructs (unobserved variables), indicators (measured or manifest variables), error terms and their linkages using one headed arrow or two headed arrow per se. In a CFA, measurement model validity is dependent on two aspects: the first deals with establishing acceptable levels of Goodness –Of- Fit (GOF) measures, and the second is establishing construct validity. GOF measures explain how the model reproduces the observed covariance matrix among the indicators, that is, GOF measures the model fits by comparing theory (estimated covariance matrix) to reality (the observed covariance matrix) (Hair et al., 2010). Construct validity suggests the extent to which the items designed to measure actually reflect the theoretical latent construct (Hair et al., 2010). In general, construct validity takes three forms: content adequacy analysis, convergent validity and

discriminant validity. Reliability was assessed to confirm internal consistency of the scale by dint of Cronbach alpha reliability coefficient. Before running the analysis, the assumptions of normality (multivariate normality), homoscedasticity, linearity, and multicollinearity in multivariate analysis were examined (Hair et al., 2010; Byrne, 2010). CFA confirmed the factor structure emerged in exploratory factor analysis and indicated good construct validity.

The chapter 'exploring the factors related to work to family conflict and family to work conflict' included correlation analysis, structural equation modelling (SEM) and analysis of moderators. SEM is an extension several multivariate techniques notably multiple regression analysis (Hair et al., 2010) and most frequently used advanced technique in testing hypotheses as it facilitates examining a series of dependence relationships simultaneously. The moderated hypotheses (H_7, H_8, H_{9a}, and H_{9b}) were tested using special statistical file "process.spd" downloaded from Andrew Hayes website: http://www.afhayes.com/spss-sas-and-mplus-macros-and-code.html as recommended by Field (2013). Once installed the downloaded file, an option for performing moderator analysis becomes as a part of the analytical tool in existing IBM SPSS Statistics 19: appeared under Analyze Regression ▸ PROCESS, by Andrew F. Hayes (http://www.afhayes.com) and the resultant process facilitated to test the proposed moderated hypotheses.

3.4.2 Assessment of nonresponse bias

Nonresponse is about the responses that are not available to the researchers because of failure to return questionnaires (questionnaire nonresponse) or failure to answer some of the questions (item nonresponse) (Wallace and Mellor, 1988). The nonresponse can be as a function of the authority (respondent's position in the organisation), capacity (access to the information or knowledge of what is inquiring) and motivation to respond (propensity to reveal information) especially in organisational study (Tomaskovic-Devey, Leiter and Thompson, 1994). Hence, nonresponses can be attributed to the characteristics of the respondents or nature of study investigating. The actual nonresponse rate of this study was 33%. The potential bias of the nonresponse can have an effect on generalisability of the results, and hence scrupulous attention is of utmost importance. Albeit response rate are low, the results can be generalisable if evidence lend weight in default of nonresponse bias (Van der Stede, Young and Chen, 2005). Many research scholars suggested that the response rate of 75% to 90% is found to be reasonable to draw generalisation of the results from the sample to the population of interest (e.g., Gall, Borg, and Gall, 1996; Tuckman, 1999; Burkell, 2003;

Dooley and Lindner, 2003; Werner, Praxedes and Kim, 2007; Ary et al., 2013). As this study has yielded a 67% response rate, the statistical analysis for non respondents' bias were warranted.

The investigation of nonresponse bias can generally be carried out by dint of three approaches: the first is about a comparative analysis of responses by data of reply, the second is about comparing the profile of respondents against known characteristics and the last one is about comparing the characteristics of respondents with nonrespondents from the sample. Of those approaches, the comparative analysis of responses by date of reply is more popular method, called "surrogate" method (Wallace and Mellor, 1988). This method actually measures nonresponse bias from the known information of sampled data on the basis of the speed of responses by comparing early respondents to that of late respondents.

In comparison to the early respondents, the late respondents are more likely to resemble as nonrespondents, but have responded because of the increased consistent follow ups or stimulus. Thus, the early vs. late response (reluctant) comparison detect the bias of nonresponse (Van der Stede, Young and Chen, 2005). Unfortunately, there is no stringent procedure to determine the early and late responses (Wallace and Mellor, 1988). In this study early is defined as 15 % of first received responses (N=85) and the late is the 15 % of last received responses. The two sample independent *t*-test was the pertinent statistical test detecting the significant mean differences on all variables investigated between the early and the late responses, and the results provided in table 3.4.

Table 3.4: Assessment of nonresponse bias

Variables	No of response	N	Mean	SD	t-value	Sig.
Work demand	Early Response	85	4.14	.73		
	Late response	85	3.95	.63	1.88	.06
Family demand	Early Response	85	4.31	.64		
	Late response	85	4.29	.72	.15	.88
Family support	Early Response	85	3.95	.86		
	Late response	85	3.89	.86	.45	.66
Work support	Early Response	85	4.16	.71		
	Late response	85	4.19	.61	.31	.76
Job satisfaction	Early Response	85	4.29	.69		
	Late response	85	4.11	.84	1.46	.15
Family satisfaction	Early Response	85	4.31	.63		
	Late response	85	4.14	.73	1.64	.10
Gender role ideology	Early Response	85	3.93	.87		
	Late response	85	3.79	.89	1.00	.32
Work life policies	Early Response	85	2.67	.59		
	Late response	85	2.54	.75	1.25	.21
Hours spent with children	Early Response	85	2.49	1.43		
	Late response	85	2.78	1.31	1.40	.16
Hours spent with dependents	Early Response	85	.49	.91		
	Late response	85	.48	.92	.80	.93
Working hours per week	Early Response	85	43.40	2.21		
	Late response	85	43.13	2.12	.82	.42
Tenure	Early Response	85	16.22	8.40		
	Late response	85	16.66	8.41	.34	.74
Time spent on travelling	Early Response	85	30.71	13.95		
	Late response	85	28.47	12.63	1.10	.28
Hours spent on household chore	Early Response	85	3.38	.99		
	Late response	85	3.18	1.00	1.31	.19
Work to family conflict	Early Response	85	4.29	.34		
	Late response	85	4.33	.37	.62	.53
Family to work conflict	Early Response	85	4.36	.36		
	Late response	85	4.40	.39	.61	.54

Source: Survey data

As can be seen in table 3.4, all main variables viz., work demand, family demand, family support, work support, job satisfaction, family satisfaction, gender role ideology, work life policies, hours spent with children, hours spent with dependents, working hours per week, tenure, time spent on travelling, hours spent on household chores, work to family conflict and family to work conflict were examined in terms of the early and late responses to detect nonresponse bias. Results showed that there is no significant difference between early and late responses of the variables investigated, at 5 % significance level ($p < 0.05$). Albeit significant results of the *t*-test portends of nonresponse bias needing more clear understanding for biasness (Groves, 2006), non significant results of this study did not portend any form of nonresponse bias and hence the results of the study can be generalisable without any cautions.

3.4.3 Data needs matrix

The data needs matrix summarises the ways research questions were answered in order to attain research aims. It includes research questions, the links between research questions and research aims, what theory informs the research questions raised, required data/data sources, data collection methods, data analysis methods, and ethical issues. The data needs matrix is presented in below table 3.5.

Table 3.5: Data needs matrix

Research question	How research question linking with aims	Why? Supporting theory	Required data / Data sources	Data collection method	Method of data analysis	Ethical and related concerns
Are the three forms of work family conflict developed from research in individualistic cultures applicable in Sri Lanka?	Investigate the extant forms of work family conflict in Sri Lanka and identify differences between males and females	Role theory	Respondents' responses on 18 items of Carlson, Kacmar and Williams' (2000) multidimensional scale (see appendix A)	Self administered questionnaire	CFA *t* statistics (H_{2a}, H_{2b}, H_{2c}, H_{2e}, H_{2f}, H_{2g}, H_{2i})	Anonymity and confidentiality assured, Results reported in aggregated form
Is psychological based work family conflict apparent in Sri Lanka?	Investigate the extant forms of work family conflict in Sri Lanka and identify differences between males and females	Role theory Work/family border theory	Respondents' responses on 9 items of psychological based work family conflict measures developed from exploratory study in line with previous literature (see appendix A)	Self administered questionnaire	CFA *t* statistics (H_{2d}, H_{2h})	Anonymity and confidentiality assured, Results reported in aggregated form
How far is Carlson, Kacmar and Williams' (2000) work family conflict questionnaire scale developed in individualist culture valid for investigating WFC in Sri Lanka?	Investigate the extant forms of work family conflict in Sri Lanka and further validate use of Carlson, Kacmar and Williams' (2000) prevalent measure beyond the sample it developed	Role theory Work/family border theory	Respondents' responses on 27 items of work family conflict measures; 18 items of Carlson, Kacmar and Williams' (2000) multidimensional scale and the remaining 9 items from exploratory study and literature review (see appendix A).	Self administered questionnaire	CFA (H_1)	Anonymity and confidentiality assured, Results reported in aggregated form

To what extent does traditional gender role ideology exist in Sri Lanka and if so, what is the consequent impact on WFC?	Construct a model of WFC in Sri Lanka	Social role theory Cognitive theories of gender development Status characteristics theory	Respondents' responses on 4 item's measure of gender role ideology originally developed by Spence and Helmreich (1978) (see appendix A).	Self administered questionnaire	Andrew Hayes' software recommended by Field (2013) **(H_{9a}, H_{9b})**	Anonymity and confidentiality assured, Results reported in aggregated form
What are the main factors influencing WFC in Sri Lanka?	Construct a model of WFC in Sri Lanka	National difference (culture) Justice theory Job Demands-Resources model	Respondents' responses on 3 items work demand, 3 items family demand, 4 items family support, 6 items work support, 3 items job satisfaction, 3items family satisfaction, job status, age, education, income, tenure, no of children and hours spent on them, no of dependents and hours spent on them, hours on household chores, working hours per week etc (see appendix A).	Self administered questionnaire	SEM Andrew Hayes' software recommended by Field (2013) *t* statistics **(H_{3a}, H_{3b}, H_{3c}, H_{3d}, H_{3e}, H_{3f}, H_{3g} , H_{4a}, H_{4b}, H_{4c}, H_{4d}, H_{4e}, H_{4f} , H_5, H_6, H_7, H_8)**	Anonymity and confidentiality assured, Results reported in aggregated form

3.5 Ethical considerations

This research was conducted under the stringent professional ethical code of the University of Kingston, London, UK. Ethics in research is about appropriateness of the researcher's behaviour towards the rights of respondents or who are affected by it (Saunders, Lewis and Thornhill , 2007). All the phases of the research were conducted to conform to accepted ethical standards from acknowledging sources to reporting data. The, core tenets of ethical principals are in the demonstration of privacy, confidentiality, accuracy, accountability, honesty and respect for human dignity that all protect respondents.

In ensuring privacy of potential respondents, the decision to take part in the study was at the complete freedom of participant. Thomas (2004) stated that providing sufficient information regarding the research to the potential respondents is the vital responsibility of the researcher that enables respondents to make a decision regarding their willingness on participation. Participating organisations and respondents were informed of the purpose of the research undertaken when seeking initial access to enable potential respondents to choose whether or not to participate in the research.

Participant's confidentiality and anonymity were assured by the statement declared by the researcher himself and on the front page of the questionnaire. This included the title of the research and research purpose, researcher and supervisors contact details and important ethical tenet (confidentiality and anonymity) (appendix A). Questions that could reveal the identity of the respondents were avoided. The researcher showed willingness to answer any queries that the respondents had, and appreciated their participation and, respected and appreciated the time they spent in filling in questionnaire. Participating organisations and respondents names were not exposed to ensure confidentiality and anonymity.

Moreover, the researcher assured that he would protect the identity of the respondents, information provided by them solely being used for the research purpose and the results were reported in aggregated form rather on an individual basis. It was further assured that researcher was attuned to adverse effect of the questionnaire if an employer or boss accessed and filled in questionnaires were kept safely; and access permitted only to the researcher and supervisors to protect potential harmful effects on subjects.

Overall, this research was conducted in strict adherence to ethical principles; privacy and confidentiality, accuracy, accountability and honesty were all assured. All sources were

entirely properly acknowledged, and the procedures and the findings were accurately documented.

3.6 Summary

This research adopts an objective (positivism) epistemology with hypothetico–deductive approach using a survey strategy in a cross sectional time horizon. Respondents were from a higher status occupation (banking) and randomly chosen from banks operating within the territory of Sri Lanka. Drawing on research philosophical assumptions and practical constraints of time, accessibility and the resources, a self administered questionnaire was used to garner the requisite data. Before distributing questionnaires among subjects, as a caveat, a pilot test with a small sample of 20 participants was carried out to test suitability for the main survey. In the main survey 843 questionnaires were distributed to employees from 12 banks, 582 were returned and 569 were found to be usable. At outset, nonresponse bias was examined however results did not portend any form of nonresponse bias suggesting the findings of the study can be generalisable to the population of banks. Data were first analysed using descriptive statistics and then more advanced inferential statistics such as CFA, SEM and Andrew Hayes' special software. In the penultimate section, researcher assured that this research conformed to strict ethical principles. The next chapter presents a descriptive analysis of the survey data.

CHAPTER FOUR

DESCRIPTIVE ANALYSIS OF THE SURVEY RESPONDENTS

4.0 Chapter overview

The purpose of this chapter is to describe the demographic characteristics of the survey respondents, their experience of work family conflict and its potential predictors and outcome variables. This chapter answers the research question of what forms of work family conflict are prevalent in Sri Lanka, identifies respondent's gender role ideology and compares the findings of this study with those from previous studies conducted in different cultural milieux. It will also report on the preliminary data analysis that sought to identify how demographic factors and gender ideology influence the work family sphere. The chapter covers three main topics: characteristics of the respondents, level of variance in work family conflict and its predictors and outcome variables, and differences in work family conflict and its predictors and outcome variables in terms of respondent's characteristics such as gender, age, income, marital status, education qualification, supervisor status and spousal status. Finally, a brief summary of what is discussed throughout this chapter is presented.

4.1 Characteristics of the survey respondents

4.1.1 General characteristics

As explained in Chapter 2, demographic characteristics of respondent - gender, age, marital status, earnings, job status and education were found as predictors of family demand/work family conflict in previous studies (e.g., Parasuraman et al., 1996; Voydanoff, 2005; Schieman, Whitestone and Van Gundy, 2006; Boyar et al., 2008). However, the relationship of all such variables has not been established in less developed countries with a collectivist tradition. The next section therefore describes the distribution of survey responses for these variables and examines the relationship between them. Table 4.1 shows the distribution of the general characteristics of the survey respondents.

Table 4.1: The distribution of the general characteristics of the survey respondents

Characteristics	Category	Number (*N*)	Percentage (%)
Gender	Male	333	59%
	Female	236	41 %
Age	18-25	78	14 %
	26-35	230	40 %
	36-45	182	32 %
	46-55	58	10 %
	Over 55	21	4 %
Marital Status	Single	61	11 %
	Married	472	83 %
	Widow	29	5 %
	Widower	07	1 %
Educational Qualification	A/L	48	8 %
	Advanced Diploma	73	13 %
	Degree	149	26 %
	Postgraduate	216	38 %
	PhD	02	1 %
	Others	81	14 %
Main Earner	Yes	406	71 %
	No	163	29 %

Source: Survey data

Of the 569 respondents, men accounted for 59% (*N*=333) whilst women accounted for 41 % (*N*=236). According to 2013 labour force survey in Sri Lanka, the female participation rate in the financial and insurance sectors was 39% suggesting that the gender composition of the sample is representative of the population (Department of Census and Statistics, 2013). As can be seen in table 4.1, ages of respondents were measured using five consecutive scales from minimum of 18 years to maximum of over 55 years. The highest number of respondents was found between 26 to 35 years. As discussed in chapter 1 (p.5), the age distribution found is similar to the pattern of labour force participation in Sri Lanka (Department of Census and Statistics, 2013) indicating the survey is representative of the population.

Regarding the marital status of the respondents, 11% of them were single (*N*=61), 83% were married (*N*=472), 5% were widowed (*N*=29) and the remaining 1% were widowers (*N*=07) (see table 4.1). The observed large number of widows might be attributed to the brutal civil

war that lasted for more than three decades and ended in May 2009 as explained in chapter 1 (p.6) (ColomboPage, 2011; Sajanthan et al., 2014). As explained in chapter 2 (p.28), marital status and age were found as determinants of work family conflict in nations with individualist culture (e.g., Voydanoff, 2005; Schieman, Whitestone and Van Gundy, 2006). However, such relationship has not been established in nations with collectivist culture. Thus, it is of substantive importance in apprehending diffusion of respondent's marital status across age groups among the respondents. The table 4.2 presents marital status of respondents by gender and age groups.

Table 4.2: Composition of the respondent's marital status, age and gender

			Age Group					
			18-25	26-35	36-45	46-55	Over 55	Total
			Percent(*N*)	Percent(*N*)	Percent(*N*)	Percent(*N*)	Percent(*N*)	*N*
Male	Marital Status	Single	36(16)	23(27)	.....	.....	.....	43
		Married	64(29)	77(92)	99(117)	88(30)	88(15)	283
		Widower	.....	.....	1(1)	12(4)	12(2)	7
		Total	**58 (45)**	**52 (119)**	**65(118)**	**59(34)**	**81(17)**	**333**
Female	Marital Status	Single	48 (16)	1(1)	.....	4(1)	.....	18
		Married	52 (17)	88(98)	81(52)	88(21)	25(1)	189
		Widow	.....	11(12)	19(12)	8(2)	75(3)	29
Total			**42(33)**	**48(111)**	**35(64)**	**41(24)**	**19(4)**	**236**

Source: Survey data

As can be seen in table 4.2, age group between 26 to 35 years consisted of the majority of men (*N*=119) and women (*N*=111) across all other age groups. Further, the age group 26 to 35 consisted of the vast majority of married women (88%), however the vast majority of married men (99%) were between 36-45 ages. Moreover, none of women with single status was found between 36-45 ages. As explained in chapter 1 (p.4), the results support men's delayed married in comparison with women in Sri Lanka. Surprisingly, the great amount of widows (*N*=24) were identified between 26-45 ages attributed to the consequence of civil war as discussed in chapter 1 (p.6). A few numbers of males and females were identified among other age groups and 6 of them were widowers and 5 of them were widows.

In terms of educational qualification, as table 4.1 shows, the majority of respondents (79%) had degree level or above educational qualifications reflecting the fact that the respondents were drawn from a higher status occupation. Table 4.3 further describes educational qualification of the respondents by gender.

Table 4.3: Educational qualification by gender

	A/L	Advanced diploma	Degree	Postgraduate	PhD	Others	Total Percent (*N*)
Male	6 %	8 %	15 %	21 %	1 %	8 %	59 % (333)
Female	3 %	4 %	11 %	17 %	.....	6 %	41 % (236)

Source: Survey data

As can be seen in above table, men had slightly high educational qualification than that of female counterparts. As explained in chapter 1 (p.5), increasing women's attainment in educational qualification and consequent influx into the labour market might change the traditional perception of gender role ideology. However, it is also plausible that women may perceive work as essential for economic benefits (family functioning) in less developed economies rather perceiving their work role as their central role (e.g., Livingston and Judge, 2008). Thus, the relationship between main earner, marital status and gender is of substantive importance, and presented in table 4.4.

Table 4.4: Role of the main earner between marital status and gender

		Gender			
		Male		Female	
		Main Earner		Main Earner	
		Yes	No	Yes	No
		Percent (*N*)	Percent (*N*)	Percent (*N*)	Percent (*N*)
Marital Status	Single	14(6)	86(37)	22(4)	78(14)
	Married	96(272)	4(11)	44(84)	56(105)
	Widow	...	...	100(29)	...
	Widower	100(7)	...	...	...

Source: Survey data

As can be seen in table 4.4, 96% of married males were the main earner of their family and 44% of married women reported that they were the main earner. The reason for the observed unexpectedly relatively large number of women as main earners of the family might be explained by the fact that banking jobs offer much higher than average pay and is not typical of Sri Lanka as a whole.

4.1.2 Family related characteristics of the respondents

Previous studies have found that the variations in family structure such as number of family members, number of children and caring for children, number of dependents and dependent care, the nature of spouse (either working or not) and spouse's employment (full-time, part-time or contract) were determinants of family demand/work family conflict as explained in chapter 2 (e.g., Goff, Mount and Jamison, 1990; Grzywacz and Marks, 2000; Foley, Hang-Yue and Lui, 2005; Lu et al., 2006; Boyar et al., 2008; Hoobler, Wayne and Lemmon, 2009). However, these characteristics are not uniform across countries and cultures. For instance, childcare would not cause similar impact on individualist and collectivist cultures as in nations with collectivist culture it is usual for extended family members living in a household to share childcare responsibilities.

The survey results found the average household size was 5.3 which is greater in comparison with many developed countries, such as 2.4 in the UK (Macrory, 2012) and 2.63 in the USA in 2009 (Nasser and Overberg, 2011). Thus, the large household size would be expected to have greater impact on work family conflict in comparison with other countries. Moreover, the household size was an indicative of the prevalence of the extended family structure in Sri Lanka. Households of respondents are composed parents (86%) and siblings and other extended family members (27%)(Table 4.7). Importantly, 79% of the respondents had at least one child (N=490) and 86 % of the respondents had at least one dependent parent either theirs or their spouse's. Most married female respondents had their parents living with them (87%) and 32% had their spouse's parents living with them. This is a typical of a collectivist cultural nation where the onus for looking after parents is on their daughters. Thus, in collectivist cultural nations the family demand would be greater owing to the extra demand from extended family members; on the other hand however, the support from extended family members would attenuate family demand (e.g., Yang et al., 2000). Thus, the relationship would hinge on both number of extended family members needing caring and the person who is responsible for primary caring. Thus, family demand would be expected to be different between nations with collectivist and individualist cultures.

Caring responsibilities by gender and marital status are presented in table 4.5. Of dependents, 20% of them need caring (N=112). 72% of them were primarily cared by respondents' wives (N=81). Among the surveyed respondents, 12% of dependents' caring needs were primarily delivered by married females whilst just 1% of dependents' care was primarily served by married men. Interestingly, 14% of dependent care was delivered by other members of

extended family living in a household. In contrast, there was virtually no use of paid carers among respondents.

Table 4.5: Primary Carer for dependents by gender, marital status and extended family structure

		Gender					
		Male		Female			
		Marital Status		Marital Status			
		Single	Married	Single	Married	Widow	Total
		Percent(N)	*Percent(N)*	*Percent(N)*	*Percent(N)*	*Percent(N)*	*Percent(N)*
Primary dependent's carer	Respondent	.....	1%(1)	.....	12%(13)	1%(2)	14% (16)
	Spouse	.....	72%(81)	.....	.....	.....	72% (81)
	Parents	.....	.....	.....	.....	1%(1)	1% (1)
	Extended family member	1%(1)	.....	.....	7%(8)	.....	8% (9)
	Paid carer	.....	.....	1%(1)	.....	.....	1% (1)
	Others	.....	.....	.....	4%(4)	.....	4% (4)
						Total	**100%(112)**

Source: Survey data

As can be seen in table 4.5, the majority of women take primary responsibility for dependent's care and consequently, they would experience high levels of family demand. In essence, women living in extended family structure would experience high level of family demand than living in nations with individualist cultures (or egalitarian) owing to the extra family demand caused by dependents' care. Thus, the pervading caring demand for dependents among samples would intensify family demand among females. On the other hand, the little sharing responsibility of men over dependents caring would cause lesser effect on family demand for men. The prevalent greater demand for dependent care is consistent with Agarwala et al. (2014) where they found greater eldercare responsibility in India (collectivist cultural nation) than Spain and Peru.

Many previous studies found that childcare was a determinant of family demand/work family conflict suggesting that the time and energy spent on care giving for children would interfere with meeting the demands of work as explained in chapter 2 (p.28) (e.g., Goff, Mount and Jamison, 1990; Kossek and Nichol, 1992). As in collectivist cultural nations extended family members (e.g., grandmother, grandfather, siblings) can be of help in looking after children, the effect of childcare on family demand in nations with collectivist culture would not

necessarily be similar to nations with individualist culture. The primary childcare responsibility between gender and marital status is illustrated in table 4.6.

Table 4.6: Primary childcare responsibility in extended family structure

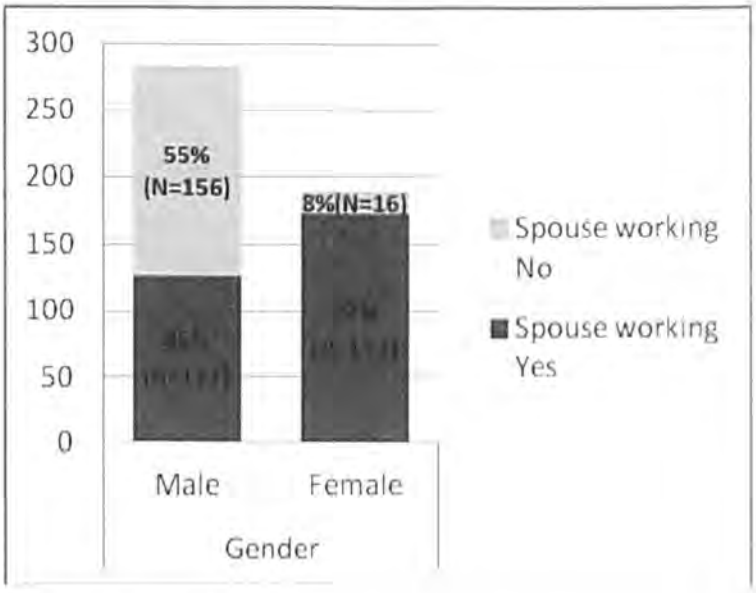
		Gender				
		Male		Female		
		Marital Status		Marital Status		
		Married	Widower	Married	Widow	Total
		Percent(N)	*Percent(N)*	*Percent(N)*	*Percent(N)*	*Percent(N)*
Main Child Carer	Respondent	1 % (6)	1% (3)	14% (67)	1% (5)	17%(81)
	Spouse	33% (150)	.....	3% (15)	.....	36%(165)
	Parents	11%(50)	1% (3)	14% (63)	5% (23)	31%(139)
	Extended family member	7% (32)	.....	6% (28)	1% (1)	14%(61)
	Others	1%(2)	1% (1)	.....	.....	2%(3)
					Total	100%(449)

Source: Survey data

As can be seen in table 4.6, of the surveyed respondents, 449 of them reported that their children needed caring, however, just around 17% of childcare was primarily given by respondents themselves, of which 15% were married women. Importantly, 47% of childcare was mainly carried out by extended family members living with the respondent. This would be a significant difference in comparison with nations with a nuclear family structures. Married male respondents agreed that their wives were primarily responsible for 33% of childcare. Only 1% of childcare was borne by male respondents reflecting the prevalence of traditional gender role ideology/extended family structure. Overall, the effect of childcare responsibilities on family demand would be lower in collectivist cultural nations than in West. As explained in chapter 2 (p.29), childcare responsibility was lower in India (a collectivist cultural nation) than Spain and Peru (Agarwala et al., 2014).

Studies in western cultures have found that work family conflict in dual earner couples is greater than with single earner couples (e.g., Moen and Yu, 2000; Nomaguchi, 2009). Almost half of the respondents' spouses were working (53%), of them, 95% were full-timers (N=285) and the remaining 5% of spouses were part-timers. As half of the respondents' spouses were working, it is important to establish the gender of the spouses. Figure 4.1 shows the working patterns of spouses by gender.

Figure 4.1: Working patterns of spouses by gender



Source: Survey data

Of those who were married, 92% of females' spouses were working whilst only 45 % of males' spouses were working. As discussed in chapter 1 (p.5), women's labour force participation was slightly greater in comparison with average labour force participation rate of 36.2 in Sri Lanka, 2013 (Department of Census and Statistics, 2013) however, the women labour force participation rate was quite low in comparison with developed countries, for instance, labour force participation rate of women in the UK was 67% in April-June 2013 (Office for National Statistics, 2013). Albeit previous studies found that work family conflict was greater among dual earner couples in nations with individualist cultures, the same level of work family conflict would not necessarily be expected among dual earner couples in nations with collectivist cultures owing to the prevalence of the extended family structure where extended family members living in a household would support in meeting family demand such as childcare, household chores etc.

As can be seen in table 4.7, the average hours spent on household chores, children and dependents were 3.16, 2.47 and 0.47 respectively. A summary of the family related characteristics of the surveyed respondents is tabulated in table 4.7 indicating general qualities, similarities and dissimilarities.

Table 4.7: A summary of the family related characteristics of the respondents

Family related characteristics	Category	Number (*N*)	Percentage (%)
No of family members	2	3	1 %
	3	40	7 %
	4	78	14 %
	5	180	32 %
	6	179	31 %
	7	65	11 %
	8	24	4 %
Any children?	Yes	450	79 %
	No	119	21 %
Number of Children	Years 1 to 4	84	12 %
	Years 5 to 11	299	44%
	Years 12 to 18	212	31 %
	Years Over 18	86	13 %
Extended family members	Parents	490	86 %
	Relatives/family members	154	27 %
Any dependent care needs?	Yes	112	20 %
	No	457	80 %
Nature of Spouse	Working	300	53 %
	Not working	269	47 %
Spouse's employment	Full-time	285	50 %
	Part-time	15	3 %
	Not working	269	47 %
Domestic helper?	Yes	45	8 %
	No	524	92 %

Pattern of hours spent on family during a working day	Minimum	Maximum	Mean	SD
Hours spent on household chore	1.00	5.00	3.16	.82
Hours spent with children	.00	5.00	2.47	1.41
Hours spent with dependents	.00	3.00	.47	.91

Source: Survey data

4.1.3 Work-related characteristics of the survey respondents

Many studies have found that work related factors viz., nature of employment, status of employment, supervisory status, level of income, formal and informal work life policies, working hours and tenure were the predictors of work demand/work family conflict as explained in chapter 2 (p.22) (e.g., Boyar et al., 2008; Allen and Finkelstein, 2014). These factors might be expected to vary across national contexts, for instance, more organisations in developed countries offer work life policies than in less developed countries. In this section the work related factors that potentially influence the work family conflict experienced by respondents is examined. The work related characteristics of respondents are shown in table 4.8.

Table 4.8: A summary of the work related characteristics of the respondents

Work related characteristics	Category	Number (*N*)	Percentage (%)
Nature of Employment	Full-time	557	98 %
	Part-time	12	2 %
Status of employment	Permanent	557	98 %
	Temporary	11	1 %
	Contract	1	1 %
Supervisory Status	Yes	297	52 %
	No	272	48 %
Income Level	Rs 10 000 - 20 000	07	1 %
	Rs 20 001 - 30 000	34	6 %
	Rs 30 001 – 40 000	138	24 %
	Rs 40 001 – 60 000	282	50 %
	Rs Over 60 000	108	19 %
Formal Work life policies	Yes	93	16 %
	No	476	84 %
Informal Work life policies	Yes	287	51 %
	No	282	49 %

	Minimum	Maximum	Mean	SD
Working hours per week	20.00	48.00	43.03	2.39
Tenure	2.00	40.00	16.27	7.97

Source: Survey data

As can be seen table 4.8, 98 % of respondents were full-time employees and held permanent positions. Only a few employees (2%) were the part-timers but they were not permanent employees, instead they were temporary (1%) and contract (1%) workers denoting limited options for working on a part-time basis in higher status occupations in Sri Lanka. Thus the vast majority of jobs are full-time and there appears to be little scope for using flexible working as a way of achieving work life balance.

Studies have found that supervisory status can increase work demand owing to greater job demand/ responsibilities (e.g., Boyar et al., 2008). Just over half of the respondents held supervisory positions (52%) and the majority of them were over 35 years indicating high level of work demand among those respondents. Further, the level of income respondents received would expect to determine work demand (e.g., Bhave, Kramer and Glomb, 2012) as high levels of pay are strongly associated with more responsibilities in the workplace. A half of the respondents' monthly earnings were between Rs 40 001 to 60 000 (50%) while 24 % of them were between Rs 30 001 to 40 000 (N= 138) and 19% of them were over Rs 60 000 (N=108). Overall, 93 % of respondents' monthly earnings were more than Rs 30 000 which is greater than average monthly income of Rs. 25,778 in Sri Lanka (Department of Census and Statistics, 2013). The observed large number of respondents over national average of income is reflective of higher status occupation. As employees of well paid expected to high demand in higher status occupation, income would predict work demand in higher status occupations.

Many studies have found that work life organisational policies ameliorate the conflict between work and family as discussed in chapter 2 (p.24) (e.g., Carlson, 1999; Fox and Dwyer, 1999; Grzywacz and Marks, 2000). Work life policies are more prevalent in developed nations, but are at a premium in developing countries. Moreover, work life policies found in the West may not reduce work family conflict in Asia due to the nature of the extended family structure as described in p.27. Table 4.9 shows that most respondents (84%) did not work in organisations with formal work life policies. However, 51% of respondents agreed that it was informal practice to make allowances. For instance, employees might ask the supervisor to go home early to look after a sick child. Nonetheless, such informal work life practices are at the discretion of management. The formal work life policies available to respondents are presented in table 4.9.

Table 4.9: Formal work life policies available to respondents

Work life policies	Types of bank		
	Availability	Local banks (*N*=481)	Multinational banks (*N*=88)
	N/Y	***Percent***	***Percent***
Maternity leave	Yes	100 %	100 %
Paternity leave	Yes	100 %	100 %
Paid leave family problems	Yes	100 %	100 %
Work training	Yes	91 %	100 %
Unpaid leave	Yes	85 %	99 %
Career break	Yes	26 %	100%
Transportation	Yes	4 %	89 %
Job sharing	Yes	.....	100 %
Childcare	Yes	.....	77 %
Childcare advice	Yes	.....	51 %
Part-time working	Yes	2%	1 %
Flexible working hours	No	.....	.....
Compressed working week	No	.....	.....
Eldercare	No	.....	.....
Working Home	No	.....	.....

Source: Survey data

As can be seen in table 4.9, work life policies typically found in European and most Western countries viz., flexible working arrangements, compressed working week, eldercare, working from home, are not present in banking organisations in Sri Lanka. Notwithstanding, some work life policies viz., maternity leave , paternity leave and paid leave for dealing with family problems were available. Unpaid leave, career breaks and transportation were more prevalent in multinational banks than local banks. However, job sharing (100%), childcare (77%) and childcare advice (51%) were only available in multinational banks indicating the adaption of Western work life policies to reduce work family conflict. Only 3% of respondents were part-timers (temporary and contract workers) moreover, part-time working in permanent positions was not available in banking organisations in Sri Lanka. Overall, multinational banks offer more work life policies in comparison with local banks. However, the level of support offered in formal and informal policies and practice was lower than that found in studies carried out in the West as described in chapter 2 (p.24).

As explained in chapter 2 (p.24), many studies have found that long working hours increase work demand/work family conflict (e.g., MacInnes, 2005; Boyar et al., 2008; Russell, O'Connell and McGinnity, 2009). The average working hours per week were 43.03

(*SD*=2.39) which is similar as found in developed countries such as 43.5 hours for men working in the UK (Cousins and Tang, 2004). The average years of the service of the respondents was 16.27 years (*SD*=7.97).

4.2 Level of variance in work family conflict and its predictors and outcome variables

This section describes the distribution of work family conflict with its further predictors (than explained above) and outcome variables across the sample. As explained in chapter 2, work demand, family demand, work support, family support and gender role ideology were the predictors of work family conflict (e.g., Lu et al., 2006; Boyar et al., 2008; Russell, O'Connell and McGinnity, 2009) and job satisfaction and family satisfaction were the outcome variables of work family conflict (e.g., Wayne, Musisca and Fleeson, 2004; Thompson and Prottas, 2006). However, these relationships have not been investigated in any depth in less developed countries. Value of mean, standard deviation and ranges of work family conflict, its predictors and outcome variables are presented in table 4.10.

Table 4.10: Mean, standard deviation and range of work family conflict, its predictors and outcome variables

Variables	Description	Minimum	Maximum	Mean	SD
Work demand	Further Predictors of Work family conflict	1.00	5.00	3.95	.79
Family demand		1.00	5.00	4.29	.70
Work support		1.33	5.00	4.37	.58
Family support		1.00	5.00	3.98	.85
Gender role ideology		2.00	5.00	4.00	.81
Time based WFC	Work to family conflict	2.00	5.00	4.30	.65
Strain based WFC		1.33	5.00	4.40	.53
Behaviour based WFC		1.00	3.33	1.57	.46
Psychological based WFC		1.00	5.00	4.20	.80
Work to family conflict (Overall)		2.78	5.00	4.30	.39
Time based FWC	Family to work conflict	2.00	5.00	4.54	.57
Strain based FWC		1.00	5.00	4.09	.82
Behaviour based FWC		1.00	3.00	1.56	.53
Psychological based FWC		1.33	5.00	4.44	.63
Family to work conflict (Overall)		3.00	5.00	4.36	.39
Job satisfaction	Outcome of Work family conflict	1.00	5.00	4.43	.65
Family satisfaction		1.33	5.00	4.35	.66

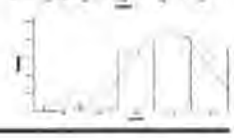
Source: Survey data

Predicting variables of work family conflict

Work demand

Work demand was measured using three items where respondents asked to indicate the extent of their agreement on the items using a five point likert scale with response choices ranging from 1 (strongly disagree) to 5 (strongly agree). The reported mean score was 3.95 (*SD*=.79) indicating on average respondents agreed on all statements. The respondents' responses on each three item are presented in table 4.11.

Table 4.11: Respondents' responses on level of work demand

Work demand			Strongly disagree	Disagree	Uncertain	Agree	Strongly agree	
Items	*M*	*SD*	%	%	%	%	%	Normality curve
I never seem to have enough time to get everything done at work	3.95	.76	2	4	10	66	18	
I feel like I have a lot of work demand	4.03	.87	2	3	15	50	30	
I have a lot of responsibility at work	3.88	.99	4	1	28	36	31	

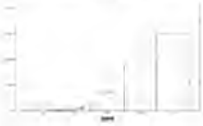
Source: Survey data

As can be seen in table 4.11, albeit 10% -15% of respondents were uncertain on the first two statements and 28 % on third statement, the majority of respondents agreed on all three statements. However, it is fair to say that the majority of respondents experienced high levels of work demand. Moreover, the average work demand found was greater than Boyar et al. (2008) found in the USA (*M*=3.78).

Family demand

Family demand was measured using three items where respondents asked to indicate the extent of their agreement on the items on a five point likert scale. The mean score was 4.29 (*SD*=.70) indicating on average respondents agreed on all statements. The respondents' responses on each three item are presented in table 4.12.

Table 4.12: Respondents' responses on family demand

Family demand Items	*M*	*SD*	Strongly disagree %	Disagree %	Uncertain %	Agree %	Strongly agree %	Normality curve
I never seem to have enough time to get everything done at home	4.31	.72	1	1	5	51	42	
I feel like I have a lot of family demand	4.35	.82	1	1	13	32	53	
I have to work hard on family related activities	4.22	.89	1	1	20	30	48	

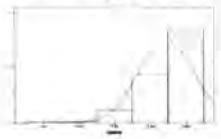
Source: Survey data

As can be seen in table 4.12, only a few respondents were not agreed on all statements (2%) however, certain numbers of respondents were uncertain. Of uncertain responses, the greatest numbers (20%) were found on the last item "I have to work hard on family related activities". Overall, the majority of respondents agreed with all three statements and consequently, it can be concluded that most respondents experienced high levels of family demand. Moreover, average family demand found to be greater in comparison with Boyar et al. (2008)'s study in the USA (M=3.07).

Work support

Work support was measured using six items, the first two items were taken from previous studies (Anderson, Coffey and Byerly, 2002) and the remaining four developed by the researcher reflect collectivist cultural characteristics found in the stage one preliminary study. On average, respondents received high levels of work support (M=4.37, SD=.58) reflecting the fact that personal relationship more important than task as discussed in p.3. The responses on each six item are presented in table 4.13.

Table 4.13: Respondents' responses on level of work support

Work support Items	*M*	*SD*	Strongly disagree %	Disagree %	Uncertain %	Agree %	Strongly agree %	Normality curve
My supervisor is supportive when I have a work problem	4.43	.69	0	2	6	40	52	
My supervisor accommodates me when I have family or personal business to take care of—for example, medical appointments, meeting with child's teacher, etc.	4.51	.69	1	1	5	33	60	
I feel my supervisor is like a family member & understands my family demands	4.09	.61	1	1	8	69	21	
My supervisors usually attend my family events such as marriage, birthday, funeral etc	4.21	.66	1	2	7	58	32	
My colleagues are supportive when I have a work problem	4.50	.72	1	1	5	33	60	
My colleagues usually attend my family events such as marriage, birthday, funeral etc	4.46	.78	1	1	8	31	59	

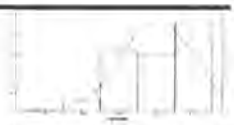
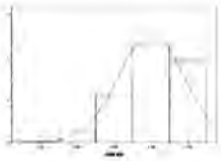
Source: Survey data

Almost 90% of respondents agreed with all statements indicating the high levels of work support as would be expected in collectivist society like Sri Lanka. The level of work support is greater than Boyar et al (2008) found in the USA, however the items used to measure work support were different in both studies as aforementioned.

Family Support

Family support was measured using four items, two of which were originally developed by King et al. (1995) (the first two items in table 4.14) and two items were developed by the researcher to reflect the nature of collectivist culture. On average, respondents received high levels of family support (M = 3.98, SD =.85) reflecting the fact of extended family support. The respondents' responses on each four item are presented in table 4.14.

Table 4.14: Respondents' responses on family support

Family support Items	*M*	*SD*	Strongly disagree %	Disagree %	Uncertain %	Agree %	Strongly agree %	Normality curve
My family members do their fair share of household chores	4.02	.96	1	5	27	26	41	
If my job gets very demanding, someone in my family will take on extra household responsibilities	4.04	.95	1	4	27	27	41	
Extended family members (parents or spouse parents/brother in law/sister in law etc) support in doing routine household chores	3.85	.94	1	11	14	50	24	
My relative supports looking after my children	4.00	.90	1	6	20	40	33	

Source: Survey data

As can be seen in table 4.14, the majority of respondents agreed on the two new items reflecting collectivist cultural characteristics in comparison with the first two items, developed in individualist cultures. For instance, the vast majority of respondents agreed that the extended family members provide support to meet family demand, however 12 % of them disagreed indicating that in some cases extended family members increase demand for dependents' care. Overall, respondents received high levels of support which is greater than Boyar et al. (2008) found in the USA, however, the measurement used to gauge family support was different in both studies as aforementioned.

Gender role ideology

Traditional gender roles dictate that work is for men and domestic responsibilities for women (e.g., Gutek, Searle and Klepa, 1991; Denton, 2004). Although more gender egalitarianism is apparent in developed countries, male dominance and patriarchy are prevalent in Sri Lanka (e.g., Kailasapathy, Kraimer and Metz, 2014). A series of four questions concerning gender roles were asked to establish the extent to which respondents supported traditional gender roles. The results supported its presence at a high level (M=4.00, SD=.81). The table 4.15 summarises the responses to the four statements.

Table 4.15: Respondents' responses on level of gender role ideology

GRI Items	*M*	*SD*	Strongly disagree %	Disagree %	Uncertain %	Agree %	Strongly agree %	Normality curve
A woman should not expect to have the same freedom as a man	4.33	.83	1	1	17	27	54	
A husband should earn more money than his wife	4.18	.90	1	1	25	25	48	
A working mother can have just as good a relationship with her children as a mother who does not work.	3.90	.96	1	6	28	32	33	
Even if the wife works outside the home, the husband should be the main breadwinner and the wife should carry the responsibility for the home and children.	3.61	.89	1	11	30	44	14	

Source: Survey data

The majority of respondents agreed on all statements, although a significant minority were uncertain. 81 % of respondents agreed the existence of patriarchy (item 1, table 4.15) and 73% of respondents agreed with the statement that a man should earn more money than his wife. The relatively high number of "uncertain" responses might be attributed to the sample being taken from a higher status occupation and the number of female respondents who were the main earner.

Work to family conflict (WFC) and family to work conflict (FWC)

Results revealed that respondents on average, experienced high levels of WFC (M=4.36, SD=0.39). Of WFC, respondents experienced a greater amount of strain based WFC (M=4.40), followed by time based WFC (M=4.30), and psychological based WFC (M=4.20). There was little evidence of the existence of behaviours based WFC (M=1.57, table 4.10). The behaviours based WFC was measured three items and responses on each items summarised in table 1 (appendix C). Less than 1% of respondents agreed on the first two statements and less than 8% of respondents agreed on the third statement. This level of disagreement indicates a virtual absence of behavioural based WFC in the sample. Moreover, confirmatory factor analysis (CFA) did not support construct validity and predict validity of the behavioural based WFC. Thus, behaviours based WFC was discarded which is consistent with Kailasapathy, Kraimer and Metz (2014) as discussed in chapter 2 (p.13)

Moreover, results revealed that respondents on average, also experienced high level of family to work conflict (M=4.30, SD=0.39). Of FWC, respondents experienced greater time based FWC (M=4.54), followed by psychological based FWC (M=4.44), and strain based FWC (M=4.09). There was little evidence of the existence of behaviour based FWC (M=1.56) and the similar pattern was observed as in behaviour based WFC. The greater level of WFC and FWC in Sri Lanka, is consistent with previous cross cultural study among collectivist and individualist nations. For instance, the greater amounts of WFC and FWC observed among Taiwanese than British (e.g., Lu et al., 2006), and of late, WFC and FWC were greater among the Indian than Spanish and Peruvian (Agarwala et al., 2014).

Outcome variables

Job satisfaction

Job satisfaction was measured using three items with five point likert scales ranging from 1 (strongly disagree) to 5 (strongly agree). On average, respondents revealed high levels of job satisfaction (M=4.43, SD=.65). The table 4.16 summarises the respondents' responses on each three item.

Table 4.16: Respondents' responses on job satisfaction

Job satisfaction Items	*M*	*SD*	Strongly disagree %	Disagree %	Uncertain %	Agree %	Strongly agree %	Normality curve
All in all I am satisfied with my job	4.39	.71	1	1	8	39	51	
In general, I like working here	4.50	.69	1	1	7	31	60	
In general, I don't like my job	4.38	.80	56	27	15	1	1	

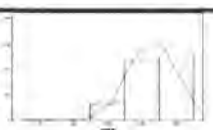
Source: Survey data

As can be seen in above table, majority of the respondents agreed on the first two statements and disagreed on the last statement owing to the negative item. Greater numbers of respondents were uncertain (15%) on the third item in comparison with other items that might be attributed to the nature of job they held. Overall, responses indicated of high level of job satisfaction.

Family satisfaction

Family satisfaction was measured using three items with five point likert scales. On average, respondents revealed high levels of family satisfaction (M=4.35, SD=.66). The table 4.17 summarises the respondents' responses on each three item.

Table 4.17: Respondents' responses on level of family satisfaction

Family satisfaction Items	*M*	*SD*	Strongly disagree %	Disagree %	Uncertain %	Agree %	Strongly agree %	Normality curve
All in all, I am satisfied with my family life	4.31	.73	1	1	12	41	45	
In general, I like being a member of family	4.34	.81	1	2	14	31	53	
Sometimes I am glad to go to work to get away from the demands of the family	4.39	.78	55	31	11	2	1	

Source: Survey data

As can be seen in table, more than 80% of respondents agreed on the first two statements and disagreed on last statement owing to the negative item. Further, 11% to 14% of respondents were uncertain on all statements suggesting neither satisfied nor dissatisfied on their family.

Overall, results have found high levels of work demand, family demand, WFC, FWC, work support, family support, job satisfaction and family satisfaction. As discussed earlier, the higher score on gender role ideology implies the presence of traditional gender role ideology. The nature of relationships between all these variables was discussed in chapter 6. The next section discusses the organisational and individual levels difference in work family conflict and its predictors and outcome variables.

4.3 Analysis of difference

Gender, income, spousal status, supervisor status, marital status, education and age groups differences in work family conflict, and its predictors and outcome variables

As explained in chapter 2 (p.12), many research scholars were in agreement with the existence of three forms of work family conflict with both directions in the West (e.g., Kelloway, Gottlieb and Barham, 1999; Carlson, Kacmar and Williams, 2000). However, the existence of such forms of work family conflict in nations with collectivist cultures has not been clearly established in previous studies (e.g., Kailasapathy, Kraimer and Metz, 2014). In examining the prevalent nature of work family conflict, many seminal studies have confirmed that men experienced greater work to family conflict than women and women experienced greater family to work conflict than men (e.g., Gutek, Searle and Klepa, 1991; Lundberg, Mardberg and Frankenhaeuser, 1994; Nielson, Carlson and Lankau, 2001). Thus, when researching the prevalent forms of work family conflict in Sri Lanka and the factors determining it, examining gender differences is essential.

As discussed earlier, women, ceteris paribus, are expected to experience a greater amount of family demand and family to work conflict that that of male counterparts where there is traditional gender role ideology. In a similar vein, men, ceteris paribus, would be expected to experience a greater amount of work demand and work to conflict than that of female counterparts.

An investigation of such significant gender differences was examined using independent sample *t*-test[1]. Since significant results are not providing meaningful effect per se, calculation of "size of effect" is highly recommended (Field, 2013) and consequently, Cohen's *d* was used to measure size of effect as group sizes were very discrepant (McGrath and Meyer, 2006). As a rule of thumb, the value of 0.20 is an indicative of small effect whilst 0.50 as an indicative of medium effect and 0.80 is of larger effect (Cohen, 1992).

Table 4.18 shows the mean differences on key variables; work/family demand, work family conflict and time spent on family and work by gender. It can be seen that in each case there were significant mean difference between men and women.

Table 4.18: Gender difference on work/family demand, work family conflict and time spent on family and work

Variables	Gender	*N*	df	Mean	*SD*	*SE*	*t*	Sig.	Cohen's *d*
Work demand	Male	333		4.13	.77	.04			
	Female	236	567	3.71	.76	.05	6.36	.00	.53
Family demand	Male	333		4.12	.71	.04			
	Female	236	567	4.54	.61	.04	-7.52	.00	.61
Work to family	Male	333		4.41	.36	.02			
conflict	Female	236	567	4.14	.38	.02	8.62	.00	.72
Family to work	Male	333		4.23	.39	.02			
conflict	Female	236	567	4.54	.33	.02	-10.48	.00	.86
Hours spent with	Male	333		2.26	1.46	.08			
children	Female	236	567	2.76	1.28	.08	-4.33	.00	.36
Hours spent with	Male	333		.56	.98	.05			
dependents	Female	236	567	.34	.78	.05	3.01	.00	.24
Working hours per	Male	333		43.58	2.23	.12			
week	Female	236	567	42.26	2.40	.16	6.67	.00	.57
Hours spent on	Male	333		3.06	.82	.04			
household chore	Female	236	567	3.31	.80	.05	-3.62	.00	.30

Source: Survey data

[1]In employing parametric statistics, it is assumed that variance is roughly equal; nonetheless there is a violation of equal variance assumed on a Levene's test where sample size is large (Field, 2013) explaining small differences in group can cause Levene's test to be significant. If Levene's test is not significant, the labelled "equal variances assumed" was read and conversely if significant "equal variances not assumed" was read.

Work/family demand and work family conflict

As expected, on average, male respondents experienced greater work demand (M=4.13, SE=.04) than females (M=3.71, SE=.05). The difference was significant t (567) = 6.36, $p< 0.01$; moreover, it did represent medium sized effect d =.53. And thus the hypothesis (H_{3g}) that work demand will be significantly higher among men than that of women was supported. As to family demand, female respondents reported a greater amount (M=4.54, SE=.04) than males (M=4.12, SE=.04) indicating significant difference t (567) = -7.52, $p< 0.01$ with medium to large sized effect d =.61. And thus hypothesis (H_{4f}) that family demand will be significantly higher among women than that of men was supported. Furthermore, regarding work family conflict, males reported greater amount of work to family conflict (M=4.41, SE=.02) than that of female counterparts (M=4.14, SE=.02) whilst female reported greater amount of family to work conflict (M=4.54, SE=.02) than male counterparts (M=4.23, SE=.02). The difference was found to be significant between male and female for both work to family conflict t (567) = 8.62, $p< 0.01$ and family to work conflict t (567) = -10.48, $p< 0.01$ with medium to large sized effect for work to family conflict d = .72 and large sized effect for family to work conflict d = .86. Thus the hypothesis (H_{2i}) of men will experience higher level of work to family conflict and women will experience higher level of family to work conflict was supported. The findings are consistent with previous studies in collectivist cultural nations (e.g., Hoobler, wayne and lemmon, 2009; Canivet et al., 2010; Kailasapathy, Kraimer and Metz, 2014). However, this is the first to be carried out in a higher status occupation in collectivist culture.

Analysis was extended to see gender difference on three forms of work to family conflict and family to work conflict and the results are depicted in table 4.19.

Table 4.19: Gender difference among six dimensions of work family conflict

	Gender	N	df	Mean	SD	SE	t	Sig.	Cohen's *d*
Time based WFC	Male	333		4.42	.59	.03			
	Female	236	567	4.13	.70	.05	5.31	.00	.46
Strain based WFC	Male	333		4.47	.50	.03			
	Female	236	567	4.31	.56	.04	3.44	.00	.29
Psychological based WFC	Male	333		4.34	.67	.04			
	Female	236	567	3.99	.92	.06	5.38	.00	.45
Time based FWC	Male	333		4.41	.60	.03			
	Female	236	567	4.73	.47	.03	6.86	.00	.57
Strain based FWC	Male	333		3.90	.86	.05			
	Female	236	567	4.35	.69	.04	-6.60	.00	.55
Psychological based FWC	Male	333		4.36	.71	.04			
	Female	236	567	4.54	.49	.03	-3.36	.00	.28

Source: Survey data

As can be seen in table 4.19, there are statistically significant gender differences on all measures. Males experienced greater time based work to family conflict (M=4.42) than females (M=4.13) and the difference was significant t (567) = 6.86, $p < 0.01$ with small to medium sized effect d =.46. And thus, hypothesis (H_{2a}) that men will experience higher levels of time based work to family conflict than women was supported. In a similar vein, strain based work to family conflict was greater among males (M= 4.47) than that of females (M=4.31) indicating significant different t (567) = 3.44, $p< 0.01$with small to medium sized effect d =.29. And thus, hypothesis (H_{2b}) that men will experience higher levels of strain based work to family conflict than women was supported. As to psychological based work family conflict, males experienced a greater amount of work to family conflict (M=4.34) than females (M=3.99) and the difference was significant t (567) = 5.38, $p< 0.01$with small to medium sized effect d =.45. And thus, hypothesis (H_{2d}) of men will experience higher level of psychological based work to family conflict than women was supported.

As to family to work conflict females experienced a greater amount of family to work conflict (M= 4.41) than males (M= 4.73) and the difference was significant t (567) = 6.86, $p < 0.01$ with medium to large sized effect d =.57. And thus, hypothesis (H_{2e}) that women will experience higher levels of time based family to conflict than men, was supported. Similarly, strain based family to work conflict was greater among females (M= 4.35) than males (M=3.90) indicating significant different t (567) = -6.60, $p< 0.01$with medium to large

sized effect d =.55. And thus, hypothesis (H_{2f}) that women will experience higher level of strain based family to conflict than men, was supported. As to psychological based work family conflict, females experienced greater family to work conflict (M=4.54) than males (M=4.36) and the difference was significant t (567) = -3.36, p< 0.01with small to medium sized effect d=.28. And thus, hypothesis (H_{2h}) of women will experience higher level of psychological based family to work conflict than men, was supported. Unfortunately, there are no previous studies that investigated these dimensions of work family conflict separately to with which to compare these findings.

Working hours

Many studies have found an association between working hours and work family conflict as discussed in chapter 2 (p.24) (e.g., Russell, O'Connell and McGinnity, 2009), and such hours are different between men and women (e.g., Cousins and Tang, 2004). This research found that working hours per week were greater for males (M = 43.58, SE = .12) than that of female counterparts (M = 42.26, SE = .16) and the difference between male and female's working hours was significant t (567) = 6.67, p< 0.01 representing medium to large sized effect d = .57. Males' working hours was similar as found in the UK (43.5), although greater than some other developed world such as the Netherlands (40.5) and the Sweden (41.7) (Cousins and Tang, 2004). On the other hand, females' working hours were much longer in comparison with the UK at 29.1, the Netherlands at 26 and the Sweden at 36.5 (Cousins and Tang, 2004).

Gender role ideology

In prevailing traditional gender role ideologist culture, time spent on family matters would be higher among women than men. This study found that on average, women spent more hours with children (M=2.76, SE=.08) than men (M=2.26, SE=.08) where the difference was significant t (567) = -4.33, p< 0.01 with small to medium sized effect d = .24. A similar pattern has been observed in spending time on household chores where females spent a greater amount of time (M=3.31, SE=.05) than males (M=3.06, SE=.04), the difference was significant t (567) = -3.62, p< 0.01 with small to medium sized effect d = .30. In comparison to hours spent on children and household chores, respondents spent trivial amounts of time looking after dependents, but it was greater for men (M=0.56, SE=.05) than women (M=0.34, SE = .05) and the difference was significant t (567) = 3.01, p< 0.01 indicating small sized effect d = .24.

Differences of level of income on work family conflict with its predictors and outcome variables

This section discusses how the levels of income[2] influence on work/family demand, work/family support, job/family satisfaction, work to family conflict and family to work conflict. The results of independent sample *t*-test are presented in table 4.20.

Table 4.20: Differences in terms of levels of income

	Income	N	df	Mean	SD	SE	t	Sig.	Cohen's *d*
Work demand	Low Level	179		3.73	.91	.07			
	High Level	390	567	4.06	.71	.04	-4.33	.00	.36
Family demand	Low Level	179		4.29	.72	.05			
	High Level	390	567	4.29	.70	.04	-.02	.99	.00
Family support	Low Level	179		3.91	.86	.06			
	High Level	390	567	4.01	.84	.04	-1.27	.20	.11
Work support	Low Level	179		4.36	.55	.04			
	High Level	390	567	4.37	.60	.03	-.10	.92	.00
Job satisfaction	Low Level	179		4.49	.61	.05			
	High Level	390	567	4.40	.66	.03	1.68	.09	.14
Family satisfaction	Low Level	179		4.37	.68	.05			
	High Level	390	567	4.33	.66	.03	.64	.52	.05
Work to family conflict	Low Level	179		4.22	.41	.03			
	High Level	390	567	4.34	.38	.02	-3.38	.00	.28
Family to work conflict	Low Level	179		4.37	.41	.03			
	High Level	390	567	4.35	.39	.02	.43	.67	.04

Source: Survey data

As can be seen from table 4.20, respondents with high level of income experienced greater work demand ($M = 4.06$, $SE = .04$) than those with low level of income ($M = 3.71$, $SE = .07$) and the difference was statistically significant $t\ (567) = -4.33$, $p < 0.01$ with small to medium sized effect $d = .36$. As expected, work to family conflict was high ($M = 4.34$, $SE = .02$) among the respondents with high level of income than those with low level of income ($M = 4.22$, $SE = .03$) and the difference was statistically significant $t\ (567) = -3.38$, $p < 0.01$ with small to medium sized effect $d = .28$. The results are consistent with Boyar et al.'s (2008) study in the USA. Moreover, results did not reveal any significant income levels differences on other

[2]Income was grouped into low level and high level. Low level contains income less than Rs 40 000 and over such amount treated as high level.

variables viz., family demand, family support, work support, family satisfaction, job satisfaction and family to work conflict $p > 0.05$. However, as work demand and work to family conflict were greater among high income earners and, ipso facto if we assume job satisfaction is higher for low income earner, the proposition becomes statistically significant with one tailed test $t(567) = 1.68, p < 0.05$ (one tailed .09/2 = p =.045).

Differences of dual earners (spousal working) on work family conflict with its predictors and outcome variables

Studies have found that spousal working increases work family conflict (e.g., Kailasapathy, Kraimer and Metz, 2014). The findings for this study on the impact of spousal working on work family conflict and its predictors and outcome variables are shown in table 4.21.

Table 4.21: Differences in terms of spousal working status

	Spouse working?	*N*	*df*	Mean	*SD*	*SE*	*t*	Sig.	Cohen's *d*
Family demand	Yes	300		4.36	.69	.04			
	No	172	470	4.17	.76	.06	2.86	.00	.26
Family support	Yes	300		4.00	.86	.05			
	No	172	470	3.91	.83	.06	1.12	.26	.10
Family satisfaction	Yes	300		4.29	.67	.04			
	No	172	470	4.40	.61	.05	-1.81	.07	.17
Work to family conflict	Yes	300		4.26	.39	.02			
	No	172	470	4.36	.39	.03	-2.76	.01	.25
Family to work conflict	Yes	300		4.41	.40	.02			
	No	172	470	4.26	.39	.03	3.97	.00	.37

Source: Survey data

As can be seen in table 4.21, of married respondents, family demand was greater among respondents in a dual earner family (M=4.36, SE=.04) than that of a single earner family (M=4.17, SE=.06) and the difference was statistically significant $t(470) = 2.86, p < 0.01$ showing small to medium sized effect d=.26. As expected, family to work conflict was found greater among dual earner families (M=4.41, SE=.02) than those in single earner families (M=4.26, SE=.03) and the difference was significant $t(470) = 3.97$ $p < 0.01$ with small to medium sized effect d =.37. However, respondents in single earner families reported greater work to family conflict (M=4.36, SE=.03) than respondents in dual earner families (M=4.26, SE=.02) indicating significant difference $t(470) = -2.76$ $p < 0.01$ with small sized effect d =.25. This might be attributed to long working hours and greater responsibilities at higher status occupation. Family support and family satisfaction were not significantly different in

terms of spousal working status. However, if we assume that family satisfaction is greater among respondents of single earner family, the proposition can undoubtedly be supported that family satisfaction was greater among respondents in single earner families (M=4.40, SE=.05) than that of dual earner families (M=4.29, SE=.06). The difference was significant t (470) = -1.81 $p < 0.05$.

Differences of supervisor status on work family conflict with its predictors and outcome variables

In determining work demand, supervisory status would be expected to positively influence on it (e.g., Boyar et al., 2008). It is axiomatic that employees who are in supervisory status are more accountable than others in non supervisory status; nonetheless, the influences of supervisory status on work family variables were not previously established in collectivist cultural nations. Table 4.22 summarises the results of the independent sample t test. As can been seen in table, on average, reported amount of work demand was greater among respondents holding supervisory position (M=4.08, SE=.06) than that of not supervisory position (M=3.81, SE=.06). The difference was significant t (567) = -4.08, $p < 0.01$ with small to medium sized effect d =.35. Moreover, hours working per week was also greater for respondents hold supervisory status (M=43.81, SE=.13) than others on non supervisory status (M=42.18, SE=.14) and the mean difference was statistically significant t (567) = -8.59, $p<0.01$ with medium to large sized effect d =.72. Moreover, respondents held supervisory status experienced greater amount of work to family conflict (M=4.35, SE=.02) than respondents on non supervisory status (M=4.25, SE=.03) indicating significant difference t (567) = -3.06, $p < 0.01$ with small to medium sized effect d =.26. However, family to work conflict did not show any significant differences in terms of supervisory positions $p > 0.05$.

Job satisfaction and family satisfaction were greater among non supervisory respondents (M=4.50, SE=.04; M=4.42, SE=.03) than respondents on supervisory status (M=4.36, SE=.04; M=4.28, SE=.03) and the differences were significant t (567) = 2.72, $p< 0.05$; t (567) = 2.57, $p < 0.05$ with having both small sized effect d =.23 and d =.22 respectively. Moreover, supervisory status did not make any significant differences on work and family support.

Table 4.22: Differences in terms of supervisory status (SS)

	SS	N	df	Mean	SD	SE	t	Sig.	Cohen's *d*
Work demand	No	272		3.81	.92	.06			
	Yes	297	567	4.08	.63	.04	-4.08	.00	.35
Family support	No	272		3.96	.84	.05			
	Yes	297	567	3.99	.85	.05	-.476	.83	.04
Work support	No	272		4.37	.60	.04			
	Yes	297	567	4.37	.57	.03	-.070	.94	.01
Job satisfaction	No	272		4.50	.58	.04			
	Yes	297	567	4.36	.69	.04	2.72	.01	.23
Family satisfaction	No	272		4.42	.63	.04			
	Yes	297	567	4.28	.69	.04	2.57	.01	.22
Working hours per	No	272		42.18	2.30	.14			
week	Yes	297	567	43.81	2.21	.13	-8.59	.00	.72
Work to family conflict	No	272		4.25	.42	.03			
	Yes	297	567	4.35	.35	.02	-3.06	.00	.26
Family to work conflict	No	272		4.33	.41	.02			
	Yes	297	567	4.38	.38	.02	-1.34	.18	.11

Source: Survey data

Differences of marital status on work family conflict with its predictors and outcome variables

Previous studies found that marital status determines family demand and thus exacerbating work family conflict (e.g., Voydanoff, 1988; Boyar et al., 2008). One way ANOVA was used to find out whether the variables' means are different in terms of marital status. As the number of respondents on each group of marital status[3] were very different, Hochberg's GT2 post hoc test was employed and in addition, Games-Howell procedure was also employed in support of Hochberg's GT2 test as population variances were unequal (Field, 2013).

Generally, results of the Levene's test would suggest the homogeneity of variance; however, simultaneously Brown-Forsythe *F* and Welch's *F* test was also performed as the homogeneity of variance assumption was broken. Moreover, omega squared (ω^2) was used to explain measure of effect size where value of .01 indicates small sized effect whilst value .06 and .14 are medium and large sized effect respectively (Kirk, 1996). Result of ANOVA is presented in table 4.23.

[3] Marital status was grouped into single (*N*=61), married (*N*=472), widow (*N*=29) and widower (*N*=7).

Table 4.23: ANOVA Marital status

		Sum of Squares	df	Mean Square	F	Sig.	(ω^2)
Family demand	Between Groups	1.286	3	.429	.864	.46	
	Within Groups	280.369	565	.496			
	Total	281.654	568				.00
Hours spent with children	Between Groups	422.750	3	140.917	113.90	.00	
	Within Groups	699.021	565	1.237			
	Total	1121.772	568				.37
Hours spent with dependents	Between Groups	9.691	3	3.230	3.97	.01	
	Within Groups	460.021	565	.814			
	Total	469.712	568				.02
Hours spent on household chore	Between Groups	8.303	3	2.768	4.20	.01	
	Within Groups	372.497	565	.659			
	Total	380.800	568				.02
Work to family conflict	Between Groups	.252	3	.084	.55	.65	
	Within Groups	86.311	565	.153			
	Total	86.563	568				.00
Family to work conflict	Between Groups	.527	3	.176	1.13	.34	
	Within Groups	87.689	565	.155			
	Total	88.216	568				.00

Table 4.24: Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Family demand	.552	3	565	.647
Hours spent with children	24.858	3	565	.000
Hours spent with dependents	21.392	3	565	.000
Hours spent on household chore	.276	3	565	.843
Work to family conflict	1.148	3	565	.329
Family to work conflict	.599	3	565	.616

Source: Survey data

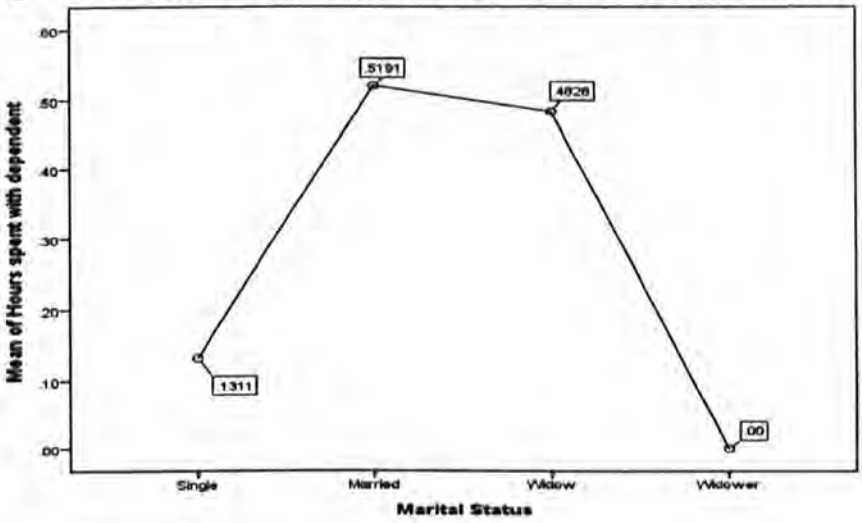
Results revealed that family demand across marital status was different indicating that reported mean value was greater for widow (*M*=4.46, *SE*=.11), followed by married (*M*=4.29, *SE*=.33), single (*M*=4.23, S*E*=.08) and widower ((*M*=4.10, *SE*=.27). Since Levene's test was not significant *P* >.05, the assumption of equal variance assumed was supported and hence, Hochberg's GT2 was used to find out whether the means difference are significant or not. As can be seen in table, there was not enough evidence to support the effect of marital status on

family demand F (3,565) =.864, $p > 0.05$, $\omega = .00$ and Hochberg's GT2 was not significant at all level of marital status.

It was found that there was a significant effect of marital status on hours spent with children F (3,565) =113.90, $p < 0.01$ indicating large sized effect $\omega = .61$. As can be seen in table 4.23, Levene's test was significant and consequently, Games-Howell procedure was used. Hours spent with children was greater for widow (M=3.19, SE=.14), followed by widower (M=2.86, SE=.50) and married (M=2.74, SE=.06). Nonetheless, Games-Howell procedure, the difference was only statistically significant between married and widow p <0.05.

In case of dependent care, married respondents spent longer hours (M=.52, SE=.04) than widow (M=.48, SE=.16) and single (M=.13, SE=.08) respondents. Significant effect of respondent's marital status on hours spent on dependent care was found F (3,565) =3.97, $p < 0.05$ indicating small to medium sized effect $\omega = .14$. Levene's test was significant and thus, Games-Howell procedure was used. Significant results were found between single-married, married –widower and widow –widower $p < 0.05$. The pattern of time spent on dependent care depicted in below figure 4.2

Figure 4.2: Pattern of time spent on dependent care by marital status

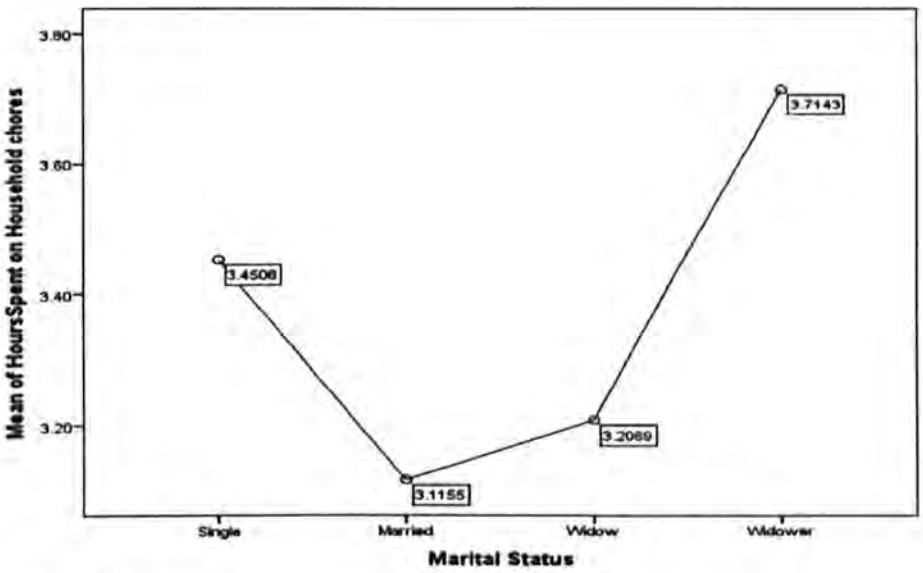


Source: Survey data

Interesting results were found on pattern of time spent on household chores. Longer hours on household chores associated with widower (M=3.71, SE = .36) followed by single (M=3.45, SE = .09), widow (M=3.22, SE = .14) and married (M=3.12, SE = .04). Results showed that there was a significant effect of marital status on hours spent with household chores F (3,565) = 4.20, $p < 0.05$ indicating small to medium sized effect $\omega = .14$. Since Levene's test was not significant P >.05, the assumption of equal variance assumed was supported and

hence, Hochberg's GT2 was used. The results suggested that the difference was only significant between single-married on the time spent on household chores $p < 0.05$. This might be attributed to the fact that respondents with single status are only spending their time on doing household chores not spending on children or fewer engagement with dependent's care. Moreover, in a married family, husband and wife might be sharing household chores. The pattern of time spent on household chores is depicted in below figure 4.3.

Figure 4.3: Pattern of time spent on household chores by marital status



Source: Survey data

Greater amount of family to work conflict was experienced by respondents who are widow (M=4.47, SE = .07), followed by married (M=4.36, SE = .02), widower (M=4.35, SE = .14) and single (M=4.30, SE = .04). Notwithstanding, the difference among marital status on family to work conflict was not significant F (3,565) =1.13, $p < 0.05$, ω = .00. In a similar vein, difference among marital status on work to family conflict was not significant F (3,565) =.55, $p < 0.05$, ω = .00.

Varying educational qualifications of respondents were examined to establish its effect on work related variables and robust test of one way ANOVA was performed. High levels of qualification attainment of the respondents associated with greater amount of work demand; nonetheless, the results were not statistically significant at different levels of educational qualification attainment on work demand F (5,563) =1.27, $p > 0.05$, ω = .05. Similarly, varying educational qualifications did not reveal any significant relationship on work to family conflict and family to work conflict $P > 0.05$.

Respondents were asked to indicate their age in pre-empt groups consisting of five scales; 18-25, 26- 35, 36- 45, 46- 55 and over 55. One way ANOVA test was employed to find out difference between age groups and family related variables such as family demand, family satisfaction and family to work conflict. Notwithstanding, the results of the analysis did not provide any significant differences between age groups and family related variables $P > 0.05$.

4.4 Summary

The analysis showed that the survey respondents were broadly representative of employees in Sri Lanka in terms of age, gender and marital status, and also typical of those employed in the banking sector. Working in a bank in Sri Lanka is a higher status occupation with above average earnings, and higher levels of qualifications and responsibility. The study found that the average size of household was 5.3 consisting of respondents, respondents' wives and their children, parents, parents in law and siblings indicating the prevalence of the extended family structure in Sri Lanka. Albeit some of the extended family members caused an extra burden in the form of dependent care in a small number of cases, but the majority of them delivered a significant amount of support in household chores and childcare and thus high levels of family support were found.

The average of working hours per week was 43.03. Albeit men's working hours were significantly greater than women's working hours, women's working hours were greater in comparison with developed countries such as the UK, the Netherlands and the Sweden. Women carried out the majority of household chores, childcare and dependent care reflecting the prevalence traditional gender role ideology. The majority of respondents agreed that a man should earn more money than his wife and that she should take primary responsibility for the family. Overall, this study has found that men experienced higher level of work demand whereas women experienced a higher level of family demand. Moreover, the level of work demand and family demand were greater than studies found in the West.

Respondents with a high level of income experienced greater work demand and WFC than those at lower income levels. Family demand and FWC was greater among respondents in a dual earner family than that of single earner. However, respondents in single earner families reported greater WFC than respondents in dual earner families. Respondents with supervisory status experienced greater amounts of WFC than respondents with non supervisory status however, FWC did not show any significant differences in terms of supervisory positions. Marital status and age group did not cause any significant differences in family demand,

WFC and FWC. However, results have found that widows spent significantly greater amounts of time on children than those who were married. Married respondents spent significantly greater amounts of time on dependents than single, and contrary to popular belief, single respondents spent significantly more time on household chores than married. Respondents' experience of work demand, WFC and FWC were not statistically significantly different in terms of educational qualification.

This study has found high levels of WFC, of which respondents experienced greater amounts of strain based WFC, followed by time based WFC and psychological based WFC. Results further found that respondents experience high levels of FWC, of which respondents experienced greater time based FWC, followed by psychological based FWC, and strain based FWC. Men experienced higher levels of WFC, and a pattern observed on all three forms of WFC (time/strain/psychological). Women, however, reported higher levels of FWC across all three forms of FWC (time/strain/psychological). However, the existence of behaviour based both WFC and FWC found in the West were not confirmed (see chapter 5). Therefore, hypotheses related to the behavioural form of work family conflict were discarded.

Despite the support of the extended family and higher levels of mutual support in the workplace, the findings suggest the level of work family conflict was higher than that found in the West. However, this study employed a new scale for measuring work family conflict so the comparison may not be exact.

One explanation may be that work life policies typically found in Europe and most developed countries were not present in banking organisations in Sri Lanka. The vast majority of jobs are full-time and women work much longer hours. There appears to be little scope for using flexible working as a way of achieving work life balance.

A summary of the findings in terms of the hypothesis tested is provided in table 4.25. The next chapter discusses the assessment of the model of work family conflict.

Table 4.25: Summary of hypothesis testing

Hypothesis	Description	Decision
H_{2a}	Men will experience a higher level of time based work to family conflict than women.	Supported
H_{2b}	Men will experience a higher level of strain based work to family conflict than women.	Supported
H_{2C}	Men will experience a higher level of behaviour based work to family conflict than women.	Discarded
H_{2d}	Men will experience a higher level of psychological based work to family conflict than women.	Supported
H_{2e}	Women will experience a higher level of time based family to work conflict than men.	Supported
H_{2f}	Women will experience a higher level of strain based family to work conflict than men.	Supported
H_{2g}	Women will experience a higher level of behaviour based family to work conflict than men.	Discarded
H_{2h}	Women will experience a higher level of psychological based family to work conflict than men.	Supported
H_{2i}	Men will experience a higher level of work to family conflict and women will experience a higher level of family to work conflict.	Supported
H_{3g}	Work demand will be significantly higher among men than that of women.	Supported
H_{4f}	Family demand will be significantly higher among women than that of men.	Supported

CHAPTER FIVE

AN ASSESSMENT OF THE MODEL OF WORK FAMILY CONFLICT

5.0 Chapter overview

The study's findings reported so far have confirmed the existence of WFC and noted some differences in its nature and level. This chapter is concerned with the extent to which Carlson, Kacmar and Williams' (2000) widely used work family conflict questionnaire developed in individualist culture is valid for investigating WFC in Sri Lanka, and identifies an additional psychological dimension of work family conflict. Factor analysis and confirmatory factor analysis are employed to identify the main dimensions of the construct. Initially, factor analysis is used to examine underlying assumptions, assess the suitability of the data, for factor extraction and rotation, and to decide which items to retain. Following the factor analysis, a confirmatory factor analysis is performed to confirm the model fit and the psychometric properties. In the penultimate section, the predictive validity of the current model is assessed. The chapter ends with a brief summary.

5.1 Factor analysis

As discussed in chapter 2 (p.13), prevailing work family conflict models and theories were mainly developed in affluent individualist nations and the appropriateness of their use in collectivist cultural contexts has not been explored. Therefore, the study set out to validate the six factor WFC model of Carlson, Kacmar and Williams' (2000) in order to assess its applicability in a collectivist cultural nation such as Sri Lanka, and to introduce a psychological dimension into the existing measure. Exploratory factor analysis therefore was used for identifying the structure among a set of variables as recommended by (Hurley et al., 1997; Hair et al., 2010; Field, 2013).

Work family conflict is a latent variable and measured by 27 indicators[1], of which 18 were taken from Carlson, Kacmar and Williams' (2000) work family conflict scale and the remaining 9 derived from the exploratory study. All indicators were measured using 5 point Likert scale, 1 indicating "strongly disagree" whilst 5 indicating "strongly agree" (see appendix A).

[1]Variables that cannot be directly observed/ measured called latent variables but they can be measured by means of observables variables, called "manifests" or "indicators" (scale items).

5.1.1 Underlying assumptions

In conducting multivariate analysis, examining the underlying statistical assumptions of normality, homoscedasticity and linearity are important. Generally, outliers portend a nonnormal sample, although not all nonnormal samples contain outliers (Yuan, Marshall and Bentler, 2002). Albeit a few variables had outliers, they were considered as "good observation"[2] owing to the five point likert scale measurement. The actual deviation of the data from normality can be measured using number of methods. Of the most commonly used tests, skewness and Kurtosis, the Kolmogorov-Smirnov test and Shapiro-Wilk test (table 2 and 3 in appendix C) are not recommended for large samples, in such case, visual examination of the shape of the distribution is strongly recommended (e.g., Tabachnick and Fidell, 2007; Hair et al., 2010; Field, 2013).

The most prevalent, reliable approach for testing normality is the visual examination of P-P (probability-probability) plot[3] (Hair et al., 2010; Field, 2013) and this was applied to the data. As can be seen in figure 1 (appendix D), the values for all variables spread along/around the diagonal without substantial departures and subsequently, can be considered reasonably normally distributed.

Overall, increasing sample size has the effect of increasing statistical power by minimizing sampling error. For example, if size of the sample is 30 or less, departures from normality can have a substantial effect on results, nonetheless, if sample size is greater than 200 or more, the same detrimental impact effectively diminishes and may be negligible (Hair et al., 2010; Pallant, 2010; Field, 2013). Thus, the assumption of the normality is not always necessary but if found to be normally distributed would enhance the solution (Tabachnick and Fidell, 2007). In factor analysis, the underlying statistical assumptions of normality, homoscedasticity and linearity can affect the correlation and hence, it is recommended to assess factorability of the correlation matrix for robustness (Hair et al., 2010).

[2]It prevents "swamping effect" by treating outliers are good observation (Mavridis and Moustaki, 2008).

[3]P-P plot depicts the cumulative probability of a variable against the cumulative probability of a particular distribution (Field, 2013) and if the plotted data forms a straight diagonal line, the distribution is to be assumed to be normally distributed (Hair et al., 2010).

5.1.2 Assessment of the suitability of the data for factor analysis

Exploratory factor analysis primarily depends on correlation coefficients among the variables. The correlation coefficients are more sensitive to sample size and fluctuate from sample to sample. The correlation coefficients among the variables become less reliable in small samples than in large samples (Pallant, 2010; Field, 2013).

a. Sample size

Thus, many authors say: the larger, the better, although, there is little agreement among them regarding the minimum sample size. Different authors suggest the minimum requirement of sample size in terms of absolute cases, ratio of variables to participants, factor loadings and communalities.

Sample size with absolute cases and with ratio of variables to participants

As discussed in chapter 3 (p.47), this study has **good sample size** in terms of absolute cases ($N > 300$). As to ratio of variables to participants, the minimum sample size should be 270 as this study has 27 variables for factor analysis (27 x 10 = 270). Consequently, it is fair to say that this study has sufficient sample size (569 > 270) in terms of ratio of variables.

Sample size with factor loadings

Guadagnoli and Velicer (1988) suggest the requirement of minimum sample size in conjunction with the level of factor loading, if a factor has four or more loadings greater than 0.6, sample size would not be problematic but if factor has 10 or more loadings greater than 0.40, the sample size greater than 150 should be sufficient. However, minimum sample size should be at least 300 cases if factor loadings are fewer. Sample of 569 cases is thus statistically sufficient as to factor loadings recommendations.

Sample size with communalities

Interestingly, MacCallum et al. (1999) explained minimum sample requirements in terms of communalities. According to their view, less than 100 samples become perfectly adequate if all communalities are above 0.6, however sample size 100 to 200 becomes sufficient if communalities are with 0.5 ranges and in all other cases minimum sample size would be 500. This study therefore has adequate sample size as exceeding minimum sample of 500 and having all communalities above .50 (table 6 in appendix C).

In brief, this study has sufficient number of samples ($N = 569$) in terms of absolute cases, ratio of variables to participants, factor loadings and communalities.

b. Factorability of the correlation matrix

Assessing suitability of the data for employing factor analysis is of paramount important, depending on the strength of the intercorrelations among the variables, largely measured by the Kaiser-Meyer–Olkin (KMO) measures of sampling adequacy[4] and Bartlett's test of sphericity and the inspection of correlation coefficients (e.g., Hair et al., 2010; Pallant, 2010; Field, 2013). The results of the KMO and Bartlett's test are provided in table 5.1a.

Table 5.1a: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.680
Bartlett's Test of Sphericity	Approx. Chi-Square	8054.091
	df	351
	Sig.	.000

Value of KMO is .680 exceeding threshold of .60 indicating that the data are appropriate for employing factor analysis. Nonetheless, albeit KMO is greater than acceptable level, the guideline needs extending to each individual variable (Field, 2013).

The individual variable's KMO can be obtained from anti-image correlation matrix (diagonal elements: Table 4a in appendix C, highlighted), and if any variable found to be lower the level of acceptance (0.5) should be excluded from the factor analysis, one at a time, smallest is first (e.g., Hair et al., 2010). The KMO of Q 27 is .458 lowering the minimum range of acceptable level (0.5), and consequently, item Q27 was excluded from the analysis. After removal, the anti image correlation matrix was reproduced revealing none of the items was below the threshold level of 0.5 (table 4b in appendix C) and the KMO and Bartlett's Test are provided in table 5.1 b. A little improvement was observed in KMO.

Table 5.1b: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.685
Bartlett's Test of Sphericity	Approx. Chi-Square	7977.420
	df	325
	Sig.	.000

[4] Hutcheson and Sofroniou (1999) suggest that the value of KMO between 0.5 and 0.7 are mediocre, between 0.7 and 0.8 are good, between 0.8 and 0.9 are great and the values above 0.9 are superb. Kaiser (1974) recommends the value of KMO 0.5 is barely acceptable (cited in Field, 2013) although Tabachnick and Fidell (2007) recommend that KMO 0.6 is the minimum value for factor analysis.

Next to the KMO, Bartlett's test of sphericity investigates whether the correlation matrix is significantly different from the identity matrix and the significant result indicates the correlations between variables are significantly different from zero. As can been seen in table 5.1b, the significance associated with Bartlett's Test of Sphericity is .000 which is less than 0.05 indicating that all pairwise correlations are not equal to zero in *R* matrix. Thus, the correlation matrix has significant correlations among at least some of the variables, that is, the *R*-matrix is not an identity matrix; therefore, there are some relationships between the variables and ipso facto the factor analysis is appropriate for the data set. Following the significant Bartlett's test of sphericity, the inspection of the correlation coefficients among variables is of substantive importance (Hair et al., 2010; Pallant, 2010; Field, 2013).

The correlation matrix (*R*-matrix) should have at least some correlations of $r = 0.3$ to be suitable for factor analysis. As can be seen in table 5 (in appendix C), many of the correlation among the variables are $r = 0.3$ and above, and thus denoting the data set is suitable for factor analysis. On the other hand, highly correlated variables ($r > 0.8$) and perfectly correlated variables (Singularity $r = 1.0$) cause multicolinrarity (Field, 2013). As can be seen in table 5 (in appendix C) the new item (Q21) "I often think about work matters at home that prevent me doing the tasks at home" was highly correlated with Q9 ($r = .973$) and Q8 ($r = .811$). Moreover, the value of the determinant of the correlation matrix is 6.26E-007 (0.000000626) which is less than the necessary minimum value of 0.00001 and ipso facto, certain level of multicollinearity exists. Therefore, the item Q21 has been excluded for further analysis which is in line with the advice of Hair et al. (2010), Pallant (2010) and Field (2013). Having removed the item Q21, the reproduced KMO and Bartlett's Test are presented in table 5.1c.

Table 5.1c: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		**.669**
Bartlett's Test of Sphericity	Approx. Chi-Square	6275.675
	df	300
	Sig.	**.000**

In summary, it can be concluded that the sample size is adequate, KMO value is of 0.669 exceeding the recommended value of 0.6, the Bartlett's test of sphericity is significant, and the inspection of the correlation matrix reveals that many correlation coefficients exceed the value of 0.3. Moreover, the value of the determinant of the correlation matrix (1.327E-005 -

0.00001327) has exceeded the minimum requirement of 0.00001 implying little evidence of multicollinearity. Thus the data set is suited to employing factor analysis.

5.1.3 Factor extraction

Initially, this study employed combined use of common factor analysis (FA) and principal components analysis (PCA) for extracting number of factors in line with Worthington and Whittake's (2006) study. However, both methods have revealed similar results from factor analysis with principal axis factoring method and PCA (table 7a and 7b, appendix C).

As PCA[5] provides accurate methods of determining the number of components to retain mostly in a large variable data set (e.g., Velicer and Jackson, 1990), this study adopted PCA method for further investigation.

Deciding how many factors to retain is difficult: on the one hand, it is desirable to have a simple solution with as few factors as possible; but on the other hand, it needs to explain as much as variance as possible. The decision on retaining components is largely determined by four techniques: a priori criterion (subjective), Kaiser's criterion (latent root), scree plot and parallel analysis, as recommended in many seminal studies (e.g., Ford, MacCallum, and Tait, 1986; Matthews, Kath and Barnes-Farrell, 2010).

A priori criterion

A priori criterion is an extraction of number of factors needed in terms of theoretical grounds or it is used for replicating another researcher's study (Hair et al., 2010). As the objective of this study is to investigate the underlying factor structure of data set, use of this technique is not appropriate.

Kaiser's criterion

In retaining number of factors, most commonly used technique is the Kaiser's criterion or eigenvalue rule. Eigenvalue associated with each factor has explanatory power representing the amount of total variance explained by each factor and the eigenvalue greater than 1 considered being significant as individual variable accounted for at least single variable's variance (Hair et al., 2010; Pallant, 2010; Field, 2013).

[5] "....component analysis can be viewed as a computational efficient approximation to factor analysis" (p.23) and "...the principal of parsimony, applied to parsimony procedures, provides the strongest argument for preferring component analysis over factor analysis" (p. 24) (Velicer and Jackson, 1990).

This technique is reliable when number of variables is less than 30 and communalities after extraction is greater than 0.7 or sample size is greater than 250 and average communalities is greater than 0.6 (Field, 2013). Communality represents the proportion of common variance within a variable (Field, 2013). The results of the analysis revealed that communalities for all variables are within the normal range of 0 and 1 (table 6 in appendix C). As can be seen in table 6 (appendix C), 84% of variance associated with question 1 is common, whilst 86% and 81% with question 2 and question 3 respectively and so forth for the remaining variables. The value of the total communalities for 25 variables is 18.99 with an average of .76. On these grounds, Kaiser's rule is appropriate technique for retaining number of factors. Table 5.2 presents the results of the factor extraction using Kaiser's criterion.

Table 5.2: Factor extraction - Kaiser's criterion

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	3.023	12.091	12.091	3.023	12.091	12.091	2.724
2	2.917	11.669	23.760	2.917	11.669	23.760	2.646
3	2.476	9.905	33.665	2.476	9.905	33.665	2.373
4	2.134	8.535	42.200	2.134	8.535	42.200	2.109
5	2.017	8.068	50.268	2.017	8.068	50.268	2.241
6	1.861	7.444	57.712	1.861	7.444	57.712	2.030
7	1.804	7.215	64.926	1.804	7.215	64.926	2.095
8	1.541	6.162	71.089	1.541	6.162	71.089	2.006
9	1.217	4.868	75.957	1.217	4.868	75.957	1.562
10	.755	3.021	78.977				
11	.705	2.818	81.796				

25	.125	.501	100.000				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

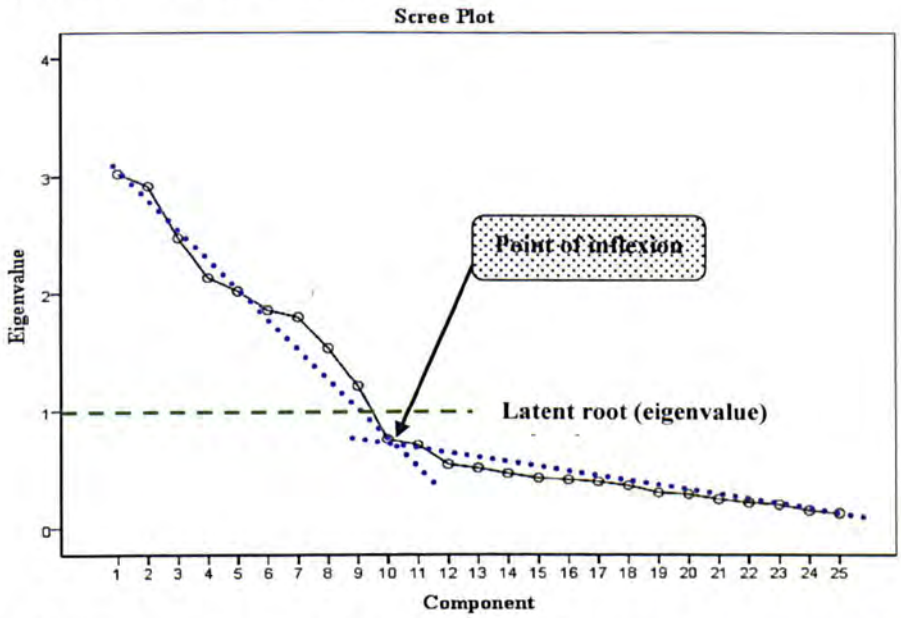
As can be seen in table 5.2, nine components had eigenvalues greater than 1.0. The eigenvalue for the tenth component is 0.755 which is less than 1.0 or even not closer to 1.0 and consequently, precluded its inclusion onto retaining number of components. The first component represents 12.09 % of the variance, followed by 11.67 %, 9.91 %, 8.54 %, 8.07 %, 7.44 %, 7.22 %, 6.16 %, and 4.87 % for the remaining eight components

respectively. Overall, the nine factors retained accounted for 75.96 % of the variance which is greater than a minimum of 60 % considered as satisfactory in social sciences (Hair et al., 2010). Thus, in terms of Kaiser's criterion, the nine factors retained adequately represent the entire set of variables.

Scree test

Cattell's Scree test (1966) is another extraction technique, derived by plotting eigenvalues (on Y- axis) against the number of factors (on X- axis). The graph is known as scree plot. Cattell recommends that the cut off point for extracting factors should be at the point of inflexion. The point of inflexion is where the curve becomes horizontal and meets the vertical and horizontal lines. Only factors to the left of the point of inflexion can be retained. The Scree plot is depicted in figure 5.1.

Figure 5.1.: Scree plot-factor extraction



As shown above, the point of inflexion is at the tenth component confirming that only nine components can be retained in line with the results of the application of Kaiser's criterion.

Parallel analysis

Parallel analysis[6] is gaining more popularity in the social science literature (Choi, Fuqua, and Griffin, 2001; Pallant, 2010). It is recommended by many research scholars as Kaiser's criterion and Cattell's scree test overestimates the number of factors to be retained (e.g., Hubbard and Allen, 1987).

[6] Generally, parallel analysis runs with 3 to 100 variables, 100 to 2500 subjects, and repeating process as many times as requires (with minimum of 1 to maximum of 1000). If an eigenvalue exceeds the corresponding value from randomly selected data set, those components will then be retained. Software for performing parallel analysis was downloaded from *http://www.allenandunwin.com/spss/further_resources.html*

The analysis called "**Monte Carlo PCA**" uses: number of variables (25 entered onto); number of subjects (569 entered onto); and number of replications (200 entered onto). The results presented in table 8 (appendix C) are summarised in table 5.3.

Table 5.3: Comparison of eigenvalues from PCA and Criterion values from parallel analysis

Component number	Eigenvalue from PCA	Criterion value from parallel analysis	Decision
1	3.023	1.4000	Retained
2	2.917	1.3374	Retained
3	2.476	1.2918	Retained
4	2.134	1.2527	Retained
5	2.017	1.2166	Retained
6	1.861	1.1829	Retained
7	1.804	1.1508	Retained
8	1.541	1.1197	Retained
9	1.217	1.0928	Retained
10	.755	1.0643	Rejected
11	.705	1.0363	Rejected
12	.534	1.0114	Rejected

As can be seen in above table, the eigenvalues from PCA are only greater for the first nine factors than criterion values from parallel analysis, and thus, the nine factors were retained. In sum, the nine factors retained for further analysis are robust and are in accordance with the Kaiser's criterion, scree plot and parallel analysis decisions.

5.1.4 Factor rotation and interpretation

Once factors have been extracted, it is vital to identify what variables make up what factors and that can be achieved by use of factor loadings. Factor loadings are the correlation of each item with the components (Hair et al., 2010) indicating a given variable to a given factor. However, Stevens (2002) recommends factor loadings with absolute value greater than .4 (16%) as significant loadings[7] alone are not indicative of how much a variable accounted for a factor (R^2). The component matrix (table 9 in appendix C) presents the results of the factor loadings showing many variables have high loadings (greater than .4). However, it did not produce a simple structure, revealing many cross loadings, and therefore it was decided to redistribute variance by rotating factors. In factor rotation, variables are fixed, and factors are rotated without changing the underlying solution (Field, 2013).

[7] Generally, researchers take absolute loading of greater than 0.3 as of substantive importance (Field, 2013), however Stevens (2002) suggests that significant loading is dependent on sample size: for example, significant loading for sample size of 50, 100, 200, 300, 600 and 1000 are .722, .512, .364, .298,.21 and .162 respectively. Therefore, in a large sample, small loadings become statistically significant.

Communality, level of shared variance, is a caveat before rotating factors, and a value above .50 denotes a satisfactory level (Hair et al., 2010). As shown in table 6 (appendix C), most of the variables have a communality was greater than .60. However, communalities of the three variables Q16, Q17 and Q25 were .583, .588 and .511 respectively, although they were at a satisfactory level of acceptance (greater than .50). Thus, the values of all communalities are sufficient to proceed with factor rotation.

Factor rotation[8] aims to obtain simpler and theoretically more meaningful factor solutions by minimising cross loadings (Hair et al., 2010). Since realistically few constructs are uncorrelated in the real world (Hair et al., 2010) and past research has shown that work to family conflict and family to work conflict are correlated, following Carlson, Kacmar and Williams (2000), this research has employed oblique rotation with direct oblimin.

Oblimin rotation produced a pattern matrix (Table 7a, appendix C) and structure matrix (table 10, appendix C), and component correlation matrix (table 11a, appendix C). The Pattern Matrix represents factor loadings of each item on each component whilst the Structure Matrix provides information about the correlation between variables and factors, and the strength of the association between components (factors) revealed in the component correlation matrix (e.g., Pallant, 2010). As revealed in the Pattern matrix (Table 7a, appendix C), all items loaded strongly onto the nine extracted components representing simple structure where loading less than .4 are suppressed for interpretative purpose as suggested by Stevens (2002). Component 1 consists of three items Q10, Q12 and Q11 with loadings of .941, .918 and .889 respectively; component 2 includes three items Q2, Q1 and Q3 with loadings of .927, .919 and .903 respectively; component 3 consists of three items Q26, Q24 and Q19 with loadings of .909, .891 and .780 respectively; component 4 consists of three items Q5, Q6 and Q4 with loadings of .844, .813 and .805 respectively; component 5 has three items Q20, Q22, and Q23 with loadings of .857, .814 and .797 respectively; component 6 includes two items Q8 and Q9 with loadings of .952, and .925 respectively; component 7 includes three items Q15, Q13 and Q14 with loadings of .829, .821 and .811 respectively; component 8 is represented by only two items Q18 and Q7 with loadings of .942 and .897 in turn; and the component 9 includes three items Q16, Q17 and Q25 with loadings of .747, .736 and .490 respectively.

[8] Two primary methods are used viz., orthogonal (Varimax, Quartimax, and Equamax) and oblique (Direct Oblimin and Promax). Orthogonal rotation is largely appropriate if underlying constructs are independent (not correlated) whilst oblique rotation becomes more effective if constructs are dependent (correlated) (e.g., Tabachnick and Fidell, 2007; Hair et al., 2010; Field, 2013). The widespread use of orthogonal rotation is "Varimax" and oblique rotation is "Direct oblimin" in social science studies (e.g., Hair et al., 2010).

Thus, all factor loadings save for Q25, exceeding 0.70 is an indicative of well defined structure, and factor loading of Q25 is considered being minimal level of acceptance (Hair et al., 2010). The component correlation matrix reveals the association between factors (table 11a, appendix C) and even if constructs are weakly dependent, the results of the oblique rotation would provide akin to an orthogonal rotation (Field, 2013).

Once a 'simple structure' is obtained examinination of the number of items loading onto each factor is important for the robustness of the factor structure. Most prominent research scholars recommend that three variables per factor are required (e.g., Kim and Mueller, 1978; MacCallum, 1990; Bollen and Lennox, 1991; Velicer and Fava, 1998; Fabrigar et al., 1999; Tabachnick and Fidell, 2007; Hair et al., 2010; Field, 2013) and is defined as the "rule of three" by Freeze and Raschke (2007). Retaining a factor with fewer than three items is generally weak and unstable (Costello and Osborne, 2005), not an optimal solution (Pallant, 2010), fundamental flaws (Little, Lindenberger and Nesselroade, 1999), and "three items per scale should therefore be viewed as a rock-bottom lower bound" (Hatcher, 1994, p.12). Thus, the factor six and eight which only had two items need to be removed from the factor structure.

Nonetheless before doing so, investigating the contents of items provide some valuable insights. Of factor six, Q8 inquires about "Behaviour that is effective and necessary for me at work would be counterproductive at home" and whilst Q9 "The behaviours I perform that make me effective at work do not help me to be a better parent or spouse". Albeit both questions represent the behavioural form of work to family conflict, the mean value of Q8 (M = 1.55) and Q9 (M=1.65) was very low indicating respondents, on average, disagree with the two statements. In the development of a multidimensional measure of work family conflict, Carlson, Kacmar and Williams (2000) considered a mean score of 3.5 or higher as an adequate and acceptable level that correspond to the intended work family conflict dimension. Moreover, the two items did not reveal any predictive validity. The predictive validation was conducted by correlating Q8 and Q9 with outcome variables of job satisfaction and family satisfaction. Results reveal that Q8 correlates with job satisfaction and family satisfaction insignificantly with very low value r =.003 and r = -.010. In a similar vein, Q9 correlates with job satisfaction and family satisfaction insignificantly with very low value r =.011 and r = .005. Thus, these two items did not ipso facto qualify to treat as indicators measuring the nature of work family conflict.

As to factor 8, the Q7 inquires about "the problem-solving behaviours I use in my job are not effective in resolving problems at home" whilst Q18 denotes "the problem-solving behaviours that work for me at home do not seem to be as useful at my work". These two items are conceptually opposite of what Carlson, Kacmar and Williams (2000) found. The first relates to work to family conflict, and the second relates to family to work conflict. Furthermore, the reported mean score is 1.52 and 1.70 respectively that indicating on average, people completely disagree with those statements (mean value of 2.00 indicates disagreement with the statement) and items did not produce any significant association with predictors (i.e., work demand /family demand) and outcome variables (i.e., job satisfaction and family satisfaction). As Field (2013) suggests factor analysis will always find a factor solution, "if you put garbage in, you get garbage out" phenomenon (p.647) and hence, a researcher needs to be meticulous in assessing indicators to be sure that they reflect theoretically meaningful aspects. It is fair to say that the two factors are of minor importance and its retention is not defensible and meaningful, and provide hardly any explanatory power to the structure. Consequently, both factors have been discarded.

Once having confirmed number of items needed in composing a factor, it is vital to check reliability of the variables contributing to a factor. Reliability is of substantive importance in measuring consistency of the construct developed. Cronbach's α is the most widely used measure for reliability, a value of Cronbach's α 0.60 to .70 is generally accepted as the lower limit of acceptability (Robinson, Shaver and Wrightsman,1991; Gliner and Morgan, 2000).

Inter item correlation is another neighbouring measure with Cronbach's α. All items of a factor needs to be reasonably correlated and the inter item correlation of .20 to .40 would be an optimal range (e.g., Briggs and Cheek, 1986). Nonetheless, as a rule of thumb inter item correlations should exceed .30 (Robinson, Shaver and Wrightsman, 1991). And thus, Pallant (2010) suggests that an item with inter correlation of less than .30 and having low Cronbach's α should be removed from analysis. The table 5.4 presents inter item correlations and Cronbach's α, excerpted from the reliability analysis, shown in table 11b in appendix C.

As can be seen in table 5.4, the column labelled 'Cronbach's α if Item is deleted' indicates the value of the Cronbach's α if the particular item is not included in calculation. If the deletion of an item increases Cronbach's α, it is fair to say that the deletion of the item improves reliability (Field, 2013). All factors, save for factor nine, have good reliability (greater than .75) with sufficient inter-item correlations (greater than .30). Nonetheless, factor

nine portends potential problems with its reliability and inter- item correlation. Of factor nine, item Q25 correlated with Q16 and Q17 was very low .192 and .182 respectively and item Q16 correlated with Q17 was .25. Moreover, the Cronbach's α is very low 0.09, and even if Q25 is deleted from the structure, the improved reliability would be just 0.40 and it would also lower the level of acceptance (below .60). Thus, all items need discarding from the factor structure (e.g., Pallant, 2010).

Table 5.4: Reliability of the extracted factors

Factor	Items composed factor	Any inter- item correlation below 0.3	Any action needed regarding inter item correlation	Cronbach's α	Would removal of any item increase the reliability?	Any action needed regarding Cronbach's α
Factor 1	Q10, Q11, Q12	A minimum inter correlation between items was 0.766	No action is needed	0.912	If item 11 deleted, Cronbach's α will increase to 0.921	Both values reflect a good degree of reliability (greater than α 0.6). Thus, any action is not required.
Factor 2	Q1, Q2, Q3	A minimum inter correlation between items was 0.727	No action is needed	0.902	No	No action is requested
Factor 3	Q19, Q24, Q26	A minimum inter correlation between items was 0.547	No action is needed	0.833	No	No action is requested
Factor 4	Q4, Q5, Q6	A minimum inter correlation between items was 0.500	No action is needed	0.763	No	No action is requested
Factor 5	Q20, Q22, Q23	A minimum inter correlation between items was 0.495	No action is needed	0.762	No	No action is requested
Factor 7	Q13, Q14, Q15	A minimum inter correlation between items was 0.498	No action is needed	0.759	No	No action is requested
Factor 9	Q16, Q17, Q25	Inter correlation between items was below 0.30. Item Q16 correlated with Q17 was .250 and item Q25 correlated with Q16 and Q17 was .192 and .182 respectively	All items need removing from factor structure	0.091	If item 25 deleted, Cronbach's α will increase to 0.400	If item 25 deleted, Cronbach's α would be 0.400, however, not at an acceptable level (α < 0.6). Thus, the factor 9 should be discarded from the factor structure!

After having sufficient statistical evidence for grouping variables onto a factor, subjective judgement on the contents of variables representing a factor measuring the same construct is necessary. In other words, it is imperative to confirm the content of questions loaded onto the same factor represent common themes (Field, 2013). As this research partly attempts to validate the extant structure of Carlson, Kacmar and Williams' (2000) work family conflict measure, it is important to observe that the variables found to be measuring a particular factor clump together similarly in this analysis. A comparison of factor structure found in exploratory factor analysis with Carlson, Kacmar and Williams' (2000) factor structure is presented in table 5.5.

Table 5.5: A comparison of extracted factor structure with Carlson, Kacmar and Williams' (2000) structure

Factor	Items/ Variables	Description	Naming factor
1	Q10, Q11, Q12	It is similar to what Carlson, Kacmar and Williams' found	Time based FTW
2	Q1, Q2, Q3	It is similar to what Carlson, Kacmar and Williams' found	Time based WFC
3	Q19, Q24, Q26	**New factor**	**Psychological based WFC**
4	Q20, Q22, Q23	**New factor**	**Psychological based FWC**
5	Q4, Q5, Q6	It is similar to what Carlson, Kacmar and Williams' found	Strain based WFC
6	Q13, Q14, Q15	It is similar to what Carlson, Kacmar and Williams' found	Strain based FWC

Of six retained factors, four of them are similar to what Carlson, Kacmar and Williams found, whilst two of them represent new factors (results that are in line with the findings of the exploratory study).

Nonetheless, it is robust to employ confirmatory factor analysis for Carlson, Kacmar and Williams' (2000) structure and the new structure derived from the analysis with the view to identifying the best structure representing the data set.

At this stage, it is imperative to redo the factor analysis in order to confirm that the deletion of variables does not affect the factor structure (e.g., Hair et al., 2010; Field, 2013) and thus,

the remaining 18 indicators of work family conflict measure were subjected to principal components analysis. The results depicted in table 5.6. The value of the Kaiser-Meyer – Olkin (KMO) measures of sampling adequacy is .709 exceeding the recommended value of .6 (Tabachnick and Fidell, 2007) and the KMO for all individual items was also greater than 0.657. Bartlett's test of sphericity χ^2 (153) = 4559.03, $p < .001$, indicating factorability of the correlation matrix. Six components had eigenvalues over Kaiser's criterion of 1 together explaining 75.42 % of the variance. Inspection of the scree plot supports the retention of six factors revealing a clear break after the seventh component. This was further supported by parallel analysis revealing the six components have eigenvalues exceeding the corresponding criterion value of the parallel analysis where parallel analysis was employed with 200 randomly generated data for 18 variables representing 569 subjects. Thus, all three criteria produced similar results for retention of a six factor structure. Oblique rotation with direct oblimin was performed and a simple structure was generated where each item clearly loaded onto each factor. All factor loadings were greater than.794 which is an indicative of well defined structure (Stevens, 2002).

Table 5.6: Summary of exploratory factor analysis ($N = 569$)

No	Items	Factor						
		TFWC	TWFC	PWFC	PFWC	SWFC	SFWC	Communality
Q10	The time I spend on family responsibilities often interferes with my work responsibilities	.947						.897
Q12	I have to miss work activities due to the amount of time I must spend on family responsibilities	.920						.858
Q11	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	.894						.796
Q2	The time I must devote to my job keeps me from participating equally in household responsibilities and activities		.922					.859
Q1	My work keeps me from my family activities more than I would like		.915					.840
Q3	I have to miss family activities due to the amount of time I must spend on work responsibilities		.903					.815
Q26	I am often not in good mood at home due to the preoccupation with work responsibilities that prevent me doing the tasks at home			.909				.823
Q24	When I am at home I see things needs doing at work; planning and scheduling work related activities that prevent me doing the tasks at home			.885				.770
Q19	I often think about work related problems at home that prevent me doing the tasks at home			.800				.693
Q22	I am often not in good mood at work due to the preoccupation with family responsibilities that prevent me doing the tasks at work				.835			.713
Q20	When I am at work I see things that need doing at home; planning and scheduling family related activities that prevent me doing the tasks at work				.822			.677
Q23	I often think about family related problems at work that prevent me doing the tasks at work				.816			.674
Q4	When I get home from work I am often too frazzled to participate in family activities/responsibilities					-.841		.714
Q5	I am often so emotionally drained when I get home from work that it prevents me from contributing to my family					-.838		.707
Q6	Due to all the pressures at work, sometimes when I come home I am too stressed to do the things I enjoy					-.794		.678
Q14	Because I am often stressed from family responsibilities, I have a hard time concentrating on my work						.825	.677
Q15	Tension and anxiety from my family life often weakens my ability to do my job						.825	.689
Q13	Due to stress at home, I am often preoccupied with family matters at work						.811	.698
								Total
	Eigenvalues	2.907	2.620	2.330	1.997	1.959	1.762	13.585
	Percentage of variance	16.152	14.556	12.946	11.096	10.883	9.786	75.419
	Cronbach's α	0.912	0.902	0.833	0.762	0.763	0.759	

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.
a. Rotation converged in 6 iterations.

TWFC- Timed based work to family conflict; **SWFC**- Strain based work to family conflict; **PWFC**- Psychological based work to family conflict; **TFTW**-Time based family to work conflict; **SFWC**-strain based family to work conflict; **PFWC**- Psychological based family to work conflict.

The value of communality is all greater than .674 indicating satisfactory level of shared variance of the variables (Hair et al., 2010). Moreover, all inter- items correlations were greater than 0.495 with higher reliability .759. Thus, the deletion of items did immune to the retaining six factor structure. All relevant output related to six factor structure is annexed in appendix C (table 12) labelled "a six factor structure". A brief comparison of nine factor structure with six factor structure summarised in table 5.7.

Table 5.7: Comparison of nine- factor structure with six - factor structure

Criteria	Nine factor solution	Six factor solution	Note
Overall KMO	0.669	0.709	KMO is "good" for six factor structure but is "mediocre" for nine factor structure
Individual KMO	A minimum of 0.519	A minimum of 0.657	Six factor structure is better
Bartlett's test of sphericity χ^2	$p < .001$	$p < .001$	Satisfied on both structures
Correlations	Reasonably correlated	Reasonably correlated	Satisfied on both structures
Factor extraction	Agreement among three criteria: Kaiser's criterion, scree plot and parallel analysis	Agreement among three criteria: Kaiser's criterion, scree plot and parallel analysis	Analogy among multiple techniques in both nine and six factor extraction
Communality	All greater than .511	All greater than .674	Six factor solution is better
Total variance explained	75.96 %	75.42%	Six factor is better because most of the variable condensed into smaller groups; just .54% lost in conjunction with discarded three factors
Factor loadings	All greater than .490	All greater than .794	Six factor solution is better
Rule of three	Not satisfied	Satisfied	No need for any removal of six factor
Cronbach's α	All above .759 save for .091	All above .759	Excellent reliability in Six factor solution
Inter item correlation	All above .495 save for factor nine	All above .495	Excellent value for Six factor solution
Representing common theme	Not satisfied	Satisfied	Satisfied with six factor solution

As shown in above table, the six factor structure vis a vis nine factor structure is robust and theoretically sound, meaningful and interpretable. The next logical step is to specify the resultant factor solution in the confirmatory procedure to see how good fit of the model and to ensure its psychometrics properties.

5.2 Confirmatory factor analysis

Confirmatory factor analysis (CFA) is most widely used technique during the scale development process establishing validity of a scale following an EFA (e.g., Bagozzi and Foxall, 1996; Worthington and Whittaker, 2006). CFA is a powerful statistical tool for investigating the natures and relations among latent constructs (Jackson, Gillaspy and Purc-Stephenson, 2009; Hair et al., 2010) and employed to fit the data to a preconceived model (Worthington, and Whittaker, 2006). In this study, CFA is used to confirm the praxis of the preconceived measurement model that emerged from exploratory factor analysis with the aid of AMOS (Analysis of Moment Structures). In a CFA, measurement model validity is dependent on two aspects: the first deals with establishing acceptable levels of Goodness – Of- Fit (GOF) measures, and the second is of establishing construct validity.

GOF measures explain how the model reproduces the observed covariance matrix among the indicators items, that is, GOF measures the model fit by comparing theory (estimated covariance matrix) to reality (the observed covariance matrix) (Hair et al., 2010). Generally, the GOF subsumes into six viz., absolute fit measures, relative (incremental) fit measures, parsimony measures, non centrality fit measures, information theoretic fit measures, and fit measure based on sample size (Blunch, 2008). The details of the dominant GOF indices are presented in table 3 (appendix E). Of such a plethora of fit indices, most widely reported indices in work family conflict scales are chi -square, RMR and CFI (Carlson, Kacmar and Williams, 2000). However, Matthews, Kath and Barnes- Farrell (2010) used SRMR instead of RMR in their study of a short, valid, predictive measure of work–family conflict. In the light of the previous studies and the recommendations of the statistical experts, this study used mainly Chi-Square tests, the RMSEA, the CFI and the SRMR in arriving at conclusions over the model fit (e.g., Kline, 2005).

Having established model fit, the construct validity of such model is of substantive importance. Construct validity suggests how well the construct items are designed to measure actually reflects the theoretical latent construct (Hair et al., 2010). In general, construct validity takes three forms: content adequacy analysis, convergent validity and discriminant validity. The content adequacy is a priori to theory testing and it was established during the process of exploratory factor analysis. Convergent validity indicates that indicators should converge or share greater proportion of variance in common. As a part of convergent validity, high loading becomes an indicator of convergent validity. Thus, the estimate of the

link of construct to indicator is of significance and, as a rule of thumb, the value of the standardised factor loadings estimates should be at least 0.5 or higher, and ideally 0.7 or higher[9] (Hair et al., 2010). Moreover, average variance extracted (AVE) also measures convergent validity and a value of 0.5 or greater is adequate (AVE is the mean varaince extracted from the item loadings on a latent factor). Construct reliability (CR) is an another indicator of convergent validity denoting the existence of internal consistency and as a rule of thumb, 0.7 or higher suggests good reliability, although 0.6 to 0.7 may also acceptable range (Hair et al., 2010).

Discriminant validity indicates whether the constructs are distinct. Higher discriminant validity suggests that each construct is unique. Discriminant validity can be carried out by comparing AVE with the square of the correlation, and if AVE is greater than that of the square of the correlation, discriminant validity is established (Hair et al., 2010).

Moreover, in a CFA, there are two foremost elements providing useful insights in assessing model fit viz., residual covariance and modification index. The residual covariance shows the difference between sample covariance and implied covariance and a robust model is expected to produce small differences between variables, "the smaller, the better the fit." Moreover, a value of standardised residuals below 2.5 suggests the model is correct, and the value between 2.5 and 4.0 deserve some attention, although a value exceeding 4.0 is unacceptable indicating potential degree of error, nonetheless, one or two of the large residuals can be acceptable in many instances (Hair et al., 2010).

Modification index (MI) explores every possible relationship that is not estimated in a model, i.e., estimating for non estimating parameters and thus, it provides some insights improvising hypothetical model. MI approximately 4.0 or greater is an indicative of the fit could be improved significantly (Hair et al., 2010). In some instances, AMOS will not produce any modification indices implying none exceeding the specified threshold limit of 4.0.

[9] Since the square of a standardised factor loading reflects how much variance in a indicator is explained by the latent factor (variance extracted), a loading below 0.7 (square below 0.5) problematic as more than half the variance in the measure is error variance than explained variance (Hair et al., 2010).

5.2.1 Results

The model obtained from exploratory factor analysis was applied in AMOS[10] for undergoing CFA. The model made up of six latent constructs; viz., TIMEWFC (time based work to family conflict), STRWFC (strain based work to family conflict) and PSYWFC (psychological based work to family conflict), TIMEFWC (time based family to work conflict) , STRFWC (strain based family to work conflict) and PSYFWC (psychological based family to work conflict) where each construct was measured by three observed variables (indicators) which had a caveat satisfying rule of thumb recommending three indicators per construct (e.g., Hair et al., 2010) and 18 observed variables composed the model en bloc (6 x 3 = 18). Error associated with each observed variable indicated by e1 to e18 and they were treated as uncorrelated. Each observed variable loaded on one and only one construct. As required by AMOS and validation purpose, all six latent constructs were allowed to covary together. The model was an overidentified model as number of estimable parameters was less than the number of data point. The number of data point was P (P+1)/2 where *P* stands for observed variable (Byrne, 2010). The model had 171 data points (18 (18+1) / 2) with a total of 51 unknown parameters and thus the model was an overidentified with 120 degrees of freedom. Overidentified is necessary rendering it of scientific use (Byrne, 2010). The summary of the model parameters are presented in table 5.8.

As can be seen in table 5.8, the hypothesised model has 42 variables, 18 of which are observed variables and the remaining 24 are unabsorbed variables. In variables' relationship taxonomy, 18 of which are said to be endogenous variables and the remaining 24 variables are exogenous variables. Last portion of the table illustrates that there are 36 regression weights, 24 of which are fixed (18 of them are error terms and 6 of them are first each set of factor loadings) and the remaining 12 of which are estimated. A total of 15 covariances and 24 variances are estimated. In sum, of the hypothesised model, there are 75 parameters, 51 of which are estimated.

[10] In AMOS, data analyse in form of path diagram (visual pictorial presentation of the model) consisting of latent constructs (unobserved variables-drawn as "ellipses"), indicators (measured or manifest variables- drawn as rectangles), error terms (how far latent variable does not explain the measured variables) and their linkages using one headed arrow (regression weights) or two headed arrow (covariance/correlations).

Table 5.8: Preliminary model summary statistics, variables and parameters

Computation of degrees of freedom	
Number of distinct sample moments:	171
Number of distinct parameters to be estimated:	51
Degrees of freedom (171 - 51	120

Results	
Minimum was achieved	
Chi-square	= 249.553
Degrees of freedom	= 120
Probability level = .000	

Variables	
Number of variables in your model	42
Number of observed variables	18
Number of unobserved variables	24
Number of exogenous variables	24
Number of endogenous variables	18

Parameter summary

	Weights	Covariances	Variances	Means	Intercepts	Total
Fixed	24	0	0	0	0	24
Labeled	0	0	0	0	0	0
Unlabeled	12	15	24	0	0	51
Total	36	15	24	0	0	75

To assure multivariate normality, AMOS facilitates to diagnose multivariate outliers of a data set by employing Mahalanobis *d*-squared statistic which "measures the distance in standard deviation units between a set of scores for one case and the sample means for all the variables (centroids)" (Byrne, 2010, p. 106). The smaller number of p1 is expected and assuming normality. Mahalanobis *d*-squared indicates minimal evidence of serious multivariate outliers. West, Finch and Curran (1995) suggest that the $ß_2$ value equal to or greater than 7 to be indicative of early departure from normality. The results show that all values were below the limit of 7 and thus no item is an indicative of Kurtotic. Moreover, the value of skew for each item less than two is an indicative of normality.

The primary purpose of the CFA is to statistically assessing how the hypothesised model fits. The evaluation criteria focus on adequacy of the parameter estimate and the model as a whole (Byrne, 2010). The adequacy of the parameter estimate is dependent on three aspects: feasibility of the parameter estimates, appropriateness of standard errors and statistical

significance of the parameter estimates. In the feasibility of the parameter estimates, correct sign and size and consistency of the underlying theory are assessed. Results revealed that the correlations were not greater than 1.00, no negative variances were produced (table 13 in appendix C) and covariance or correlation matrices were not positive definite. Moreover, Byrne (2010) suggests that the standard errors should be smaller to obtain precise estimation. All standard errors are less than 0.05 save for STRFWC which is 0.07 (table 13 in appendix C). Thus it is fair to say, all the standard errors are close to 0 indicating the estimation of the model are accurate. As to statistical significance of parameter estimate, critical ratio (CR), derived by dividing value of parameter estimate by standard errors, is used to test. If the value of CR is greater than +/- 1.96, the estimate is said to be statically significant from zero. As shown in below table 5.9, the results of the unstandardised solution reveal that all estimates are statistically significant. The significant results are also indicative of adequate sample size (Byrne, 2010).

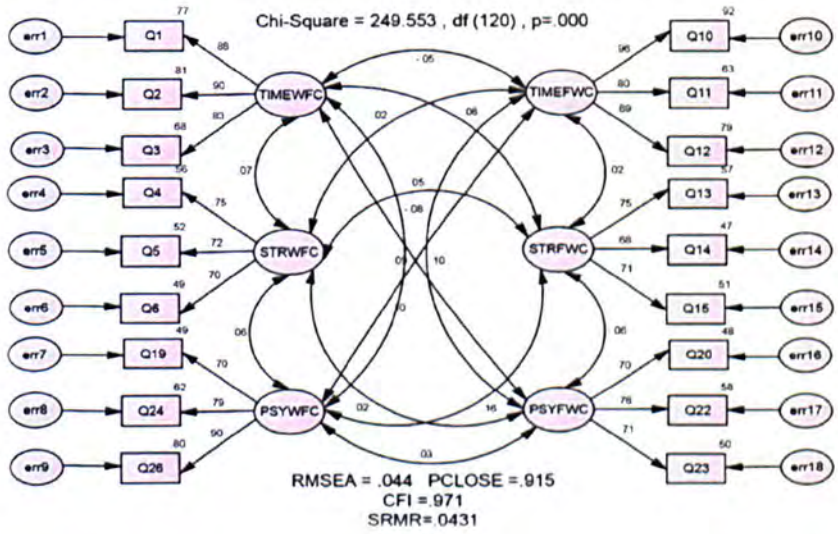
Table 5.9: Parameter estimate both unstandardised solution and standardised solution

			Unstandardised solution				Standardised solution
			Estimate	S.E.	C.R.	P	Estimate
Q2	<---------	TIMEWFC	.970	.036	27.193	***	.902
Q3	<---------	TIMEWFC	.860	.035	24.687	***	.827
Q1	<---------	TIMEWFC	1.000				.878
Q5	<---------	STRWFC	.939	.074	12.766	***	.719
Q6	<---------	STRWFC	1.049	.082	12.722	***	.701
Q4	<---------	STRWFC	1.000				.748
Q24	<---------	PSYWFC	1.055	.064	16.586	***	.790
Q26	<---------	PSYWFC	1.232	.074	16.595	***	.896
Q19	<---------	PSYWFC	1.000				.697
Q11	<---------	TIMEFWC	.855	.033	26.145	***	.797
Q10	<---------	TIMEFWC	1.000				.961
Q12	<---------	TIMEFWC	.959	.030	32.344	***	.890
Q14	<---------	STRFWC	.828	.067	12.370	***	.683
Q13	<---------	STRFWC	1.000				.752
Q15	<---------	STRFWC	.946	.076	12.459	***	.712
Q22	<---------	PSYFWC	.984	.077	12.711	***	.763
Q20	<---------	PSYFWC	1.000				.696
Q23	<---------	PSYFWC	.825	.065	12.713	***	.708

The model as a whole represents how the hypothesised model is a better fitting model on the use of sampled data. In the results of the model fit, there are three types of the models demonstrated: independence model, saturated model and default model (table 14 in appendix C). The independence model represents complete independence of all variables in the model

whereas a saturated model represents the number of estimated parameters equals the number of data points (Byrne, 2010). The hypothesised model is the default model between independence model and saturated model. The result of the model is presented in figure 5.2.

Figure 5.2: The results of the six factor work family conflict model



In a CFA, standardised factor loadings should be at least 0.5, however, value greater than or close to 0.7 is said to be highly significant. All standardised loadings, save for Q14, Q19 and Q20 were found to be greater than 0.7 indicating high statistical significance. Moreover, the standardised loadings of Q19 <--- PSYWFC (.697), Q14 <--- STRFWC (.683), Q20 <--- PSYFWC (.696) were also very close to 0.7. Thus, it is fair to say all standardised loadings are statically significant and robust for further validation process. The results of the standardised loading can also be seen in above table 5.9 underneath standardised solution.

In a CFA model, numbers of diagnostic measures are more prevalent in assessing overall model fit (see table 14 in appendix C). A nonsignificant χ^2 indicates good model fit although the results of the hypothesised model noted as χ^2 (120) = 249.553, $p < 0.05$. Despite the significant value associated with χ^2 is the portent of poor fitting model, the significant results is mostly common in a large sample size[11] N=569 (e.g., Bagozzi and Yi,1988; Bagozzi and Foxall, 1996; Hair et al., 2010). Thus, alternatively, the value of the normal χ^2 (CMIN/DF) revealed that the model has an acceptable fit (2.080) with data.

[11] Bagozzi and Foxall (1996) stated that the "reliance on the Chi-square test as the sole measure of fit is not recommended because of its dependence on sample size" (p. 205).

Furthermore, RMSEA has a value of .044 not exceeding guideline of 0.05 and the non significant value of the PCLOSE confirms that RMSEA is statistically lower than 0.05 and thus, it concludes that the hypothesised model is a good fitting model. Next, CFI frequently reported relative (incremental) fit measure has value of 0.971 exceeding guidelines of 0.95 supporting that the hypothesised model is well fitting model fit. Moreover, the SRMR, an absolute fit measure, has a value of 0.0431 indicating good fit. Thus, all such GOF measures and additional GOF measures[12] suggest that the hypothesised model is robustly well fitting model. Modification index did not provide any useful unidentified relationship and thus, the model with six constructs is a better fitting model with the sample data.

Schoenfeldt (1984) suggests that "The legitimacy of the organizational research as a scientific endeavour is dependent upon the psychometric properties of the measuring instruments" (p.78, cited in Schriesheim et al., 1993, p. 386) and thus the robustness of model is anchored in its psychometric properties, particularly its construct validity including content adequacy analysis, convergent validity and discriminant validity. The adequacy of the content is a judgement based decision (subjective) and was investigated during the process of factor extraction, and it was confirmed that all items contained and covered underlying theoretical construct of work family conflict (as reflected on the item wordings). Content adequacy is necessary but not sufficient and thus further convergent validity and discriminant validity are required.

Convergent validity of the measurement can be assessed by dint of factor loadings, AVE and construct reliability (CR). The factor loadings should be at least .5 although preferably 0.7. Results revealed that all loadings were highly significant (greater than or close to .70) and the values of AVE also exceeded the 50 percent rule of thumb, the lowest AVE is 0.513. In a similar vein, reported values of CRs were all above the threshold of .70 suggesting high reliability and the values of CR are higher than AVE which is also an indicative of strong convergent validity in situ. Thus, overall, results reveal that the model has excellent convergent validity suggesting that the hypothesised model is a robust model and recommending retention of all items in the model. The results of the validity measures are presented in table 5.10.

[12] **GFI=.954**(Good fit), **AGFI= .934** (Good fit), **RMR =.026** (Better the model fit), **NFI= .946** (Good fit: Model has a discrepancy that is 94.6% of the way between the (terribly fitting) independence model and the (perfectly fitting) saturated model), **RFI=.931**(Superior fit), **IFI=.971** (Very good fit), **TLI=.963**(Good fit), **CFI=.971** (Well fitting model), **PGFI=.762**(Mediocre fit) and **PRATIO=.784** (The model is 78.4 % as complex as the independence model).

Table 5.10: The results of the validity measures

	CR	AVE	MSV	ASV	TFWC	TWFC	SFWC	PFWC	SWFC	PWFC
TFWC	0.915	0.784	0.010	0.005	0.885					
TWFC	0.903	0.756	0.008	0.005	-0.047	0.870				
SFWC	0.759	0.513	0.025	0.007	0.023	0.059	0.716			
PFWC	0.766	0.523	0.009	0.004	0.096	0.088	-0.060	0.723		
SWFC	0.766	0.523	0.005	0.002	0.024	0.070	0.053	0.019	0.723	
PWFC	0.839	0.638	0.025	0.009	0.101	-0.077	0.158	0.028	0.055	0.798

CR: Construct reliability; AVE: Average variance extracted; MSV: Maximum Shared Variance; ASV : Average Shared Variance

Discriminant validity can be established by comparing the AVE of each construct with its squared intercorrelations where each AVE estimate should be greater than corresponding squared intercorrelations for discriminant validity. As can be seen in table 5.10 all AVE is greater than 0.5 and none of the inter correlations of the constructs is not greater than 0.2 (its maximum squared value would be .2* .2 = 0.04), and therefore, it can be concluded that each AVE is greater than the squared intercorrelations of the respective constructs. Moreover, in high discriminant validity, MSV (Maximum shared variance) should be less than AVE and ASV (average shared variance) less than AVE. As shown in table 5.10, all MSV < AVE and ASV < AVE indicating good discriminant validity of the model.

It is important to examine standardised residual as it shows the discrepancy between the hypothesised model and the analysed data (Byrne, 2010). Only three values were found to be greater than 2.5 (Q19 with Q 10, Q11, Q12 are 4.077, 3.231, and 2.606 respectively, see table 15 in appendix C), and one of them is slightly exceeding the unacceptable level of 4.0 although, one or two large residuals can be acceptable in many instances (Hair et al., 2010). Thus in terms of the standardised residual covariance, it is reasonable to infer that the hypothesised model is correct.

In conclusion, CFA results confirm that the hypothesised model is a well fitting model and has strong construct validity and thus, it is a suitable model to proceed with further examination.

5.2.2 A comparison of hypothesised model with Carlson, Kacmar and Williams' six dimensional model

Comparing the hypothesised model with Carlson, Kacmar and Williams' (2000) six dimensional work family conflict model is of substantive importance. The difference between the hypothesised model and Carlson, Kacmar and Williams' model is in terms of presence of

psychological based and behavioural based dimensions. The hypothesised model developed in this research replaces behavioural based interference of the Carlson Kacmar and Williams' model with psychological based interference.

As shown in table 5.11, the results of the unstandardised solution reveal that the estimate for one of the behavioural based items (Q17<--- BEHFWC) is not statistically significant on Carlson, Kacmar and Williams' model.

Table 5.11: Parameter estimate both unstandardised solution and standardised solution

			Unstandardised solution				Standardised solution
			Estimate	S.E.	C.R.	*P*	Estimate
Q2	<---------	TIMEWFC	.969	.036	27.138	***	.901
Q3	<---------	TIMEWFC	.862	.035	24.740	***	.829
Q1	<---------	TIMEWFC	1.000				.878
Q5	<---------	STRWFC	.940	.074	12.774	***	.722
Q6	<---------	STRWFC	1.037	.082	12.703	***	.695
Q4	<---------	STRWFC	1.000				.751
Q8	<---------	BEHWFC	-.151	.047	-3.186	.001	**-.147**
Q9	<---------	BEHWFC	-.202	.052	-3.894	***	**-.199**
Q7	<---------	BEHWFC	1.000				**1.058**
Q11	<---------	TIMEFWC	.853	.033	26.171	***	.796
Q10	<---------	TIMEFWC	1.000				.962
Q12	<---------	TIMEFWC	.956	.030	32.386	***	.889
Q14	<---------	STRFWC	.872	.070	12.408	***	.699
Q13	<---------	STRFWC	1.000				.731
Q15	<---------	STRFWC	.983	.079	12.439	***	.719
Q17	<---------	BEHFWC	.832	.488	1.707	.088	**.099**
Q16	<---------	BEHFWC	1.000				**.121**
Q18	<---------	BEHFWC	11.173	4.388	2.546	.011	**.892**

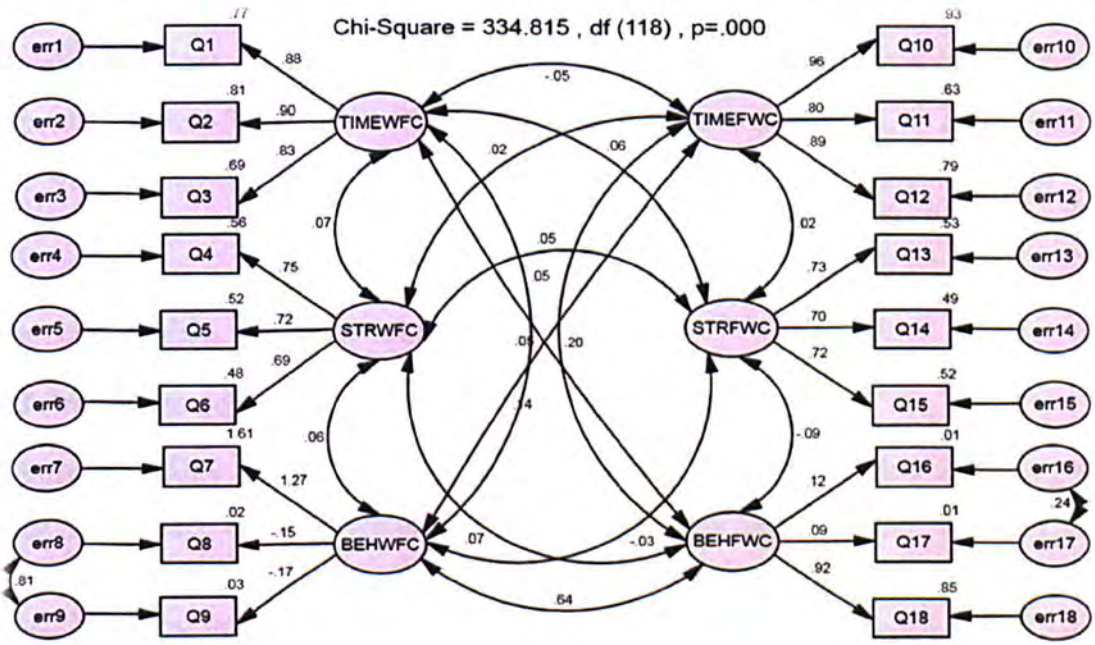
Moreover, factor loadings of five items were found to less than minimum threshold of .50 and were not reliable (Q8 <--- BEHWFC (-.147), Q9 <---BEHWFC (-.199), Q7 <--- BEHWFC (1.058), Q17 <--- BEHFWC (.099) and Q16 <--- BEHFWC (.121)). In this case, all five items were identified as candidate for deletion. Moreover, model fit indices were found indicating a poor fitting model. A brief summary of the model fit indices are presented in table 5.12.

Table 5.12: Comparison of hypothesised model with Carlson, Kacmar and Williams' model

Model	χ^2	CMIN/DF	CFI	RMSEA	PCLOSE	SRMR	ECVI	AIC
Hypothesised model	χ^2 (120)=249.553, $p < 0.05$	2.080	.971	.044	.915	.0431	.619	351.533
Carlson, Kacmar and Williams' model	χ^2 (120)=985.287, $p < 0.05$	8.211	.812	.113	.000	.0798	1.914	1087.287

As can be seen in table 5.12, all model fit indices were beyond the acceptable range and thus, Carlson, Kacmar and Williams' model was found as a poor fitting model with the sample data. Nonetheless, the MI suggests that there is room for improvement if two covariances were treated as free parameters between err8 <--> err9 (372.969) and err17 <--> err16 (33.074). Subsequently, they were allowed to covary and the results are presented in figure 5.3.

Figure 5.3: Carlson, Kacmar and Williams' work family conflict model



Albeit a little improvement observed, analysis did not produce any robust results to retain behavioural based work family conflict however, the findings strongly support for the inclusion of psychological based work family conflict. Therefore, the new six factor model of work family conflict viz., time based, strain based and psychological based both work to family conflict and family to work conflict is theoretically robust (as discussed in chapter 2), and has strong psychometric properties. And thus, it can be concluded that the new six factor

model is superior to the Carlson, Kacmar and Williams' six factor model of work family conflict for the sample data. Thus hypothesis $\mathbf{H_1}$ that the six factor structure of Carlson, Kacmar and Williams' (2000) scale of work family conflict developed in individualist culture will exist in Sri Lanka was only partially supported as time based and strain based were in line with what Carlson, Kacmar and Williams found whereas no evidence in support of the inclusion of the behavioural dimension was found.

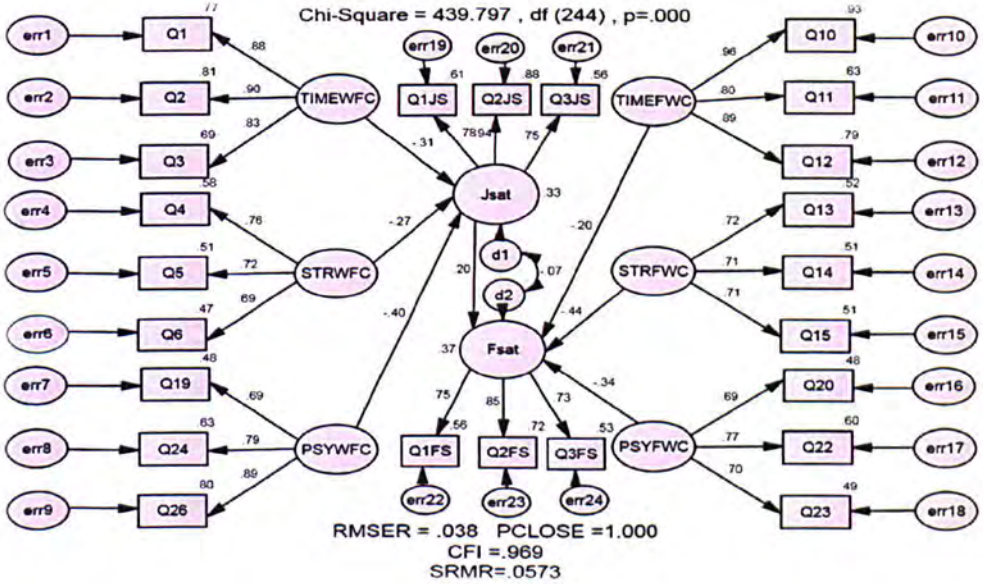
5.2.3 Second order CFA

Bagozzi and and Yi (2012) suggests that second order CFA is more valid and meaningful when first order CFA interpreted as dimensions of second order concept. On the ground of literature, work family conflict takes two forms: work to family conflict and family to work conflict. In the six factor structure, TIMEWFC, STRWFC and PSYWFC describe work interfering with family, whilst TIMEFWC, STRFWC and PSYFWC describe family interference in work. Nonetheless, it is of foremost importance to examine the model with two forms of work family conflict reflecting a six factor structure to see if it is valid and meaningful. Consequently, second order CFA (hierarchical factorial structure) was performed to see how a two -factor model fits with a six factor combination. The χ^2 (130) = 272.221, $p < 0.05$., CMIN/DF (2.094), CFI (.968), RMSER (.044), PCLOSE (.914), and SRMR (.0553) were indicative of a well fitting two factor model. Thus, it can be concluded that the hypothesised six factor model is a robust model capturing the terrain of both work to family conflict and family to work conflict.

5.3 Predictive validity

Predictive validity (sometimes referred to as criterion validity) suggests the ability of the measure to make accurate predictions (Saunders, Lewis and Thornhill, 2003). Thus, for gauging predictive validity, structural equation modelling (SEM) was employed where dimensions of WFC and FWC were related to two outcome measures which are theoretically well established and used in many empirical studies ; job satisfaction and family satisfaction. The results are depicted in figure 5.5. TIMEWFC, STRWFC and PSYWFC have negative, significant coefficient of -.268, -.361 and -.333 on job satisfaction respectively (table 16 in appendix C). This implies that when TIMEWFC, STRWFC and PSYWFC increase, job satisfaction decreases by the stated magnitude of the value. As can be seen in figure 5.5, 33 percent of observed variability in job satisfaction can be explained by TIMEWFC, STRWFC and PSYWFC en bloc.

Figure 5.4: Predictive validity of the six factor work family conflict model



In a similar vein, TIMEFWC, STRFWC and PSYFWC have negative, significant coefficient of -.186, -.319 and -.318 on family satisfaction respectively (table 16 in appendix C). This implies that when TIMEFWC, STRFWC and PSYFWC increase, family satisfaction decreases by the stated magnitude of the value. As can be seen in figure 5.4, 37 percent of observed variability in family satisfaction can be explained by TIMEFWC, STRFWC and PSYFWC en bloc. Thus, both WFC and FWC dimensions predicted job satisfaction and family satisfaction indicating strong predictive validity per se.

5.4 Summary

Results of the principal components analysis revealed the presence of six components with an eigenvalue exceeding 1.0, explaining 75.42% of variance. Visual examination of the scree plot and the parallel analysis also supported retaining six components. Subsequently, the robustness of structure and its psychometric properties were examined. GOF measures of RMSEA (.044), PCLOSE (.915), CFI (0.971), SRMR (0.0431) were found to be indicative of good fit with strong psychometric properties. Moreover, in assessing capability of the model for accurate prediction, the frequently reported consequences viz., job satisfaction and family satisfaction were significantly related and the results lent credence to the existence of predictive validity. In conclusion, the analysis has demonstrated that a model with a six - factor structure (time based, strain based and psychological based both work to family conflict and family to work conflict) represents the most theoretically and psychometrically sound measure of work family conflict. Therefore, hypothesis ($\mathbf{H_1}$) that the six factor

structure of Carlson, Kacmar and Williams' (2000) scale of work family conflict developed in individualist cultures will exist in Sri Lanka was only partially supported as there was little evidence to the prevalence of behaviour based work family conflict, and the new psychological based dimension found goes beyond the Carlson, Kacmar and Williams' model. The next chapter explores the factors related to work to family conflict and family to work conflict.

CHAPTER SIX

EXPLORING THE FACTORS RELATED TO WORK TO FAMILY CONFLICT AND FAMILY TO WORK CONFLICT

6.0 Chapter overview

In this chapter the relationship between work demand, family demand and the six dimensions of work family conflict identified in chapter 5, and the variables found to be related with the measures of work family conflict reported in chapter 4 are explored. This chapter therefore, answers the research question of what work related and family related factors influence work family conflict. It will report on the results of correlation analysis, multiple regression analysis, structural equation modelling (SEM) and moderation analysis in order to identify the predictors of work family conflict. The chapter ends with a brief summary.

6.1 Correlation analysis

At first, on the theoretical grounds and the findings of chapter 4, the potential variables expected to be associated with work demand are explored. The correlations between such potential predictors and work demand are presented in table 6.1.

As can be seen in table 6.1, working hours per week ($r = .47, p < 0.01$) has the strongest positive association with work demand whereas being female has the strongest negative association ($r = -.26, p < 0.01$) with work demand. Furthermore, of the potential predictors, supervisory role ($r = .17, p < 0.01$), number of employees reporting ($r = .21, p < 0.01$), tenure ($r = .10, p < 0.01$), higher level income ($r = .20, p < 0.01$), local banks ($r = .11, p < 0.01$) were all weakly positively associated with work demand. However, formal work life policies ($r = -.13, p < 0.01$) was weakly negatively associated with work demand. Educational qualifications and informal work life policies were not significantly associated with work demand.

Table 6.1: Correlations between predictive variables of work demand

		Correlation Matrix										
		1	2	3	4	5	6	7	8	9	10	11
1	Working hours per week	1.000										
2	Supervisory role (1=No; 2=Yes)	.340**	1.000									
3	Reporting: Number of employees	.363**	.715**	1.000								
4	Education (1=Basic; 2= Higher)	.135**	.354**	.292**	1.000							
5	Tenure	.318**	.658**	.689**	.290**	1.000						
6	Income (1=Low; 2= High)	.296**	.564**	.460**	.490**	.489**	1.000					
7	Bank (1=Multinational bank ; 2= Local bank)	.106**	.106**	.104**	-.222**	.112**	-.248**	1.000				
8	Formal work life policies (1=No; 2=Yes)	-.094*	-.119**	-.082*	.183**	-.098**	.207**	-.902**	1.000			
9	Informal work life policies (1=No; 2=Yes)	-.033	-.055	-.042	-.017	-.019	-.058	.013	-.028	1.000		
10	Gender (1=Male; 2=Female)	-.273**	-.008	-.094*	.106**	-.100**	-.060	-.074*	.081*	-.207**	1.000	
11	**Work demand**	.470**	.171**	.210**	.031	.100**	.195**	.106**	-.129**	-.048	-.258**	1.000

** Correlation is significant at the 0.01 level (1-tailed). * Correlation is significant at the 0.05 level (1-tailed).

Turning now to the demands of family, potential predictors were chosen on the ground of previous studies and the findings of chapter 4. The results of the correlation analysis between such potential predictors and family demand are presented in table 6.2. Results revealed that hours spent on household chores (r =.27, $p < 0.01$) and being female (r =.29, $p < 0.01$) were strongly positively associated with family demand whereas informal work life policies (r = -.30, $p < 0.01$) was strongly negatively associated with family demand. Further, number of children (r = .10, $p < 0.01$), hours spent on children (r =.09, $p < 0.05$), main child's carer (respondent) (r =.08, $p < 0.05$), working spouse (r =.11, $p < 0.01$), spouse working hours (r =.13, $p < 0.01$) were significantly positively associated with family demand however the association was weak. The association of formal work life policies with family demand was significantly negatively weak (r = -.09, $p < 0.05$) suggesting little effect. Nonetheless, number of dependents needing care, hours spent on dependent care, primary dependent's carer, nature of family (living couple) and number of family member were not found to be significantly associated with family demand.

Table 6.2: Correlations between predictive variables of family demand

		Correlation Matrix															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Hours spent on household chores	1.000															
2	No of children	-.219**	1.000														
3	Hours spent on children	-.222**	.653**	1.000													
4	Main child's carer (1=Others; 2=Respondent)	-.073	.146**	-.059	1.000												
5	No of dependents need caring	-.490**	.363**	.203**	.124**	1.000											
6	Hours spent on dependents	-.516**	.267**	.117**	.075	.841**	1.000										
7	Primary dependent's carer (1=Others; 2=Respondent)	-.006	.162*	.026	.643**	.097	-.053	1.000									
8	Working spouse (1=No; 2=Yes)	.138**	.127**	.150**	.246**	-.117**	-.141**	.360**	1.000								
9	Spouse working hours	.144**	.134**	.148**	.277**	-.108**	-.132**	.392**	.978**	1.000							
10	Main earner (1=No; 2=Yes)	-.095*	.221**	.275**	-.489**	.090*	.142**	-.440**	-.216**	-.254**	1.000						
11	Number of family members	-.091*	.446**	.332**	-.027	.116**	.092*	.233**	.337**	.335**	-.051	1.000					
12	Nature of family ((1=Single; 2=Couple)	-.122**	.484**	.610**	.a	.151**	.129**	.055	.366**	.358**	.413**	.145**	1.000				
13	Formal work life policies (1=No; 2=Yes)	.028	-.075*	-.025	.038	-.077*	-.016	-.102	.066	.055	.149**	-.121**	.030	1.000			
14	Informal work life policies (1=No; 2=Yes)	-.047	-.101**	-.097*	-.036	-.040	-.034	-.080	-.108**	-.104**	.002	-.037	-.116**	-.028	1.000		
15	Gender (1=Male; 2=Female)	.150**	.128**	.175**	.414**	-.137**	-.121**	.632**	.347**	.397**	-.390**	-.114**	.084*	.081*	-.207**	1.000	
16	**Family demand**	.267**	.099**	.089*	.083*	.022	.014	.052	.107**	.125**	-.128**	.049	.028	-.088*	-.304**	.294**	1.000

**. Correlation is significant at the 0.01 level (1-tailed). *. Correlation is significant at the 0.05 level (1-tailed). a. Cannot be computed because at least one of the variables is constant.

Having identified the main factors related to work and family demand, the next stage of analysis considers the relationship between work and family demand, the moderating variables work and family support and the key outcome measures. These are the six dimensional model of bidirectional work family conflict namely time based, strain based and psychological based, and the final outcome measures of job and family satisfaction.

The results of the correlation analysis are presented in below table 6.3. As expected, work demand was significantly positively correlated with psychological based WFC (r = .59, $p < 0.01$), strain based WFC (r = .44, $p < 0.01$) and time based WFC (r = .39, $p < 0.01$). In a similar vein, family demand was significantly positively correlated with strain based FWC (r = .56, $p < 0.01$) and psychological based FWC (r = .44, $p < 0.01$) and time based FWC (r = .42, $p < 0.01$). As can be seen in the table, time based WFC, strain based WFC and psychological based WFC were strongly negatively associated with job satisfaction, however, their association with family satisfaction was weak. Similarly, time based FWC, strain based FWC and psychological based FWC were strongly negatively associated with family satisfaction. However, there was no significant association between time based FWC and strain based FWC and job satisfaction, but a weak negative association was found between psychological based FWC and job satisfaction.

The table also includes the measure of behaviour based WFC and FWC and it can be seen that they are not correlated with work/family demand or job/family satisfaction: the results were clearly consistent with the decision made in chapter five for exclusion of behavioural form of work family conflict.

The measure of work support was negatively strongly associated with work demand (r = -.29, $p < 0.01$) indicating that increased work support decreases work demand and organisational WLP was also significantly negative but weakly associated with work demand (r = -.07, $p < 0.01$) and family demand (r = -.08, $p < 0.01$) suggesting little impact. However, results revealed that family support was positively associated with family demand (r = .27, $p < 0.01$) which is in contradiction to many research findings in individualist nations. It is assumed that with an extended family structure, the amount of family support would be greater in comparison with the nuclear family, but conversely it appears that extended family members might be a burden generating a greater amount of family demand.

Table 6.3: Correlations analysis of the predictive variables and outcome variables of work family conflict

		Correlation Matrix														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Work demand	1.000														
2	Family demand	.146**	1.000													
3	Work support	-.289**	-.016	1.000												
4	Family support	.019	.273**	.013	1.000											
5	Work life policies (WLP)	-.072*	-.076*	.071*	-.030	1.000										
6	Time based WFC	.387**	.065	-.251**	-.024	-.021	1.000									
7	Strain based WFC	.437**	.064	-.281**	.040	-.052	.070*	1.000								
8	Psychological based WFC	.592**	.095*	-.297**	.014	-.031	-.066	.060	1.000							
9	Behaviour based WFC	.044	.041	-.073*	.002	-.033	-.005	.094*	-.001	1.000						
10	Time based FWC	.119**	.420**	.047	-.018	-.026	-.056	.021	.129**	.041	1.000					
11	Strain based FWC	.151**	.555**	-.038	.134**	-.098**	.044	.045	.110**	-.008	-.003	1.000				
12	Psychological based FWC	.066	.439**	-.020	.060	-.026	.065	.024	.032	.046	.076*	-.051	1.000			
13	Behaviour based FWC	.020	.041	-.058	.000	-.026	-.017	-.014	.085*	.169**	.154**	-.051	.034	1.000		
14	Family satisfaction	-.146**	-.392**	.085*	-.020	.140**	-.128**	-.079*	-.083*	-.059	-.205**	-.354**	-.277**	-.061	1.000	
15	Job satisfaction	-.452**	-.128**	.368**	-.073	.157**	-.281**	-.267**	-.360**	-.019	-.001	-.128**	-.121**	-.041	.229**	1.000

**. Correlation is significant at the 0.01 level (1-tailed). *. Correlation is significant at the 0.05 level (1-tailed). WFC: work to family conflict. FWC: Family to work conflict

The correlation analysis revealed association of the variables with potential predictors of work demand, family demand and work family conflict. However, the correlation matrix also revealed some degree of inter-correlation among the set of predictor variables. The next section reports on the results of stepwise multiple regression analysis that sought to explore these relationships in greater depth.

6.2 Multiple regression analysis

Correlation coefficients measure association between variables, it does not support making any direct conclusions about causality, and thus multiple regression analysis was performed to calculate the coefficient of determination (R^2) measuring the amount of variability in one variable that is shared by the other (Field, 2013).

6.2.1 Predictors of work demand

Several seminal studies have found that work demand is a predictor (cause) of work to family conflict (e.g., Lu et al., 2006; Boyar et al., 2008). Thus identifying the factors contributing to work demand is essential to a complete model of work family conflict. As discussed in chapter 2 the main factors identified as predictors of work demand in the literature, and found to have an association in this study (see table 6.1 above) were working hours, supervisory status (how many reporting), tenure, income, formal work life policies, informal work life policies, gender and educational qualification. These were examined using stepwise multiple regression analysis[1]. The results revealed a six variable solution that excluded informal work life policies and educational qualification as insignificant contributions to the model. Table 6.4 depicts the variance explained by each of these predictor variables.

Table 6.4: Model summary: Predictors of work demand

Model Summary [g]

Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate	Durbin-Watson
1	.470[a]	.221	.219	.69760	
2	.489[b]	.239	.236	.68999	
3	.495[c]	.245	.241	.68787	
4	.502[d]	.252	.247	.68527	
5	.514[e]	.265	.258	.68000	
6	.521[f]	.271	.264	.67749	**1.847**

a. Predictors: (Constant), Working hours
b. Predictors: (Constant), Working hours, Gender
c. Predictors: (Constant), Working hours, Gender, Formal Policies
d. Predictors: (Constant), Working hours, Gender, Formal Policies, Income
e. Predictors: (Constant), Working hours, Gender, Formal Policies, Income, Tenure
f. Predictors: (Constant), Working hours, Gender, Formal Policies, Income, Tenure , Supervisory status (how many reporting)
g. Dependent Variable: Work demand

[1] It is the most popular sequential approach to variable selection and to examine the contribution of each independent variable and thus facilitate addition or deletion of variables at each stage (Hair et al., 2010).

Inclusion of all six variables explains 27.1 % of the variance (Model 6: R^2 = .271) in work demand although the remaining 72.9 % of variance in work demand is not explained in this model. However, the value of R^2 (.271) produced the effect size of Cohen's f^2 .372 indicating large sized effect. Cross validation of a regression model indicating accuracy of the model in a different sample is necessary (Field, 2013) and thus Stein's formula applied with a sample of 569 and six predictors. The value of Stein's equation is 25.3% which is closer to the observed value of R^2 (.271) indicating that the cross validity of the simple model is reasonable good.

As shown in ANOVA table 17 (appendix C), the value of F statistic is highly significant for all six models: F (567) = 160.43, $p < .001$), F (566) = 88.79, $p < .001$), F (565) = 61.05, $p < .001$), F (564) = 47.46, $p < .001$), F (563) = 40.52, $p < .001$) and F (562) = 34.88, $p < .001$) respectively, indicating initial model significantly improved the ability to predict work demand and thus model 6 was chosen as better model. Coefficients of the predictors determining work demand are presented in table 6.5.

Table 6.5: Coefficients of the predictors determining work demand

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	*t*	Sig.
6	(Constant)	-1.269	.600		-2.114	.035
	Working hours	.132	.013	.401	9.856	.000
	Supervisory status	.013	.006	.117	2.274	.023
	Tenure	-.020	.005	-.202	-3.874	.000
	Income	.234	.076	.138	3.076	.002
	Formal Policies	-.253	.082	-.118	-3.094	.002
	Gender	-.224	.060	-.140	-3.732	.000

a. Dependent Variable: Work demand

As can be seen in table 6.5, t values are significant for all predictor variables ($p < .05$) indicating coefficients for all variables are not zero and thus predictors were making significant contribution to the model. Working hours (t (562)= 9.86, $p < .001$), supervisory status (t (562)= 2.27, $p < .05$), tenure (t (562)= -3.87, $p < .001$), income (t (562)= 3.08, $p < .01$), formal practice (t (562)= -3.09, $p < .01$) and gender (t (562)= -3.73, $p < .001$) were all significant predictors. The results are consistent in line with Boyar et al. (2008).

The *b*-values are the indicative of relationship between each predictor and work demand; positive value suggesting positive influence on work demand and vice versa. Working hours, supervisory status, income have positive coefficients suggesting work demand increases with the increasing number of working hours, supervisory status and higher level of income. For example, if working hour increases by one hour, work demand will increase by .132. In contrast, tenure, formal policies and being female have negative coefficient suggesting work demand decreases with an increase of such variables. For example, ceteris paribus, female respondents experience lesser work demand by -.224 than that of male counterparts. Inter alia all predictor variables, working hours contributes more to this model because of its largest standardized coefficient (.40) in comparison with all other predictors.

The crux of the multiple regression analysis is anchored in its assumptions. One of the most important assumptions is that there is no multicollinearity in a model and its presence poses a problem in multiple regression analysis. The mostly widely used diagnostic measures of multicollinearity are: VIF (Variance inflation factor) and tolerance. As can be seen in table 18 (appendix C), VIF values are all well below 10 (maximum VIF value is 2.10) and similarly all tolerance statistics are well above 0.2 (minimum value of tolerance .476) indicating no multicollinearity between predictors suggesting that the model is capable of assessing the individual importance of each predictor. The independent error (i.e., the residuals are independent) is another important assumption of regression analysis and that can be measured using the Durbin–Watson test. As a rule of thumb, a value between 1 and 3 is acceptable (Field, 2013) and in this case its value 1.847 (table 6.4) indicating that any errors in regression are independent. Furthermore, a plot of *ZRESID against *ZPRED, a histogram and normal probability plot of the residuals were examined and the results have met the assumptions of linearity, homoscedasticity and normality (See figure 2, appendix D).

Overall, the model 6 is a robust model and the findings can be generalised beyond the sample. In terms of the results, a couple of hypotheses that "educational qualification will have a positive impact on work demand (H_{3e}) and informal WLP will have a negative impact on work demand (H_{3f})" were not supported and not contributing to this model.

6.2.2 Predictors of family demand

Several seminal studies have found that family demand is the predictor of family to work conflict (e.g., Fu and Shaffer, 2001, Boyar et al., 2008). Thus the factors contributing to family demand are essential for a complete model of work family conflict. On the basis of previous studies discussed in chapter 2 and the results of the correlation analysis (above table 6.2), the potential predictors of family demand viz., hours spent on household chores, hours spent on childcare, hours spent on dependent, number of dependents, number of children, formal work life policies, informal work life policies, age, marital status, spouse working and gender were examined using stepwise multiple regression analysis. The results of the stepwise regression analysis revealed a six variable solution that excluded number of children, number of dependents, age, spouse working and marital status as heaving insignificant contribution to the model. Table 6.6 depicts the variance explained by each of the 6 remaining predictor variables.

Table 6.6: Model summary: Predictors of family demand

Model Summary [g]

Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate	Durbin-Watson
1	.304[a]	.093	.091	.67139	
2	.396[b]	.157	.154	.64776	
3	.444[c]	.197	.193	.63251	
4	.477[d]	.227	.222	.62125	
5	.491[e]	.241	.235	.61608	
6	.497[f]	.247	.239	.61424	**1.783**

a. Predictors: (Constant), Informal Policies
b. Predictors: (Constant), Informal Policies, hours spent on household chores
c. Predictors: (Constant), Informal Policies, hours spent on household chores, Gender
d. Predictors: (Constant), Informal Policies, hours spent on household chores, Gender, hours spent on dependent
e. Predictors: (Constant), Informal Policies, hours spent on household chores, Gender, hours spent on dependent, Formal Policies
f. Predictors: (Constant), Informal Policies, hours spent on household chores, Gender, hours spent on dependent, Formal Policies, hours spent on children
g. Dependent Variable: Family demand

Inclusion of all six variables explain 24.7 % of the variance (Model 6: R^2 = .247) in family demand although the remaining 75.3 % of variance in family demand is not explained in this model. However, the value of R^2 (.247) produced the effect size of Cohen's f^2 .328 is an indicative of large sized effect. The value of Stein's equation is 22.9% which is closer to the observed value of R^2 (.247) indicating that the cross validity of the model is reasonable good.

As shown in ANOVA table 19 (appendix C), the value of F statistic is highly significant for all six models: $F(567) = 57.83, p < .001$), $F(566) = 52.63, p < .001$), $F(565) = 46.34$, $p < .001$), $F(564) = 41.44, p < .001$), $F(563) = 35.81, p < .001$) and $F(562) = 30.75$, $p < .001$) respectively, indicating that the initial model is significantly improved and thus model 6 was chosen as a better model. Coefficients of the predictors determining family demand are presented in table 6.7.

Table 6.7: Coefficients of the predictors determining family demand

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	*t*	Sig.
6	(Constant)	3.487	.202		17.237	.000
	Hours spent on household chores	.301	.038	.350	7.931	.000
	Hours spent on childcare	.040	.019	.081	2.092	.037
	Hours spent on dependent	.156	.033	.201	4.690	.000
	Formal Policies	-.222	.070	-.117	-3.170	.002
	Informal Policies	-.327	.053	-.232	-6.177	.000
	Gender	.304	.055	.213	5.488	.000

a. Dependent Variable: Family demand

As can be seen in table 6.7, t values are significant for all predictor variables ($p < .05$) indicating coefficients for all variables are not zero and thus predictors were making a significant contribution to the model. Hours spent on household chores (t (562)= 7.93, $p < .001$), hours spent on childcare (t (562)= 2.09, $p < .05$), hours spent on dependent (t (562)= -4.69, $p < .001$), formal policies (t (562)= -3.17, $p < .01$), informal practice (t (562)= -6.18, $p < .01$) and gender (t (562)= 5.49, $p < .001$) were all significantly influencing family demand. Many studies found that number of children and number of dependents were determinants of family demand, nonetheless, this study has found that hours spent caring for children and dependents were the determinants of family demand rather numbers of children and dependents per se (e.g., Boyar et al., 2008). As in collectivist cultures members of extended family share childcare and eldercare, thus numbers become irrelevant.

Hours spent on household chores, hours spent on childcare and on dependents and being female have positive coefficients suggesting family demand increases with increases in these variables. For example, if hours spent on household chores increases by an hour; family

demand will increase by .301. In contrast, formal policies and informal policies have negative coefficients suggesting family demand decreases with the availability of formal and informal work life policies. However, of all predictor variables, hours spent on household chores contribute most to this model because of its largest standardized coefficient (.35) in comparison with other predictors.

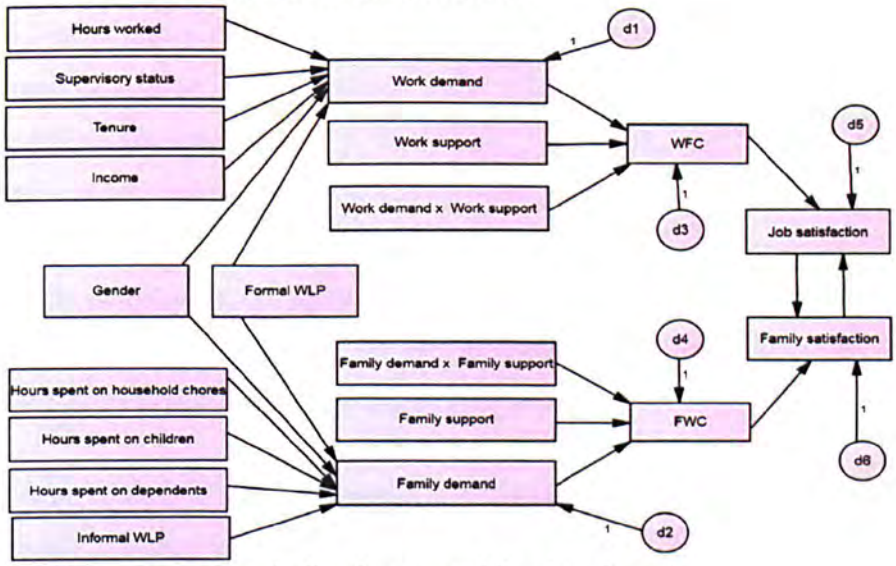
As can be seen in table 20 (appendix C), VIF values are all well below 10 (maximum VIF value is 1.45) and similarly all tolerance statistics are well above 0.2 (minimum value of tolerance .690) indicating no multicollinearity between predictors suggesting that the model is capable of assessing the individual importance of each predictor. Moreover, the value of Durbin–Watson statistic 1.783 is better (table 6.6) indicating errors in regression are independent. Furthermore, plot of *ZRESID against *ZPRED, histogram and normal probability plot of the residuals were examined and the results have met the assumptions of linearity, homoscedasticity and normality (See figure 3, appendix D).

Overall, the model 6 is robust and the findings can be generalised beyond the sample. In terms of the results, hypotheses inquiring "age of the respondents will have a positive impact on family demand (H_{4a}), being married will have a positive impact on family demand (H_{4b}) and number of children and dependents living at home will have a positive impact on family demand" (H_{4c}) were not supported and not contributing to this model.

6.3 Assessing the model of work family conflict using structural equation modelling (SEM)

SEM was used to assess the model in greater depth as it facilitates the examination of a series of dependence relationships simultaneously. The number of children, number of dependents, marital status, age and educational qualification were not found to be significant (as discussed in section 6.2) and thus these non contributing variables were discarded from the proposed model. The reduced model shown in figure 6.1 consists of work demand and its predictors, family demand and its predictors, work to family conflict and its predictors, family to work conflict and its predictors, and job and family satisfaction with its predictors.

Figure 6.1: Reduced model of work family conflict



[Note: d1 to d6 are error terms indicating unexplained variance]

SEM was employed using AMOS version 19 with the help of IMB SPSS statistics 19. The results of the analysis are presented in table 6.8.

Table 6.8: Unstandardised and standardised regression weight of reduced model

			Unstandardised regression weight (RW)				Standardised RW
			Estimate	S.E.	C.R.	P	Estimate
Family demand	<---	Formal policies	-.222	.069	-3.190	.001	-.117
Work demand	<---	Formal policies	-.253	.077	-3.296	***	-.118
Work demand	<---	Gender	-.224	.057	-3.910	***	-.140
Family demand	<---	Gender	.304	.055	5.518	***	.214
Work demand	<---	Hours worked	.132	.012	11.206	***	.401
Work demand	<---	Supervisory status	.013	.004	3.278	.001	.117
Work demand	<---	Tenure	-.020	.004	-5.644	***	-.202
Work demand	<---	Income	.234	.061	3.846	***	.138
Family demand	<---	Hours spent on household chores	.301	.037	8.154	***	.350
Family demand	<---	Hours spent on children	.040	.019	2.168	.030	.081
Family demand	<---	Hours spent on dependents	.156	.033	4.725	***	.201
Family demand	<---	Informal practice	-.327	.052	-6.269	***	-.233
WFC	<---	Work demand	.584	.011	54.051	***	.866
WFC	<---	Work demand x Work Support	-.048	.002	-19.375	***	-.338
WFC	<---	Work support	.036	.016	2.265	.023	.039
FWC	<---	Family demand x Family support	-.042	.003	-12.204	***	-.408
FWC	<---	Family support	.121	.020	5.913	***	.198
FWC	<---	Family demand	.638	.013	49.081	***	.868
Job satisfaction	<---	WFC	-.820	.043	-18.894	***	-.614
Family satisfaction	<---	FWC	-.784	.046	-16.861	***	-.568
Family satisfaction	<---	Job satisfaction	.182	.053	3.434	***	.182
Job satisfaction	<---	Family satisfaction	.156	.055	2.850	.004	.156

The output of SEM is presented with the critical value of the unstandardised coefficient and standardised coefficients. Critical ratios (CR) of all path coefficients were greater than ±1.96 indicating significant relationships between the variables of the reduced model. As can be seen in table 6.8, of the predictors of work demand, working hours had the largest impact on work demand (largest standardised coefficient .401), followed by tenure (-.202), gender (-.140), income (.138), formal work life policies (-.118) and supervisory status (.117). Squared multiple correlations are presented in table 6.9 describing the proportion of variance accounted by all combined predictors. As shown in table 6.9, a combination of all predictors accounted for 27.1 % of the variance of work demand.

As discussed in chapter 2 and shown in hypothesised model (figure 2.2, p.30), it was hypothesised that working hours will have a positive impact on work demand. As shown in table 6.8, working hours had a statistically positive impact on work demand (β = .132, $C.R$= 11.206, P < .001). And thus, the hypothesis H_{3a} that working hours will increase work demand was supported. It was found that supervisory status (number of employees reporting) had a statistically significant positive effect on work demand (β =.013, $C.R$= 3.278, P < .01) indicating that work demand increases with the number of subordinates (reportees), and thus hypothesis (H_{3b}) was supported. Moreover, working experience (tenure) had a significant negative impact on work demand (β =-.020, $C.R$= -5.644, P < .001) and therefore, the hypothesis "working experience will have a negative impact on work demand" was supported (H_{3c}). This implies that respondents became attuned to work demand with increasing number of working years. Results revealed that income significantly positively impacted on work demand (β = .234, $C.R$= 3.846, P < .001) suggesting that as income levels increase so does work demand and thus, the hypothesis H_{3d} that level of income will have a positive impact on work demand was supported. As discussed in earlier in the multiple regression analysis, informal WLP was not found to have significant influence on work demand. However, formal WLP was found to be a significant influence on work demand (β = -.253, $C.R$= -3.296, P < .001). Therefore, the hypothesis H_{3f} that formal and informal WLP will have a negative impact on work demand was supported only in relation to informal work life practice.

As to family demand, hours spent on household chores had the largest impact on family demand having the largest standardised coefficient (.350) followed by informal work life policies (-.233), gender (.214), hours spent on dependents (.201), formal policies (-.117) and

hours spent on children (.081). As shown in table 6.9, a combination of all predictors accounted for 24.6 % of the variance of family demand.

As discussed in chapter 2 and shown in hypothesised model (figure 2.2, p.30), it was hypothesised that hours spent on household chores and hours spent caring for children and dependents will have a positive impact on family demand (H_{4d}). As can be seen in table 6.8, Family demand <--- Hours spent on household chores (β = .301, *C.R*= 8.154, $P < .001$), Family demand <--- Hours spent on children (β = .040, *C.R*= 2.168, $P < .05$) and Family demand <--- Hours spent on dependents (β = .156, *C.R*= 4.725, $P < .001$) had all positive significant coefficients and thus the hypothesis (H_{4d}) was supported. Moreover, formal WLP (β = -.222, *C.R*= -3.190, $P < .01$) and informal WLP (β = -.327, *C.R*= -6.269, $P < .001$) had significantly negative coefficients on family demand and thus, the hypothesis H_{4e} that formal and informal WLP will have a negative impact on family demand was supported. And as discussed aforementioned, the effect of informal practice vis a vis formal practice was greater on family demand.

Work demand and family demand were hypothesised as having positive impact on work to family conflict (H_5) and family to work conflict (H_6) respectively. Results of the WFC <--- Work demand was β = .584, *C.R*= 54.051, $P < .001$ and FWC <--- Family demand was β = .638, *C.R*= 49.081, $P < .001$ supporting hypotheses. The interaction term (Work demand x Work Support) was found to negatively impact on work to family conflict (β = -.048, C.R= -19.375, $P < .001$) supporting moderating role of work support between work demand and work to family conflict. Moreover, family support between family demand and family to work conflict (the interaction term: Family demand x Family support) was also found to be significantly negative β = -.042, *C.R*= -12.204, $P < .001$. As suggested by Field (2013), a further robust moderator analysis was conducted for identifying nature of moderators, reported in the subsequent section.

Overall, as shown in table 6.9, work demand and the moderating effect of work support explained 85.4 % of the variance in work to family conflict and the remaining 14.6 % of variance was not explained by model. In case of family to work conflict, family demand and the moderating effect of family support explained 82.2 % of the variance in family to work conflict and the remaining 17.8 % of variance was not explained by model.

Table 6.9: Squared multiple correlations

	Estimate
Work demand	.271
Family demand	.246
FWC	.822
WFC	.854
Family satisfaction	.365
Job satisfaction	.418

Furthermore, job satisfaction and family satisfaction, frequently reported outcome variables of work family conflict were examined. Results revealed that work to family conflict was found to be a negative influence on job satisfaction (β = -.820, $C.R$= -18.894, P < .001) and family to work conflict was a negative influence on family satisfaction (β = -.784, $C.R$= -16.861, P < .001). Thus, the model is robustly demonstrating predictive validity. It was also found that Family satisfaction <--- Job satisfaction and Job satisfaction <--- Family satisfaction were statistically significantly positive (β = .182, $C.R$= 3.434, P < .001, β = .156, $C.R$= 2.850, P < .01) demonstrating a nonrecursive model.

In a nonrecursive model (family satisfaction depends on job satisfaction and job satisfaction depends on family satisfaction), examining the system of linear dependencies (called stable) for its stability is of substantive (Arbuckle, 2010). AMOS computes stability index from its estimates and if the stability index falls between -1 and +1, the nonrecursive model is said to be stable; otherwise unstable (Arbuckle, 2010). The stability index of this model is .028 denoting model stability.

As to model fit indices, the test of χ^2 is significant (χ^2 (134) = 356.579, p < 0.05) indicating portent of badness of fit, nonetheless, the significant result is mostly common in a large sample size N = 569 (e.g., Bagozzi and Yi, 1988; Bagozzi and Foxall, 1996; Hair et al., 2010) and thus, the reliance on the Chi-square test as the sole measure of fit is not recommended (e.g., Bagozzi and Foxall, 1996). CMIN/DF (2.661), CFI (.947), GFI (.941), RMR (.052), RMSER (.054), and SRMR (.0639) were all indicative of a well fitting hypothesised model.

6.4 Analysis of Moderating effect

Moderation is conceptually interpreted as the combined effect of two variables on another and statistically referred to as an interaction effect (Field, 2013). Thus, any model with moderator includes at least a predictor, moderator and predictor x moderator (interaction term) in determining outcome variable. The significant interaction term explains that moderator influences the relationship between predictor and outcome variable. The model used in this study assumed work support, family support and gender role ideology are potential moderators between work demand / family demand and work family conflict as discussed in chapter 2. The moderator analysis was employed using Andrew Hayes' tool as guided by Field (2013).

6.4.1 Work support as a moderator of the relationship between work demand and work to family conflict.

This study hypothesised (H_7) that work related support will moderate the relationship between work demand and work to family conflict i.e., the relationship between work demand and work to family conflict will be weaker for employees who receive higher levels of work related support than for those who experience low levels of work related support. The result of the moderator analysis is presented in table 6.10.

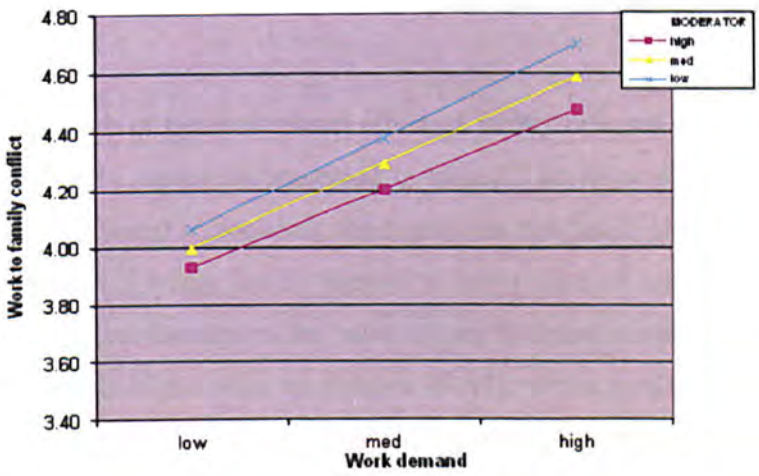
Table 6.10: work support as a moderator between work demand and work to family conflict

	b	*SE B*	*t*	*p*
Constant	4.29 (4.28, 4.31)	.008	517.42	$p < .001$
Work support (centred)	-.15 (-.18, -.12)	.0153	-10.10	$p < .001$
Work demand (centred)	.37 (.34, .40)	.0147	25.39	$p < .001$
Work demand x Work support	-.05 (-.09, -.01)	.0194	-2.48	$p = .013$

As can be seen in table 6.10, the interaction term (Work demand x Work support) is significant, b = -.05, 95 % *CI* (-.09, -.01), t = -2.48, p =.013 indicating that the relationship between work demand and work to family conflict is moderated by work support i.e., work support does weaken the positive relationship between work demand and work to family conflict. Further, a slope analysis was conducted to understand the nature of moderating effect.

The result of the conditional effect of work demand on work to family conflict at values of the work support is presented in table 21 (appendix C). According to table, results showed three different regressions: the regression for work demand as a predictor of work to family conflict (1) when work support is low (value of work support is -.5817); (2) at the mean value of work support (the value is zero because of centred traits) (3) when the value of work support is high (value of traits is .5817). When work support is low, there is a significant positive relationship between work demand and work to family conflict, b = 0.40, 95 % CI (0.37, 0.43), t = 26.91, p < 0.001 whilst at the mean value of work support, the relationship between work demand and work to family conflict is significantly positive, however such relationship is weaker than at low level of work support, b = 0.37, 95 % CI (0.34, 0.40), t = 25.39, p < 0.001. Similarly, when work support is high there is a significant positive relationship between work demand and work to family conflict, however such relationship is weaker than at mean level of work support, b = 0.35, 95 % CI (0.30, 0.39), t = 16.03, p < 0.001. Overall, results revealed that there is a significant positive relationship between work demand and work to family conflict at all three levels of work support, nonetheless such positive relationship is weakened when respondents receive more work support and thus hypothesis (H_7) was supported. The nature of relationship is depicted in figure 6.2.

Figure 6.2: Graphical presentation of work support as a moderator between work demand and work to family conflict



Work demand	Work support	yhat
-.7895	-.5817	4.0662
.0000	-.5817	4.3833
.7895	-.5817	4.7005
-.7895	.0000	3.9985
.0000	.0000	4.2936
.7895	.0000	4.5886
-.7895	.5817	3.9309
.0000	.5817	4.2038
.7895	.5817	4.4767

As shown in figure 6.2, positive relationship between work demand and work to family conflict get weaker when the respondents receive more and more work support.

6.4.2. Extended family support as a moderator of the relationship between family demand and family to work conflict

This study hypothesised (H_8) that extended family support will moderate the relationship between family demand and family to work conflict i.e., the relationship between family demand and family to work conflict will be weaker for employees who receive high level of extended family support than for those who experience low level of extended family support. The results of the moderator analysis excerpted is presented in table 6.11

Table 6.11: Family support as a moderator between family demand and family to work conflict

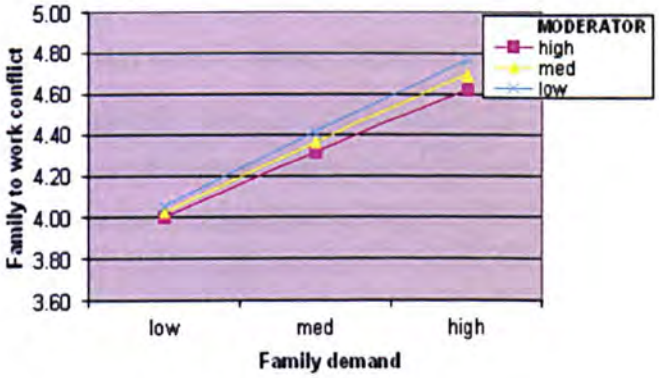
	b	*SE B*	*t*	*p*
Constant	4.36 (4.34, 4.38)	.0094	461.77	$p < .001$
Family support (centred)	-.06 (-.08, -.04)	.0113	-5.09	$p < .001$
Family demand (centred)	.47 (.45, .50)	.0147	34.61	$p < .001$
Family demand x Family support	-.04 (-.07, -.01)	.0142	-2.94	$p = .003$

As can be seen in table 6.11, the interaction term (Family demand x Family support) is significant, b = -.04, 95 % *CI* (-.07, -.01), t = -2.94, p = .003 indicating that the relationship between family demand and family to work conflict is moderated by family support i.e., family support does weaken the positive relationship between family demand and family to work conflict. Further, a slope analysis was conducted to understand the nature of moderating effect.

The result of the conditional effect of family demand on family to work conflict at values of the family support is presented in table 22 (in appendix C). According to table, results show three different regressions: the regression for family demand as a predictor of family to work conflict (1) when family support is low (value of work support is -.8462); (2) at the mean value of work support (the value is zero because of centred traits) (3) when the value of work support is high (value of traits is .8462). When family support is low, there is a significant positive relationship between family demand and family to work conflict, b = 0.51, 95 % *CI* (0.47, 0.54), t = 30.02, $p < 0.001$ whilst at the mean value of work support, there is also positive relationship between work demand and family to work conflict, however such relationship is weaker than at low level of family support, b = 0.47, 95 % *CI* (0.45, 0.50),

t = 34.61, p < 0.001. Similarly, when family support is high positive relationship between family demand and family to work conflict is significant, however such relationship is weaker than at mean level of family support, b = 0.44, 95 % CI (0.40, 0.48), t = 22.64, p < 0.001. Overall, results revealed that there is a significant positive relationship between family demand and family to work conflict at all three levels of family support, nonetheless this positive relationship is weakened when respondents receive more family support and thus hypothesis (H_8) was supported. The nature of relationship is depicted in figure 6.3.

Figure 6.3: Graphical presentation of family support as a moderator between family demand and family to work conflict



Family demand	Family support	yhat
-.7042	-.8462	4.0542
.0000	-.8462	4.4119
.7042	-.8462	4.7696
-.7042	.0000	4.0302
.0000	.0000	4.3631
.7042	.0000	4.6961
-.7042	.8462	4.0062
.0000	.8462	4.3144
.7042	.8462	4.6226

As can been seen in figure 6.3, the positive relationship between family demand and family to work conflict is weaker when respondents receive more and more family support.

6.4.3 Gender role ideology as a moderator of the relationship between work demand and work to family conflict

This study hypothesised (H_{9b}) that gender role ideology moderates the relationship between work demand and work to family conflict such that the relationship between work demand and work to family conflict will be stronger for men who report higher levels of agreement with traditional gender role ideology than for those who report a lower level of gender role ideology. The result of the moderator analysis is presented in table 6.12.

Table 6.12: Gender role ideology (GRI) as a moderator between work demand and work to family conflict

	b	*SE B*	*t*	*p*
Constant	4.41 (4.39, 4.43)	.0117	378.41	p < .001
GRI (centred)	-.05 (-.08, -.02)	.0168	-2.99	p = .003
Work demand (centred)	.38 (.34, .43)	.0221	17.27	p < .001
Work demand x GRI	-.01 (-.05, -.04)	.0236	-.30	p = .765

As can be seen in table 6.12, the interaction term (work demand x GRI) is not significant, b = -.01, 95 % *CI* (-.05, -.04), t = -.30, p =0.765 indicating that the relationship between work demand and work to family conflict is not moderated by GRI in case of men. Elaborating, the non significant result revealed that gender role ideology did not moderate the relationship between work demand and work to family conflict and thus there is not sufficient evidence to infer that the relationship between work demand and work to family conflict is stronger for men who report higher levels of gender role ideology than for those who report a lower level of gender role ideology. Consequently, hypothesis H_{9b} was rejected.

6.4.4 Gender role ideology as a moderator of the relationship between family demand and family to work conflict

This study hypothesised (H_{9c}) that gender role ideology moderates the relationship between family demand and family to work conflict such the relationship between family demand and family to work conflict will be stronger for women who report higher levels of gender role ideology than for those who report lower levels of gender role ideology. The result of the moderator analysis is presented in table 6.13.

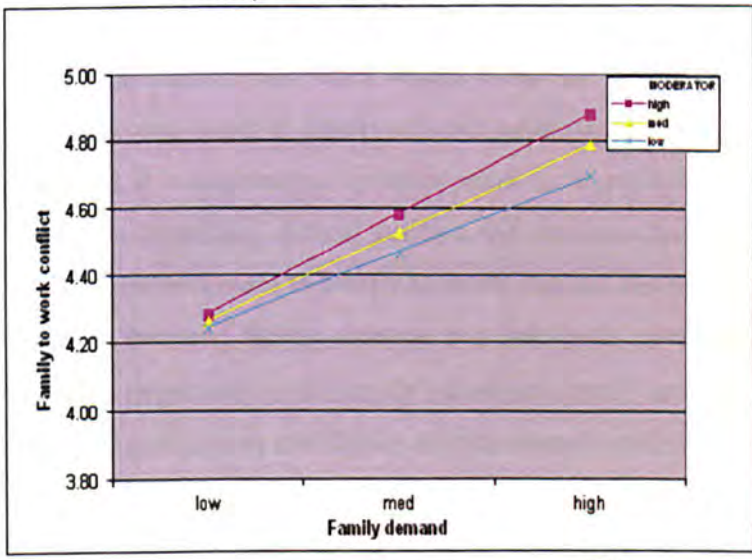
Table 6.13: Gender role ideology (GRI) as a moderator between family demand and family to work conflict

	b	*SE B*	*t*	*p*
Constant	4.53 (4.50, 4.55)	.0131	344.71	p < .001
GRI (centred)	.06 (.03, .09)	.0155	3.85	p < .001
Family demand (centred)	.43 (.35, .51)	.0412	10.43	p < .001
Family demand x GRI	.06 (0.01, .13)	.0308	2.09	p = .038

As can be seen in table 6.13, the interaction term (family demand x GRI) is significant, $b = .06$, 95 % CI (.01, .13), $t = 2.09$, $p = 0.038$ indicating that the relationship between family demand and family to work conflict is moderated by GRI. Further, a slope analysis was conducted to understand the nature of moderating effect.

The result of the conditional effect of family demand on family to work conflict at values of the GRI is presented in table 23 (appendix C). According to table, results show three different regressions: the regression for family demand as a predictor of family to work conflict (1) when GRI is low (value of GRI is -.9339); (2) at the mean value of GRI (the value is zero because of centred traits) (3) when the value of GRI is high (value of GRI is .9339). When GRI is low, there is a significant positive relationship between family demand and family to work conflict, $b = 0.37$, 95 % *CI* (0.27, 0.47), $t = 7.15$, $p < 0.001$ whilst at the mean value of GRI, the relationship between family demand and family to work conflict is significantly positive, however this relationship is stronger than at low level of GRI, $b = 0.43$, 95 % *CI* (0.35, 0.41), $t = 10.43$, $p < 0.001$. Similarly, when GRI is high there is a significant positive relationship between family demand and family to work conflict, and the relationship is strongest in comparison with all level of GRI, $b = 0.49$, 95 % *CI* (0.39, 0.59), $t = 10.06$, $p < 0.001$. Overall, the results revealed that there is a significant positive relationship between family demand and family to work conflict at all three levels of GRI, and the positive relationship is stronger when women respondents perceive most GRI and thus hypothesis (H_{9c}) was supported. The nature of relationship is depicted in figure 6.4.

Figure 6.4: Graphical presentation of GRI as a moderator between family demand and family to work conflict

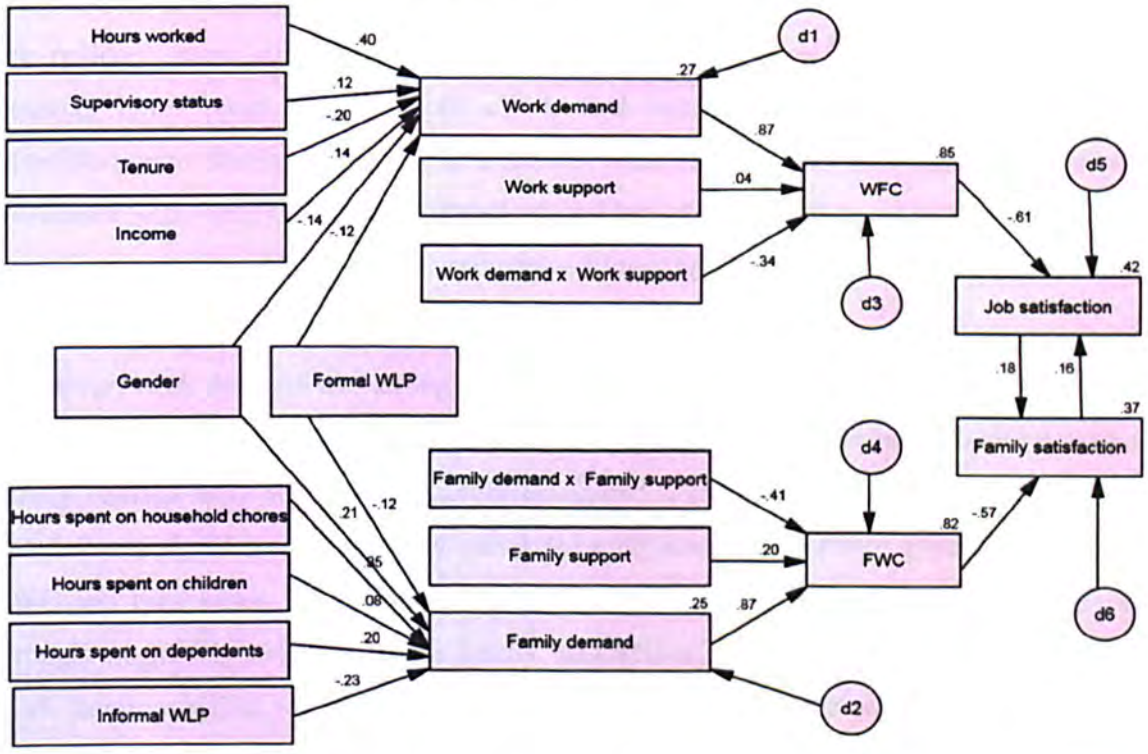


Family demand	GRI	yhat
-.6112	-.9339	4.2459
.0000	-.9339	4.4720
.6112	-.9339	4.6980
-.6112	.0000	4.2649
.0000	.0000	4.5277
.6112	.0000	4.7905
-.6112	.9339	4.2840
.0000	.9339	4.5835
.6112	.9339	4.8830

As can be seen in above figure, the positive relationship between family demand and family to work conflict gets stronger when women respondents perceive more and more GRI.

Overall, the revised model with contributing variables is presented with its standardised coefficients (see table 6.8) in figure 6.5.

Figure 6.5: The revised model of work family conflict



As shown in figure 6.5, revised model explains that working hours per week, supervisory status, tenure, income, formal practice and gender are the significant determinants of work demand and that work demand leads to work to family conflict. Further, a moderating effect of work support has been found between work demand and work to family conflict. As expected, work to family conflict negatively influences on job satisfaction. As to family demand, it is determined by hours spent on household chores, hours spent on childcare, hours spent on dependent, formal policies, informal practice and gender. It is further shown that the family demand leads to family to work conflict and that there is a moderating effect of family support between family demand and family to work conflict. As expected, family to work conflict negatively significantly influences family satisfaction. Furthermore, the model shows that job satisfaction and family satisfaction are positively related.

6.5 Summary

This chapter presented the findings of the data analysis which identified the factors that influence work family conflict. Correlation analysis revealed that working hours per week had the strongest positive significant association with work demand whereas being female had the strongest negative significant association with work demand. Moreover, supervisory role, number of employees reporting, tenure, high level income, local banks and formal work life policies were all weakly significantly associated with work demand. As to family demand, hours spent on household chores and being female were strongly positively associated with family demand, but informal work life policies was strongly negatively associated with family demand. Number of children, hours spent on children, main child's carer (respondent), working spouse, spouse working hours and formal work life policies were significantly weakly associated with family demand.

Moreover, work demand was strongly significantly positively associated with psychological based WFC, strain based WFC and time based WFC and in turn, all these forms of work to family conflict were strongly negatively associated with job satisfaction. Similarly, family demand was significantly positively correlated with strain based FWC, psychological based FWC and time based FWC, and in turn, all these forms of family to work conflict were strongly negatively associated with family satisfaction. However, the behavioural form of work family conflict was not significantly associated with either work/family demand or job/family satisfaction.

Results of the multiple regression analysis and SEM revealed that working hours per week, supervisory status, tenure, income, formal practice and gender were the predictors of work demand and of such predictors working hours per week had the strongest positive effect on work demand. Results further revealed that hours spent on household chores, hours spent on childcare, hours spent on dependent, formal policies, informal practice and gender were influence on family demand. Of such predictors, hours spent on household chores had the greatest influence on family demand. As might be expected, work demand was strongly positively related with work to family conflict whereas family demand was strongly positively related to family to work conflict. Analysis of the effect of moderating variables revealed that work support moderated the relationship between work demand and work to family conflict. In similar vein, family support moderated the relationship between family demand and family to work conflict. Further, gender role ideology moderated the relationship

between family demand and family to work conflict. The relationship between family demand and family to work conflict was stronger for women who report higher levels of traditional gender role ideology than for those who report lower levels. Overall, table 6.14 shows the summary of the hypothesis testing.

Table 6.14: Summary of hypothesis testing

Hypothesis	Description	Decision
H_{3a}	Working hours will have a positive impact on work demand	Supported
H_{3b}	Supervisory status will have a positive impact on work demand	Supported
H_{3c}	Working experience will have a negative impact on work demand	Supported
H_{3d}	Level of income will have a positive impact on work demand	Supported
H_{3e}	Educational qualification will have a positive impact on work demand	Rejected
H_{3f}	Formal and informal WLP will have a negative impact on work demand	Supported in favour of formal WLP
H_{4a}	Age of the respondents will have a positive impact on family demand	Rejected
H_{4b}	Being married will have a positive impact on family demand	Rejected
H_{4c}	Number of children and dependents living at home will have a positive impact on family demand	Rejected
H_{4d}	Hours spent on household chores, hours spent on children and hours spent on dependents will have a positive impact on family demand	Supported
H_{4e}	Formal and informal WLP will have a negative impact on family demand	Supported
H_5	Work demand will have a positive impact on work to family conflict	Supported
H_6	Family demand will have a positive impact on family to work conflict	Supported
H_7	Work related support will moderate the relationship between work demand and work to family conflict such that the relationship between work demand and work to family conflict will be weaker for employees who receive a high level of work related support than for those who experience a low level of work related support	Supported
H_8	Extended family support will moderate the relationship between family demand and family to work conflict such that the relationship between family demand and family to work conflict will be weaker for employees who receive high level of extended family support than for those who experience low level of extended family support	Supported
H_{9a}	Gender role ideology moderates the relationship between work demand and work to family conflict such that the relationship between work demand and work to family conflict will be stronger for men who report high level of gender role ideology than for those who report lower level of gender role ideology	Rejected
H_{9b}	Gender role ideology moderates the relationship between family demand and family to work conflict such that the relationship between family demand and family to work conflict will be stronger for women who report a high level of gender role ideology than for those who report lower levels of gender role ideology.	Supported

CHAPTER SEVEN
FINDINGS AND DISCUSSIONS, CONTRIBUTIONS AND CONCLUSIONS

7.0 Chapter overview

This final chapter starts with a brief summary of the rationale for the study, the research design, data collection and the analysis. Next, the findings of the previous chapters (4, 5 and 6) which answer the research questions and on which the revised model of work family conflict is based are discussed. The theoretical contributions and the practical implications are then considered. In the penultimate section, the limitations of the study are outlined and directions for future research are proposed with a view to strengthening the work family interference literature. The thesis ends with the conclusions to be drawn from the study.

7.1 Review of previous chapters

The majority of work family interference studies have been conducted in nations with individualist culture and the resultant prevalent conceptualisations and models mostly reflect such cultural contexts. Unfortunately, little work has been carried out in countries with collectivist culture and the research that has been done has applied the conceptualisations and models developed in individualist cultural nations without question. The most widely used measure of work family conflict is the Carlson, Kacmar and Williams' six dimensional model of work family conflict scale (i.e., time based, strain based and behaviour based both work to family conflict and family to work conflict). It is based on many seminal studies but the vast majority were carried out in individualistic cultural nations. Thus applicability of this model in nations with collectivist culture has been questioned (e.g., Gelfand and Knight, 2005; Choi, 2008; Hassan, Dollard and Winefield, 2010).

This study therefore focused on a collectivist cultural nation, Sri Lanka, to identify the prevalent forms of work family conflict and to construct a model of work family conflict relevant to collectivist cultures by identifying the work-related and family-related factors that determine work family conflict.

As explained in Chapter 1, there are aspects of Sri Lankan culture in relation to work and family that contrast with the national contexts in which it has been applied; most significantly, it is a high power distance and patriarchal society, paternalistic working relationships provide more informal support for employees than in the West, and traditional

gender role ideology where women bear major responsibility for domestic matters predominates. These responsibilities may be more onerous than in the West as households normally consisted of extended family members living together. However, with economic and social change in Sri Lanka, the position of women is changing: their educational attainment equals that of men and they make up about one third of the labour market. Nonetheless, fundamental differences remain from Western societies that are sufficient for questioning the suitability of the Carlson, Kacmar and Williams' model in this context.

Given the paucity of research in Sri Lanka and limited resources, it was decided to look at one sector in depth, banking, where work family conflict/higher levels of pressure have been found to be high in other studies (e.g., Granleese, 2004). While this limits the generalisability of the research findings for Sri Lanka as a whole, it has advantages for comparative research. The banks employ significant numbers of women, levels of pay are well above average, and employees are well qualified and professionally trained. These characteristics are similar to those found in banks globally, and also are strongly associated with work family conflict in most studies. Thus there are similarities in organisational tasks and employee roles, but differences in the cultural context; it is therefore a good starting point from which to explore work family conflict in Sri Lanka and test the relevance of the model to a collectivist culture.

The research method

The research was conducted in three stages: A small scale exploratory qualitative study, development and piloting of the main survey questionnaire, and a self report survey of a sample of 12 banks.

An initial exploratory study consisting in depth interviews with 15 bank employees covered a range of variation in gender, age, level, role, income, and type of bank. Analysis of the qualitative data collected in this first stage was used to gain insight into and establish the existence of work family conflict, to provide an initial assessment of the relevance of the model and the questions used to measure it, and to identify additional questions regarding the cultural context and a psychological dimension. The exploratory study confirmed the national differences in family structure and culture, working relationships and women's role noted above. Nonetheless, work family conflict was seen as an issue by all participants and the significance of time based, strain based and psychological based work family conflict was apparent; however, there was little evidence of the behavioural form of work family conflict found in the West. The study showed that work family conflict can originate from either the

work or family domain - findings consistent with many previous studies (e.g., Gutek, Searle and Klepa, 1991; Frone, Russell and Cooper, 1992; Kelloway, Gottlieb and Barham, 1999; Carlson, Kacmar and Williams, 2000).

In stage two the qualitative data from the exploratory interviews were analysed and used to adapt scales, to develop scales for measuring psychological based work family conflict, and to frame questions relevant to the Sri Lankan context. Finally, the self report questionnaire was piloted on 20 employees in banking organisations, and revised ready for the main survey.

The main survey consisted of a self report questionnaire sent out to a sample of 843 employees working in twelve banks, of which 582 were returned. However, only 569 were found to be usable yielding a response rate of 67%. Data analysis was conducted in several stages –starting with descriptive statistics, then factor analysis, confirmatory factor analysis, correlation, stepwise regression, structural equation modelling and finally moderation analysis.

Summary of the findings and discussions

Analysis found that the survey respondents were broadly representative of employees in Sri Lanka in terms of age, gender and marital status, and typical of those employed in the banking sector. The average size of respondent's household was 5.3, consisting of respondents' spouse, children, parents and parents in laws, and siblings. The vast majority of parents live with daughters indicating the collectivist cultural tradition that women bear the major responsibility for caring.

This study therefore set out to validate the applicability of the six factor WFC model of Carlson, Kacmar and Williams' (2000) beyond the culture in which it was developed. Furthermore, as discussed in chapter 2, a new form of psychological based work family conflict was introduced. Of Carlson, Kacmar and Williams' three forms of work family conflict, results confirmed the prevalence of time based and strain based work to family conflict (WFC) and family to work conflict (FWC) in the study sample. However, the presence of behavioural based WFC and FWC was not supported. The proposed new dimension of psychological based WFC and FWC was confirmed. This study therefore revised the original Carlson, Kacmar and Williams' work family conflict model by replacing the behavioural with the new psychological based dimension. The revised Carlson, Kacmar and Williams' model of work family conflict is depicted in figure 7.1.

Figure7.1: Revised Carlson, Kacmar and Williams' model of work family conflict

Directions of work family conflict

Forms of work family conflict	*Work interference with family*	*Family interference with work*
Time	Time-based work interfering with family	Time-based family interfering with work
Strain	Strain-based work interfering with family	Strain-based family interfering with work
Psychological	**Psychological-based** work interfering with family	**Psychological-based** family interfering with work

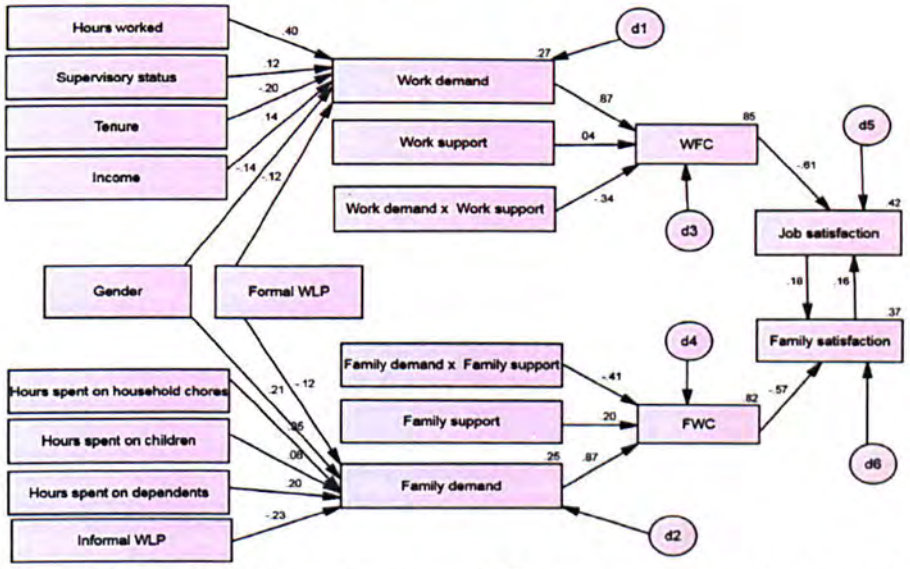
The factor analysis presented in chapter 5 found that the revised six dimensional model of work family conflict represents the most theoretically and psychometrically (reliability, content adequacy validity, convergent validity, discriminant validity and predictive validity) sound measure of work family conflict. While this is a single study, the significance of the psychological dimension is in line with the theoretical works of Willmott (1971), Clark (2000), Ashforth, Kreiner and Fugate (2000), Carlson and Frone (2003) and Lu et al. (2006). Moreover, its importance in this study is consistent with the work and family characteristics typical of collectivists culture described above. Further, as to the behavioural dimension, the majority of respondents did not agree with any of the statements measuring behaviour based work family conflict and this finding again can be explained by the cultural differences noted above. Moreover, the analysis found that the behavioural dimension was not associated with the predictors (work/family demand) and outcome variables (job satisfaction/family satisfaction). Therefore, the behavioural based work family conflict dimension was discarded; and the findings are in line with many recent seminal studies published in high quality academic journals such as Academy of Management Journal, The International Journal of Human Resource Management, Journal of Vocational Behavior and Career Development International (e.g., Lu et.al., 2006; Hoobler, Wayne and Lemmon, 2009;

Powell and Greenhaus, 2010; Griggs, Casper and Eby, 2013; Kailasapathy, Kraimer and Metz, 2014).

The study found higher levels of WFC and FWC than found in the West and the findings are consistent with many seminal studies (e.g., Lu et al., 2006; Boyar et al., 2008; Agarwala et al., 2014). However, this study employed a different scale for measuring work family conflict and thus comparison may not be exact. As to WFC, respondents experienced greater amounts of strain based WFC, followed by time based WFC, and then psychological based WFC. Men reported significantly greater amounts of WFC than women on all three forms of WFC (findings consistent with those of Parasurman and Simmers, 2001). The observed difference is explained by men's higher level of work demand in comparison with women. As to FWC, respondents experienced greater time based FWC, followed by psychological based FWC, and strain based FWC. Overall, women reported significantly greater amounts of FWC than men on all three forms of FWC. The observed difference is caused by the higher level of family demand that women experienced in comparison with men. A positive association between work to family conflict and family to work conflict was observed, consistent with previous findings (e.g., Huang et al., 2004).

Having revised and validated the measure of work family conflict, stepwise regression and structural equation modelling were used to build a model explaining variation in work family conflict. The revised model is shown in figure 7.2. Predictor variables are shown on the left, the moderating variables work and family support and demand at the centre, and the outcome measures of work to family conflict (WFC) and family to work conflict (FWC), and then job and family satisfaction on the right.

Figure 7.2: The revised model of work family conflict



[Note: d1 to d6 are error terms indicating unexplained variance]

As can be seen in the model, of the predictors of work demand, working hours had the largest impact on work demand, followed by tenure, gender, income, formal work life policies and supervisory status (number of employees reporting), findings are consistent with previous studies (e.g., Fagan, 2001; MacInnes, 2005; Boyar et al., 2008; Russell, O'Connell and McGinnity, 2009). All the predictors accounted for 27.1% of variance in work demand. This study found that employees work long hours per week (M=43.03) that might be attributed to the higher unemployment rate in less developed economies where they protect their job and grasp the opportunities for uplifting their life. Men spent significantly longer working hours than women; however women working hours were greater in comparison with developed world (Cousins and Tang, 2004) as there was virtually no part-time working in the study sample. Length of working (number of years) was significantly negatively related to work demand as employees attuned to work that they performed. Albeit income and number of employees reporting increase work demand, the presence of formal work life policies attenuates work demand. Importantly, organisation formal work life policies viz., flexible working arrangements, compressed working week, eldercare, working at home found in several seminal studies conducted in the West were not found to be present in Sri Lanka. Notwithstanding, some formal work life polities viz., paid leave for dealing with family problems; maternity leave and paternity leave were more prevalent. Overall, men reported significantly greater amounts of work demand than women indicating the prevalence nature

of traditional gender role ideology and men's longer working hours than women. Despite increasing women's attainment of educational qualification and consequent influx into the labour market, women did not perceive their work role as their central role: the findings were consistent with Livingston and Judge (2008). As expected, work demand was the predictor of WFC, findings in line with previous studies (e.g., Yang et al., 2000; Lu et al., 2006; Voydanoff, 2005; Spector et al., 2007; Boyar et al., 2008).

The study identified six variables as predictors of family demand in the final model, viz., hours spent on household chores, hours spent on childcare, hours spent on dependents, formal work life policies, informal work life policies, and gender. Of all predicting variables, hours spent on household chores had the largest impact on family demand, followed by informal work life policies, gender, hours spent on dependents, hours spent on children and formal policies. All these predictors contributed 24.6 % of the variance in family demand. The average time spent during the working day on household chores, children and dependents were 3.16, 2.47 and .47 hours respectively. Informal work life policies have attenuated the family demand but not the work demand. This might be attributed to the fact that the majority of the informal policies deal with family related problems rather than work related problems, typifying early leaving home, late coming to work, financial aids (colleague collection) etc. The majority of the respondents were aware of the availability of the informal work life policies however, such advantages to employees were at the manager's discretion.

Crucially, number of children, number of dependents, marital status and age were not found as predictors of family demand, however many seminal studies conducted in the West confirmed such variables relationship with family demand (e.g., Grazywacz and Marks, 2000; Boyar et al., 2008). Notwithstanding, this study found that hours spent with children and dependents significantly influenced family demand. This might be attributed to the fact that in an extended family structure, family member (s) living in a household share responsibilities in looking after children/ dependents, and ipso facto counting the number of care needing children/dependents would be irrelevant in this specific culture rather than hours of engagement. For the same reason being married was not directly related to family demand, with the exception of widows and widowers who spent significantly greater amounts of time on children than married respondents. Further, single status respondents spent significantly greater amounts of time on household chores than those of married respondents as they spent larger proportions of time on household chores rather than dependents and

childcare, and married couples could share household chores. Moreover, as expected the study found greater family demand/ FWC among respondents in dual earner families than that of single earner families: results consistent with studies conducted in the West (e.g., Moen and Yu, 2000; Nomaguchi, 2009). Overall, women reported significantly greater amounts of family demand than men indicating the prevalence of traditional gender role ideology.

The study found a positive relationship between work demand and WFC, but this was moderated by the support respondents received at work. Thus the positive relationship between work demand and work to family conflict was weaker for employees who receive higher levels of work related support. Moreover, this study found more work support than Boyar et al (2008) found in the USA and that might be attributed to an employee-employer relationship that goes beyond the workplace typical of collectivist cultures (Abdullah, 1996), however, the items used to measure work support were different in both studies. Overall, the model explained 85.4 % of variance in WFC by combining work demand and moderated effect of work support. In turn, WFC was negatively related to job satisfaction that is consistent with previous studies (e.g., Brough, O'Driscoll and Kalliath, 2005; Lu et al., 2006).

Turning to family demand, as might be expected, there was a direct positive relationship between family demand and FWC. However, extended family support moderated the relationship between family demand and FWC and FWC was weaker for employees who receive high level of extended family support than for those who experience low level of extended family support. It was evidenced that 47% of childcare was mainly delivered by extended family members living with the respondents. Albeit some of the extended family members caused an extra burden in the form of dependent care in a small number of cases (as noted by Poster and Prasad, 2005), the majority of them delivered a significant amount of support in household chores and childcare and thus high levels of family support were found. The level of family support was greater than Boyar et al. (2008) found in the USA, however, the measurement used to gauge family support was different in both studies as aforementioned. In toto, combining family demand and moderated extended family support explained 82.2 % of the variance in FWC. In turn, FWC was negatively related to family satisfaction that is consistent with previous studies (e.g., Brough, O'Driscoll and Kalliath, 2005; Lu et al., 2006).

This study confirmed the prevalence of a traditional gender role ideology that assumes "men are mainly breadwinners and women are mainly homemakers" and the existence of patriarchy. Although high proportion of women said they were mainly homemakers, they were very well educated and qualified, and earning well above average salaries. This might be attributed to men's higher level of work demand/WFC and women's higher level of family demand/ FWC. Crucially, the results found that gender role ideology moderated the relationship between family demand and FWC: the relationship between family demand and FWC was stronger for women who report higher level of agreement with traditional gender role ideology than for those who report lower level. However, results for male respondents did not support the proposition that "gender role ideology moderate the relationship between work demand and WFC such the relationship between work demand and WFC will be stronger for men who report high level of gender role ideology than for those who report lower level of gender role ideology".

7.2 Answering the research questions - A summary

In this section the findings which answer the research questions developed in chapter 2 are summarised. The first question asked "Are the three forms of work family conflict developed from research in individualistic cultures applicable in Sri Lanka?" As discussed earlier, of three forms of work family conflict, time based and strain based, both directions of work to family conflict and family to work conflict were found to be present within the sample taken from banks in Sri Lanka. However, behavioural based work family conflict was not found in the sampled data.

The second question enquired about "Is psychological based work family conflict apparent in Sri Lanka?" The answer is assuredly yes. This study provides sound evidence of psychological based both work to family conflict and family to work conflict within the sample and also demonstrated its psychometric properties and predictive validity.

The third question examined "How far is Carlson, Kacmar and Williams' (2000) work family conflict questionnaire developed in individualist culture valid for investigating WFC in Sri Lanka?" Carlson, Kacmar and Williams' (2000) work family conflict questionnaire is of 18 items measuring three forms (time based/strain based/behaviour based) of both work to family conflict and family to work conflict. In addition, this research introduced new 9 items measuring psychological based bidirectional work family conflict onto Carlson, Kacmar and Williams' (2000) measure. Study has found that Carlson, Kacmar and Williams' time based

and strain based work family conflict's items were clumped together nonetheless, items measuring behaviour based work family conflict did not appear as separate dimension. Albeit the original Carlson, Kacmar and Williams' measure was not supported, their time based and strain based work family conflict combined with the new form of psychological based work family conflict measure produced robust results, anchored in strong theoretical and cultural grounds.

The fourth question was "To what extent does traditional gender role ideology exist in Sri Lanka and if so, what is the consequent impact on work family conflict?" Results revealed that on average respondents agreed the existence of traditional gender role ideology suggesting men are mainly breadwinners whilst women are mainly homemakers delivering the majority of household chores, childcare and dependent care. Gender role ideology moderated the relationship between family demand and family to work conflict-the relationship between family demand and family to work conflict was found to be stronger for women who report agreement with high levels of gender role ideology than for those who report lower level of gender role ideology. Therefore, the positive relationship between family demand and family to work conflict becomes much stronger the more women respondents perceive as they are homemakers.

The fifth question enquired about "What are the main factors influencing WFC in Sri Lanka?" This research produced a complete model of work family conflict by demonstrating its predictors and outcomes variables. In toto, the model explained 85.4% of variance in work to family conflict and 82.2% of the variance in family to work conflict. Family support, family demand, hours spent on household chores, hours spent on children, hours spent on dependent care and gender were found as the family-related predictors of work family conflict whereas income level, working hours, work demand, supervisor/co-worker supports, organisational HR formal and informal policies, tenure and supervisory status were found as the work-related predictors of work family conflict.

Overall, the answers to the research questions fulfil the research objectives: to investigate the extant forms of work family conflict in Sri Lanka and to construct a model of work family conflict in Sri Lanka by identifying work-related and family-related factors that are associated with variation in and form of work family conflict.

7.3 Contributions of this study

This study contributed in several ways beyond the extant work family conflict literature. Firstly, it provided empirical evidence of a new psychological based bidirectional work family conflict dimension in adherence with rigorous development and validation procedures. The idea of a psychological dimension was derived from theory and seminal studies, nonetheless such a dimension has been neglected in past in the work family interference literature and research. This study shed new light on prevalence psychological based work family interference in Sri Lanka as a microcosm of collectivist cultural nations. Thus, introducing a new dimension of work family conflict is a crucial theoretical contribution.

Secondly, this research developed a model reflecting antecedents and consequences of work family conflict. Results revealed that some of the factors found to predict work family conflict in individualist cultures were not found to be present in banking in Sri Lanka. Instead some unique factors reflecting national culture were found to determine work family interference. For instance, albeit number of children and dependents were found to be predictors of family demand in the West (e.g., Boyar et al., 2008), this study found number of children and dependents are irrelevant, instead actual hours of engagement were the predictors of family demand due to the prevalence of extended family structure. Moreover, work support, family support and gender role ideology were found as moderators of the relationship between work/family demand and work family conflict.

This study further validated and extended the use of Carlson, Kacmar and Williams' measure of work family conflict (time based and strain based) beyond the culture in which it was developed. New questions measuring psychological based work family conflict were developed and validated, and consequently, a complete measure gauging work family conflict was introduced as a best measure reflective of collective culture nations. This was a methodological contribution to the extant work family interference.

Finally, this research focused on work family conflict in a less developed nation with a collectivist cultural tradition, Sri Lanka. It is the first empirical study of work family conflict in banking in the country.

7.4 Implications

Previous seminal studies concluded that work support for employees is related to a number of positive outcomes including ameliorating work family conflict (e.g., Carlson and Perrewé, 1999), improving health and well being (e.g., Hardy, Richman and Rosenfeld, 1991), job satisfaction (e.g., De Lange et al., 2004) and performance (e.g., Olson and Borman, 1989). This study found that work support can weaken the positive relationship between work demand and work to family conflict suggesting greater support would buffer the negative effect of work family interference. Thus, management should take into consideration the role of work support in the management of people as a means of eliciting positive outcomes benefitting to both organisation and employees.

Formal work life policies ameliorate WFC; however the formal work life policies commonly found in the West are not present in banking organisations in Sri Lanka. Some are not appropriate owing to the cultural differences-for example the demands of childcare are not so important in an extended family structure as in a nuclear family structure (e.g., Goff, Mount and Jamison, 1990; Kossek and Nichol, 1992; Goodstein, 1995; Honeycutt and Rosen, 1997; Baltes et al., 1999; Allen, 2001). Thus, organisations should consider appropriate formal policies to reduce WFC in line with cultural differences rather than practicing the work life policies found in the West. For instance, in less developed economies, financial work family benefit (e.g., Milliken, Martins and Morgan, 1998), part-time working (e.g., Edwards and Robinson, 2001) or medical care support for extended family members could be crucial although research is needed to clarify what is required.

This study found the number of working hours directly strongly impact on work demand. It is recommended to organisation to place a cap on number of working hours per week to take advantages of work family balance and ipso facto organisations in less developed economies can scale down the number of unemployed in the market leading to reduce poverty and make optimum use of the variety of human talents. Supervisory status (number of employees reporting) was found to causes deleterious effect on work family conflict which suggests that reduced span of control could curb the burden of work demand, as well as providing more opportunities for promotion within the company.

Informal policies were identified as means of alleviating family demand. Therefore, it would consider such informal practices are available for all employees without discrimination. As it is an informal practice, management can work out in an ad hoc manner in response to

employees demand. Therefore, better understanding of employee's credibility and family background would facilitate better use of informal policy privilege.

This study identified high levels of psychological based work family conflict and owing to its nature it might be expected to cause many health related problems. Thus, organisations should assess the pervading level of psychological based work family conflict and should take measures to reduce it. The design of appropriate policies to balance work and family life depends on accurate measurement. Work family interference studies in collectivist cultures were gravely criticised owing to the lack of appropriate measurement instruments. This study negated such criticism by developing and validating robust multi dimensional forms of work family conflict scale. Thus the management, practitioners and research scholars should consider the advantages of its use in assessment of accurate levels of work family conflict. Knowing the exact level of work family conflict would be an essential first step to putting any alleviating strategies in place.

Furthermore, this research urges the policy makers, practitioners and members of organisations to collaborate in balancing work and family in nations with collectivist cultures.

7.5 Limitations and directions for future research

Although the research has provided useful insights and contributions to work family conflict, there were some limitations acknowledged. The major limitation was the cross sectional research design that makes it difficult to definitely identify causal relationships and therefore firm conclusions. Undertaking study at a single period in time can only reflect that time period per se and the social and economic and industrial context in Sri Lanka is changing rapidly, thus the need for longitudinal research.

The present study focused on banking organisations as a microcosm of a higher status occupation. Thus there was a methodological limitation in generalizing findings to the other sectors or other similar nations (country effect). Therefore, a more detailed study across organisations, occupations and nations with similar culture is warranted for further validation, replication and generalisation.

This study conflicts with those finding behavioural based work family conflict and it introduced a new form of psychological based bidirectional work family conflict. Thus there is a need further research capturing sui generis concept of work family conflict in nations with collectivist cultures.

The current research focused on identifying the main factors intruding into work and family. Albeit this study found a certain number of factors determining work family conflict, it could not include every potential predictor or outcome –for example predictors such as role ambiguity, autonomy, marital distress, parental stress, or measures of stress and other health related outcomes.

Findings of this current study are based on a self reported measured and thus might be subject to bias (e.g., ego flattering) or where respondents might be reluctant to bring their family or work related problems to light. Thus a more detailed qualitative study and one that included extended family members would proffer great insights.

Moreover, the study did not investigate the role of government law and regulation governing both organisation and employees. For instance, laws relate to employees entitlement and right (e.g., maternity leave, benefits, wages law) or organisation (e.g., benefit contribution EPF/ETF. sick pay, labour relation, termination of employment) would directly or indirectly impact on work and family life.

Published research works not written in English were excluded from the literature reviewed, and might have led to "Tower of Babel Bias' (Gregoire, Derderian and Le Lorier, 1995). Therefore some useful material may have been excluded.

Overall, this research would serve as a springboard for exploring these unknown arenas of work family conflict in collectivist cultural nations.

7.6 Conclusions

The sphere of work family conflict was well researched in affluent countries with individualist cultures and the prevalent concepts and models were the reflective of such cultural findings. Nonetheless, little attention has been given to less developed countries or those with collectivist cultures. This study therefore focused on a sample taken from banking organisations in Sri Lanka. The analysis showed that the survey respondents were broadly representative of employees in Sri Lanka in terms of age, gender and marital status, and also typical of those employed in the banking sector. This research contributed in many ways by filling the gaps identified in seminal studies. As a part of this research, a work family conflict scale reflecting collectivist cultural nations was developed and validated with its psychometric properties. Moreover, this study devised a new model combining the antecedents and consequences of work family conflict with the effects of moderating

variables. Many factors identified as determinants of work family conflict had not been adequately addressed in many seminal studies. Besides, this research focused on unexplored nation, Sri Lanka. In toto, this research culminated with theoretical, parametric, methodological and geographical contributions. This study has achieved its twofold research objectives: to investigate the extant forms of work family conflict and construct model of WFC in Sri Lanka by identifying work-related and family-related factors that are associated with variation in and form of WFC. In addition, limitations and directions for future research were clearly presented. Overall, this research has made contributions beyond the extant work family literature. Besides its own contribution, this research would be a springboard for future scholarly work.

References

Abdullah, A. (1996) *Going Glocal: Cultural Dimensions in Malaysian Management.* Malaysia: Malaysian Institute of Management.

Adams, G.A., King, L.A. and King, D.W. (1996) 'Relationships of job and family involvement, family social support, and work-family conflict with job and life satisfaction', *Journal of Applied Psychology*, 81(4), pp.411-420.

Adams, J., Khan, H.T., Raeside, R. and White, D. (2007) *Research methods for graduate business and social science students.* London: Sage publications Ltd

Agarwala, T., Arizkuren-Eleta, A., Del Castillo, E., Muñiz-Ferrer, M. and Gartzia, L. (2014) 'Influence of managerial support on work–life conflict and organizational commitment: an international comparison for India, Peru and Spain', *The International Journal of Human Resource Management*, 25(10), pp.1460-1483.

Ahmad, A. (1996) 'Work-family conflict among married professional women in Malaysia', *The Journal of social psychology*, 136(5), pp.663-665.

Allen, T.D. (2001) 'Family-supportive work environments: The role of organizational perceptions', *Journal of Vocational Behavior*, 58(3), pp.414-435.

Allen, T.D. and Armstrong, J. (2006) 'Further Examination of the Link Between Work Family Conflict and Physical Health The Role of Health-Related Behaviors', *American Behavioral Scientist*, 49(9), pp.1204-1221.

Allen, T. D. and Finkelstein, L. M. (2014) 'Work-Family Conflict Among Members of Full-Time Dual-Earner Couples: An Examination of Family Life Stage, Gender, and Age', *Journal of occupational health psychology,* 19(3), pp.376-384.

Allen, T.D., Herst, D.E., Bruck, C.S. and Sutton, M. (2000) 'Consequences associated with work to family conflict: A review and agenda for future research', *Journal of Occupational Health Psychology*, 5(2), pp.278-308.

Allen, T.D., Johnson, R.C., Kiburz, K.M. and Shockley, K.M. (2013) 'Work–family conflict and flexible work arrangements: Deconstructing flexibility', *Personnel Psychology*, 66(2), pp.345-376.

Anafarta, N. (2010) 'The Relationship between Work-Family Conflict and Job Satisfaction: A Structural Equation Modeling (SEM) Approach', *International Journal of Business and Management*, 6(4), pp.168-177.

Anderson, S.E., Coffey, B.S. and Byerly, R.T. (2002) 'Formal organizational initiatives and informal workplace practices: Links to work–family conflict and job-related outcomes', *Journal of Management*, 28(6), pp.787-810.

Arbuckle, J.L. (2010) *IBM SPSS AMOS 19 user's guide*. Crawfordville, FL: AMOS Development Corporation.

Ary, D., Jacobs, L.C., Sorensen, C. and Walker, D.A. (2013) *Introduction to research in education*. 9th edn. USA: Wansworth Cengage Learning.

Aryee, S., Fields, D. and Luk, V. (1999) 'A cross-cultural test of a model of the work-family interface', *Journal of management*, 25(4), pp.491-511.

Ashforth, B.E., Kreiner, G.E. and Fugate, M. (2000) 'All in a day's work: Boundaries and micro role transitions', *Academy of Management review*, 25(3), pp.472-491.

Babbie, E. (1995) *The Practice of Social Research*. 7thedn. USA: Wadsworth: Cengage Learning.

Bagger, J. and Li, A. (2012) 'Being important matters: The impact of work and family centralities on the family-to-work conflict–satisfaction relationship', *Human Relations*, 65(4), pp.473-500.

Bagozzi, R.P. and Foxall, G.R. (1996) 'Construct validation of a measure of adaptive innovative cognitive styles in consumption', *International Journal of Research in Marketing*, 13(3), pp.201-213.

Bagozzi, R.P. and Yi, Y. (2012) 'Specification, evaluation, and interpretation of structural equation models', *Journal of the Academy of Marketing Science*, 40(1), pp.8-34.

Bailey, D.E. and Kurland, N.B. (2002) 'A review of telework research: findings, new directions, and lessons for the study of modern work', *Journal of organizational behavior*, 23(4), pp.383-400.

Baker, T.L. (1994) *Doing Social research*. 2nd edn. New York: McGraw-Hill Inc.

Bakker, A.B. and Demerouti, E. (2007) 'The job demands-resources model: State of the art', *Journal of managerial psychology*, 22(3), pp.309-328.

Bakker, A.B., Demerouti, E., Taris, T.W., Schaufeli, W.B. and Schreurs, P.J.G. (2003) "A multi-group analysis of the Job Demands-Resources model in four home care organizations", *International Journal of Stress Management*, 10(1), pp.16-38.

Baltes, B.B., Briggs, T.E., Huff, J.W., Wright, J.A. and Neuman, G.A. (1999) 'Flexible and compressed workweek schedules: A meta-analysis of their effects on work related criteria', *Journal of applied psychology*, 84(4), pp.496-513.

Bedeian, A.G., Burke, B.G. and Moffett, R.G. (1988) 'Outcomes of work-family conflict among married male and female professionals', *Journal of Management,* 14(3), pp.475-491.

Behson, S.J. (2002) 'Coping with family-to-work conflict: The role of informal work accommodations to family', *Journal of Occupational Health Psychology*, 7(4), pp.324-341.

Bellavia, G. and Frone, M. (2005) 'Work-family conflict' in Barling, J., Kelloway, E.K. and Frone, M.R. (ed) *Handbook of Work Stress*. London: Sage, pp.113-148.

Bennett, R. (1991) 'How is Management Research Carried Out?', in Smith, N.C. and Dainty, P. (eds.) *The Management Research Handbook.* London: Routledge

Bhave, D.P., Kramer, A. and Glomb, T.M. (2013) 'Pay satisfaction and work–family conflict across time', *Journal of Organizational Behavior*, 34(5), pp.698-713.

Bianchi, S. M. and Milkie, M. A. (2010) 'Work and family research in the first decade of the 21st century', *Journal of Marriage and Family*, 72(3), pp.705-725.

Bielby, D.D. (1992) 'Commitment to work and family', *Annual Review of Sociology*, 18, pp.281-302.

Blumberg, B., Cooper, D. and Schindler, P. (2008) *Business research method.* 2nd European edn. Maidenhead: McGraw-Hill Education.

Blunch, N. J. (2008) *Introduction to structural equation modelling using SPSS and AMOS.* London: Sage publication

Bohen, H.H. and Viveros-Long, A. (1981) *Balancing Jobs and Family Life: Do Flexible Schedules Help?* Philadelphia: Temple University Press.

Bollen, K. and Lennox, R. (1991) 'Conventional wisdom on measurement: A structural equation perspective', *Psychological bulletin*, 110(2), pp.305-314.

Bowling, N.A. and Hammond, G.D. (2008) 'A meta-analytic examination of the construct validity of the Michigan Organizational Assessment Questionnaire Job Satisfaction Subscale', *Journal of Vocational Behavior*, 73(1), pp.63-77.

Boyar, S.L., Maertz Jr, C.P., Mosley Jr, D.C. and Carr, J.C. (2008) 'The impact of work/family demand on work-family conflict', *Journal of Managerial Psychology*, 23(3), pp.215-235.

Boyar, S.L. and Mosley Jr, D.C. (2007) 'The relationship between core self-evaluations and work and family satisfaction: The mediating role of work–family conflict and facilitation', *Journal of Vocational Behavior*, 71(2), pp.265-281.

Briggs, S.R. and Cheek, J.M. (1986) 'The role of factor analysis in the development and evaluation of personality scales', *Journal of Personality*, 54(1), pp.106-148.

Brough, P., O'Driscoll, M. P. and Kalliath, T. J. (2005) 'The ability of 'family friendly'organizational resources to predict work–family conflict and job and family satisfaction', *Stress and Health*, 21(4), pp.223-234.

Bruck, C.S., Allen, T.D. and Spector, P.E. (2002) 'The relation between work-family conflict and job satisfaction: a finer-grained analysis', *Journal of Vocational Behavior*, 60(3), pp.336- 353.

Bryman, A. and Bell, E. (2007) *Business research methods*. 2nd edn. United Kingdom: Oxford university press.

Burke, R.J. (1988) 'Some antecedents and consequences of work-family conflict', *Journal of Social Behavior and Personality*, 3(4), pp.287-302.

Burke, R.J., Weir, T. and DuWors Jr, R.E. (1979) 'Type A behavior of administrators and wives' reports of marital satisfaction and well-being', *Journal of Applied Psychology*, 64(1), pp.57-65.

Burkell, J. (2003) 'The dilemma of survey nonresponse', *Library & Information Science Research*, 25(3), pp.239-263.

Byrne, B.M. (2010) *Structural equation modeling with Amos: Basic concepts, applications, and programming.* 4th edn. USA: Taylor and Francis group.

Cammann, C., Fichman, M., Jenkins, D. and Klesh, J. (1979) *The Michigan Organizational Assessment Questionnaire.* Unpublished manuscript, University of Michigan, Ann Arbor, MI.

Canivet, C., Östergren, P.O., Lindeberg, S.I., Choi, B., Karasek, R., Moghaddassi, M. and Isacsson, S.O. (2010) 'Conflict between the work and family domains and exhaustion among vocationally active men and women', *Social science & medicine*, 70(8), pp.1237-1245.

Cardenas, R.A., Major, D.A. and Bernas, K.H. (2004) 'Exploring work and family distractions: Antecedents and outcomes', *International Journal of Stress Management*, 11(4), pp.346-365.

Carlson, D.S. (1999) 'Personality and role variables as predictors of three forms of work–family conflict', *Journal of Vocational Behavior*, 55(2), pp.236-253.

Carlson, D.S. and Frone, M.R. (2003) 'Relation of behavioral and psychological involvement to a new four-factor conceptualization of work-family interference', *Journal of business and psychology*, 17(4), pp.515-535.

Carlson, D.S. and Perrewe, P.L. (1999) 'The role of social support in the stressor-strain relationship: An examination of work-family conflict', *Journal of Management*, 25(4), pp.513-540.

Carlson, D.S., Kacmar, K.M. and Williams, L.J. (2000) 'Construction and Initial Validation of a Multidimensional Measure of Work–Family Conflict', *Journal of Vocational Behavior*, 56(2), pp.249-276.

Cattell, R.B. (1966) 'The scree test for number of factors', *Multivariate Behavioral Research*, 1(2), pp.245-276.

Cavana, R., Delahye, B.L. and Sekaran, U. (2001) *Applied Business Research: Qualitative and Quantitative methods.* Australia: Wiley.

Central bank of Sri Lanka (2012) *Annual report 2012.* Colombo: Central Bank of Sri Lanka.

Central bank of Sri Lanka (2013) *Socio economic data.*[Online]. Available at: ://www.cbsl.gov.lk/pics_n_docs/10_pub/_docs/statistics/other/econ_&_ss_2013_e.pdf (Accessed : 05 January 2013).

Chandola, T., Martikainen, P., Bartley, M., Lahelma, E., Marmot, M., Michikazu, S., Nasermoaddeli, A. and Kagamimori, S. (2004) 'Does conflict between home and work explain the effect of multiple roles on mental health? A comparative study of Finland, Japan, and the UK', *International Journal of Epidemiology*, 33(4), pp.884-893.

Chang, A., McDonald, P. and Burton, P. (2010) 'Methodological choices in work-life balance research 1987 to 2006: a critical review', *The International Journal of Human Resource Management*, 21(13), pp.2381-2413.

Choi, J. (2008) 'Work and family demands and life stress among Chinese employees: The mediating effect of work–family conflict', *The International Journal of Human Resource Management*, 19(5), pp.878-895.

Choi, N., Fuqua, D.R. and Griffin, B.W. (2001) 'Exploratory analysis of the structure of scores from the multidimensional scales of perceived self-efficacy', *Educational and Psychological Measurement*, 61(3), pp.475-489.

Clark, S.C. (2000) 'Work/family border theory: A new theory of work/family balance', *Human relations*, 53(6), pp.747-770.

Cohen, J. (1992) 'Statistical power analysis', *Current directions in psychological science*, 1(3), pp.98-101.

ColomboPage 'Over 59,000 war widows in Sri Lanka's North and East', 13 August 2011 [Online]. Available at: http://www.colombopage.com/archive_11A/Aug13_1313209283JR.php (Accessed: 23 August 2011).

Colquitt, J.A., Conlon, D.E., Wesson, M.J., Porter, C.O. and Ng, K.Y. (2001) 'Justice at the millennium: a meta-analytic review of 25 years of organizational justice research', *Journal of applied psychology*, 86(3), pp.425-445.

Comrey, A.L. and Lee, H.B. (1992) *A first course in factor analysis.* 2nd edn. Hillsdale, NJ: Erlbaum.

Cooke, R.A. and Rousseau, D.M. (1984) 'Stress and strain from family roles and work-role expectations', *Journal of Applied Psychology*, 69(2), pp.252-260.

Costello, A.B. and Osborne, J.W. (2005) 'Best Practices in exploratory factor analysis: Four recommendations for getting the most from your analysis', *Practical Assessment Research & Evaluation*, 10(7), pp.1-9.

Cousins, C.R. and Tang, N. (2004) 'Working time and work and family conflict in the Netherlands, Sweden and the UK', *Work, employment and society*, 18(3), pp.531-549.

Cowlishaw, S., Birch, A., McLennan, J. and Hayes, P. (2014) 'Antecedents and Outcomes of Volunteer Work-Family Conflict and Facilitation in Australia', *Applied Psychology*, 63(1), pp.168-189.

Dasgupta, S.D. (1998) 'Gender roles and cultural continuity in the Asian Indian immigrant community in the US', *Sex Roles*, 38(11-12), pp.953-974.

De Lange, A.H., Taris, T.W., Kompier, M.A.J., Houtman, I.L.D. and Bongers, P.M. (2004) 'The relationships between work characteristics and mental health: Examining normal, reversed and reciprocal relationships in a 4-wave study', *Work and Stress*, 18(2), pp.149-166.

De Soysa, N. (2000) *Gender development in Sri Lanka: a peek behind the statistics.* [Online]. Available at: http://www.twnside.org.sg/title/2093.htm (Accessed: 29 August 2010).

Department of Census and Statistics (2013) *Sri Lanka Labour Force Survey*. Quarterly report 2013 [Online]. Available at: http://www.statistics.gov.lk/samplesurvey/ 2013 q4report.pdf (Accessed: 5 January 2014).

Dikkers, J.S.E, den Dulk, L., Geurts, S.A.E. and Peper, B. (2005) 'Work-nonwork culture, utilization of work–nonwork arrangements, and employee-related outcomes in two Dutch organizations', in Poelmans, S.A.Y., (ed.) *Work and Family: An International Research Perspective*. Mahwah, NJ: Lawrence Erlbaum Associates, pp.147-172.

Dooley, L.M. and Lindner, J.R. (2003) 'The handling of nonresponse error', *Human Resource Development Quarterly*, 14(1), pp.99-110.

Duxbury, L.E. and Higgins, C.A. (1991) 'Gender differences in work–family conflict', *Journal of Applied Psychology*, 76(1), pp.60-73.

Duxbury, L.E., Higgins, C.A. and Mills, S. (1992) 'After-hours telecommuting and work family conflict: A comparative analysis', *Information Systems Research*, 3(2), pp.173-190.

Eagle, B.W., Miles, E.W. and Icenogle, M.L. (1997) 'Inter-role conflicts and the permeability of work and family domains: are there gender differences?', *Journal of Vocational Behavior*, 50(2), pp.168-84.

Eagly, A.H. and Wood, W. (1982) 'Inferred sex differences in status as a determinant of gender stereotypes about social influence', *Journal of personality and social psychology*, 43(5), pp.915-928

Easterby-Smith, M., Thorpe, R. and Lowe, A. (2002) *Management Research an Introduction.* 2nd edn. Thousand Oaks: Sage Publications.

Edwards, C.Y. and Robinson, O. (2001) 'Better part-time jobs? A study of part-time working in nursing and the police', *Employee Relations*, 23(5), pp.438-454.

Emslie, C. and Hunt, K. (2009) 'Live to Work or Work to Live? A Qualitative Study of Gender and Work–life Balance among Men and Women in Mid-life', *Gender, Work and Organization*, 16(1), pp.151-175.

Emslie, C., Hunt, K. and Macintyre, S. (2004) 'Gender, work–home conflict and morbidity amongst white-collar bank employees in the UK', *International Journal of Behavioral Medicine*, 11(3), pp.127-34.

Evans, P. and Bartolome, F. (1980) 'The relationship between professional and private life', in Derr, C.B. (ed.) *Work, Family and Career.* New York: Praeger, pp.281-317.

Fabrigar, L.R., Wegener, D.T., MacCallum, R.C. and Strahan, E.J. (1999) 'Evaluating the use of exploratory factor analysis in psychological research', *Psychological methods*, 4(3), pp.272-299.

Fagan, C. (2001) 'Time, Money, and the Gender Order: Work-orientations and Working-Time Preferences in Britain', *Gender, Work and Organization,* 8(3), pp.239-266.

Fernando, W.D.A. and Cohen, L. (2011) 'Exploring the interplay between gender, organizational context and career: a Sri Lankan perspective', *Career Development International*, 16(6), pp.553-571.

Field, A. (2013) *Discovering statistics using IBM SPSS statistics.* 4th edn. London: Sage Publications.

Fiksenbaum, L., Jeng, W., Koyuncu, M. and Burke, R.J. (2010) 'Work hours, work intensity, satisfactions and psychological well-being among hotel managers in China', *Cross Cultural Management,* 17(1), pp.79-93.

Fisher, R.J. (1993) 'Social desirability bias and the validity of indirect questioning', *Journal of consumer research,* 20(2), pp.303-315.

Foley, S., Hang-Yue, N. and Lui, S. (2005) 'The effects of work stressors, perceived organizational support, and gender on work-family conflict in Hong Kong', *Asia Pacific Journal of Management,* 22(3), pp.237-256.

Ford, J.K., MacCallum, R.C. and Tait, M. (1986) 'The application of exploratory factor analysis in applied psychology: A critical review and analysis', *Personnel Psychology,* 39(2), pp.291-314.

Ford, M.T., Heinen, B.A. and Langkamer, K.L. (2007) 'Work and family satisfaction and conflict: a meta-analysis of cross-domain relations', *Journal of Applied Psychology,* 92(1), pp.57-80.

Fox, M.L. and Dwyer, D.J. (1999) 'An investigation of the effects of time and involvement in the relationship between stressors and work–family conflict', *Journal of Occupational Health Psychology,* 4(2), pp.164-174.

Freeze, R.D. and Raschke, R.L. (2007) 'An assessment of formative and reflective constructs in IS research', *ECIS Proceedings,* pp.1481-1492

Frone, M.R. (2000) 'Work–family conflict and employee psychiatric disorders: The National Comorbidity Study', *Journal of Applied Psychology,* 85(6), pp.888-895.

Frone, M.R., Russell, M. and Cooper, M.L. (1992) 'Antecedents and outcomes of work-family conflict: Testing a model of the work-family interface', *Journal of Applied Psychology,* 77(1), pp.65-78.

Frone, M. R., Russell, M. and Cooper, M. L. (1994) 'Relationship between job and family satisfaction: Causal or noncausal covariation?', *Journal of Management,* 20(3), pp.565-579.

Frone, M.R., Russell, M. and Cooper, M.L (1997) 'Relation of work family conflict to health outcomes: A four- year longitudinal study of employed parents', *Journal of occupational and organizational psychology*, 70(4), pp.325-335.

Frone, M.R., Yardley, J.K. and Markel, K.S. (1997) 'Developing and testing an integrative model of the work–family interface', *Journal of vocational behavior*, 50(2), pp.145-167.

Fu, C.K. and Shaffer, M.A. (2001) 'The tug of work and family: Direct and indirect domain specific determinants of work-family conflict', *Personnel Review*, 30(5), pp.502-522.

Gall, M.D., Borg, W. R. and Gall, J.P. (1996) *Educational research: An introduction.* 6th edn. London: Longman Publishers.

Gelfand, M.J. and Knight, A.P. (2005) 'Cross-cultural perspectives on work-family conflict', in Poelmans S.A.Y (eds.) *Work and family: An international research perspective.* New Jersey, NJ: Lawrence Erlbaum Associates, pp.401-414.

Geurts, S.A.E., Kompier, M.A.J., Roxburgh, S. and Houtman, I.L.D. (2003) 'Does work–home interference mediate the relationship between workload and well-being?', *Journal of Vocational Behavior*, 63(3), pp.532-559.

Gilbert, N. (2001) *Researching Social Life,* 2nd edn, London: Sage

Glaveli, N., Karassavidou, E. and Zafiropoulos, K. (2013) 'Relationships among three facets of family-supportive work environments, work–family conflict and job satisfaction: a research in Greece', *The International Journal of Human Resource Management*, 24(20), pp. 3757-3771.

Gliner, J.A. and Morgon, G.A. (2000). *Research methods in applied settings: An integrated approach to design and analysis.* Marwah, NJ: Lawrence Eribaum

Goff, S.J., Mount, M.K. and Jamison, R.I. (1990) 'Employer supported child care, work family conflict and absenteeism: A field study', *Personnel psychology*, 43(4), pp.793-809.

Goodstein, J. (1995) 'Employer involvement in eldercare: An organizational adaptation perspective', *Academy of Management Journal*, 38(6), pp.1657-1671.

Grandey, A. and Cropanzano, R. (1999) 'The conservation of resources model applied to work-family conflict and strain', *Journal of Vocational Behavior*, 54(2), pp.350-370.

Grandey, A., Cordeiro, B. and Crouter, A. (2005) 'A longitudinal and multi-source test of the work–family conflict and job satisfaction relationship', *Journal of Occupational and Organizational Psychology*, 78(3), pp.1-20.

Granleese, J. (2004) 'Occupational pressures in banking: gender differences', *Women in Management Review*, 19(4), pp.219-226.

Greenhaus, J.H., Bedeian, A.G. and Mossholder, K.W. (1987) 'Work experiences, job performance, and feelings of personal and family well-being', *Journal of Vocational Behavior*, 31(2), pp.200-215.

Greenhaus, J.H., Collins, K.M., Singh, R. and Parasuraman, S. (1997) 'Work and family influences on departure from public accounting', *Journal of Vocational Behavior*, 50(2), pp.249-270.

Greenhaus, J.H. and Beutell, N.J. (1985) 'Sources of conflict between work and family roles', *Academy of management review*, 10(1), pp.76-88.

Greenhaus, J.H., Parasuraman, S. and Collins, K.M. (2001) 'Career involvement and family involvement as moderators of relationships between work-family conflict and withdrawal from a profession', *Journal of Occupational Health Psychology*, 6(2), pp.91-100.

Gregoire, G., Derderian, F. and Le Lorier, J. (1995) 'Selecting the Language of the Publications Included in a Meta-Analysis: Is There a Tower of Babel Bias?', *Journal of Clinical Epidemiology*, 48(1), pp.159-163.

Griggs, T.L., Casper, W.J. and Eby, L.T. (2013) 'Work, family and community support as predictors of work–family conflict: A study of low-income workers', *Journal of Vocational Behavior*, 82(1), pp.59-68.

Groves, R. M. (2006) 'Nonresponse rates and nonresponse bias in household surveys', *Public Opinion Quarterly*, 70(5), pp.646-675.

Grzywacz, J.G., Almeida, D.M. and McDonald, D.A. (2002) 'Work–Family Spillover and Daily Reports of Work and Family Stress in the Adult Labor Force', *Family Relations*, 51(1), pp.28-36.

Grzywacz, J.G. and Marks, N.F. (2000) 'Reconceptualising the work-family interface: An ecological perspective on the correlates of positive and negative spillover between work and family', *Journal of Occupational Health Psychology*, 5(1), pp.111-126.

Guadagnoli, E. and Velicer, W.F. (1988) 'Relation to sample size to the stability of component patterns', *Psychological bulletin*, 103(2), pp.265-275.

Gutek, B.A., Searle, S. and Klepa, L. (1991) 'Rational versus gender role explanations for work-family conflict', *Journal of Applied Psychology*, 76(4), pp.560-568.

Hair, J.F., Black, W.C., Babin. B.J. and Anderson, R.E (2010) *Multivariate Data Analysis*. 7th edn. Englewood Cliffs, NJ: Prentice Hall.

Haines, V.Y., Harvey, S., Durand, P. and Marchand, A. (2013) 'Core Self-Evaluations, Work–Family Conflict, and Burnout', *Journal of Marriage and Family*, 75(3), pp.778-793.

Halbesleben, J.R., Wheeler, A.R. and Rossi, A.M. (2012) 'The costs and benefits of working with one's spouse: A two-sample examination of spousal support, work–family conflict, and emotional exhaustion in work-linked relationships', *Journal of Organizational Behavior*, 33(5), pp.597-615.

Hammer, L.B., Allen, E. and Grigsby, T.D. (1997) 'Work–family conflict in dual-earner couples: Within individual and crossover effects of work and family', *Journal of Vocational Behavior*, 50(2), pp.185-203.

Hanson, S.M. (2001) 'Family health care nursing: An introduction', in Hanson, S.M. (eds.), *Family health care nursing: Theory, practice, and research.* Philadelphia: F.A. Davis.

Haraldstad, H. (2012) 'The Maldives at the inauguration of the international conference', Kelaniya [online]. Available at: http://www.kln.ac.lk/units/cgs/index.php?option=com_content&view=article&id=14 (Acessed: 5 January 2013).

Hardy, C.J., Richman, J.M. and Rosenfeld, L.B. (1991) 'The role of social support in the life stress/injury relationship', *Sport Psychologist,* 5(2), pp.128-139.

Harpaz, I. (2003) 'The Essence of Performing Meaningful Comparative International Survey Research', in Punnett, B.J. and Shenkar, O. (eds.) *Handbook for International Management Research*, USA: University of Michigan Press, pp.17-48.

Hassan, Z., Dollard, M.F. and Winefield, A.H. (2010) 'Work-family conflict in East vs Western countries', *Cross Cultural Management: An International Journal*, 17(1), pp.30-49.

Hatcher, L. (1994) *A Step-by-Step Approach to Using the SAS System for Factor Analysis and Structural Equation Modelling*. USA: SAS Institute Inc.

Hill, E.J., Ferris, M. and Martinson, V. (2003) 'Does It Matter Where You Work? A Comparison of How Three Work Venues (Traditional Office, Virtual Office, and Home Office) Influence Aspects of Work and Personal/Family Life', *Journal of Vocational Behavior*, 63(2), pp.220-241.

Hodson, R. (2004) 'Organizational trustworthiness: Findings from the population of organizational ethnographies', *Organization Science*, 15(4), pp.432-445.

Hofstede, G., Hofstede, G.J. and Minkov, M. (2010) *Cultures and organizations: Software of the mind*. 3rd edn. New York: McGraw-Hill

Honeycutt, T.L. and Rosen, B. (1997) 'Family friendly human resource policies, salary levels, and salient identity as predictors of organizational attraction', *Journal of Vocational Behavior*, 50(2), pp.271-290.

Hoobler, J.M., Wayne, S.J. and Lemmon, G. (2009) 'Bosses perceptions of family-work conflict and women's promotability: Glass ceiling effects', *Academy of Management Journal*, 52(5), pp.939-957.

Huang, Y.H., Hammer, L.B., Neal, M.B. and Perrin, N.A. (2004) 'The relationship between work-to-family conflict and family-to-work conflict: A longitudinal study', *Journal of Family and Economic Issues*, 25(1), pp.79-100.

Hubbard, R. and Allen, S.J. (1987) 'An empirical comparison of alternative methods for principal component extraction', *Journal of Business Research*, 15(2), pp.173-190.

Hurley, A.E., Scandura, T.A., Schriesheim, C.A., Brannick, M.T., Seers, A., Vandenberg, R.J. and Williams, L.J. (1997) 'Exploratory and confirmatory factor analysis: Guidelines, issues, and alternatives', *Journal of organizational behavior*, 18(6), pp.667-683.

Hutcheson, G. and Sofroniou, N. (1999) *The multivariate social scientist.* London: Sage publication Ltd.

Jackson, D.L., Gillaspy Jr, J.A. and Purc-Stephenson, R. (2009) 'Reporting practices in confirmatory factor analysis: an overview and some recommendations', *Psychological methods*, 14(1), pp.6-23.

Javidan, M. and House, R.J. (2001) 'Cultural acumen for the global manager: lessons from Project GLOBE ', *Organizational Dynamics*, 29(4), pp.289-305.

Jett, Q.R. and George, J.M. (2003) 'Work interrupted: A closer look at the role of interruptions in organizational life', *Academy of Management Review*, 28(3), pp. 494-507.

Joplin, J.R.W., Shaffer, M.A., Francesco, A.M. and Lau, T. (2003) 'The macro environment and work–family conflict: Development of a cross-cultural comparative framework', *International Journal of Cross-Cultural Management*, 3(3), pp.305-328.

Kahn, R.L., Wolfe, D.N., Quinn, R.P., Snoek, J.D. and Rosenthal, D.A. (1964) *Organizational stress: Studies in role conflict and ambiguity.* New York: John Wiley.

Kailasapathy, P., Kraimer, M.L. and Metz, I. (2014) 'The interactive effects of leader member exchange, gender and spouse's gender role orientation on work interference with family conflict', *The International Journal of Human Resource Management*, 25(19), pp.1-21.

Keene, J.R. and Quadagno, J. (2004) 'Predictors of perceived work-family balance: Gender difference or gender similarity?', *Sociological Perspectives*, 47(1), pp.1-23.

Kelloway, E.K., Gottlieb, B.H. and Barham, L. (1999) 'The source, nature, and direction of work and family conflict: A longitudinal investigation', *Journal of Occupational Health Psychology*, 4(4), pp.337-346.

Kim, J.O. and Mueller, C.W. (1978) *Factor Analysis: Statistical methods and practical issues* [Online]. Available at:http://books.google.co.uk/books?id=raQzQnbET9QC&printsec=frontcover&dq=Factor+Analysis:+Statistical+methods+and+practical+issues.&hl=en&sa=X&ei=SUj-U7K7CNftaJGKgmg&ved=0CCsQ6AEwAA#v=onepage&q=Factor%20Analysis%3A%20Statistical%20methods%20and%20practical%20issues.&f=false (Accessed: 23 April 2014).

King, L.A., Mattimore, L.K., King, D.W. and Adams, G.A. (1995) 'Family support inventory for workers: A new measure of perceived social support from family members', *Journal of Organizational Behavior*, 16(3), pp.235-258.

Kite, M.E. (1996) 'Age, gender, and occupational label: A test of social role theory', *Psychology of Women Quarterly*, 20(3), pp.361-374.

Kline, R.B. (2005) *Principles and Practice of Structural Equation Modeling*. 2nd edn. New York: The Guilford Press.

Kopelman, R.E., Greenhaus, J.H. and Connolly, T.F. (1983) 'A Model of Work, Family, and Inter-Role Conflict: A Construct Validation Study', *Organizational Behavior and Human Performance*, 32(2), pp.198-215.

Korabik, K., Lero, D.S. and Ayman, R. (2003) 'A multi-level approach to cross cultural work-family research a micro and macro perspective', *International Journal of Cross Cultural Management*, 3(3), pp.289-303.

Kossek, E.E. and Nichol, V. (1992) 'The effects of on-site child care on employee attitudes and performance', *Personnel psychology*, 45(3), pp.485-509.

Kossek, E.E. and Ozeki, C. (1998) 'Work-Family conflict, policies, and the job life satisfaction relationship: A review and directions for future organizational behavior-human resources research', *Journal of Applied Psychology*, 83(2), pp.139-149.

Kossek, E.E., Pichler, S., Bodner, T. and Hammer, L.B. (2011) 'Workplace social support and work–family conflict: A meta-analysis clarifying the influence of general and work family-specific supervisor and organizational support', *Personnel Psychology*, 64(2), pp.289-313.

Kulik, L. (2004) 'Predicting gender role ideology among husbands and wives in Israel: A comparative analysis', *Sex roles*, 51(9/10), pp.575-587.

Lafreniere, S.L. and Longman, K.A. (2008) 'Gendered realities and women's leadership development: Participant voices from faith-based higher education', *Christian Higher Education*, 7(5), pp.388-404.

Lambert, S.J. (1990) 'Processes linking work and family: A critical review and research agenda', *Human relations*, 43(3), pp.239-257.

Lapierre, L.M., Allen, T.D., Spector, P.E., O'Driscoll, M., Cooper, C.L., Poelmans, S. and Sanchez, J.I. (2005, August) 'further validation of carlson, kacmar, and williams' (2000) work-family conflict measure', *Academy of Management Proceedings*, 1, pp.J1-J6.

Little, T.D., Lindenberger, U. and Nesselroade, J.R. (1999) 'On selecting indicators for multivariate measurement and modeling with latent variables: When" good" indicators are bad and" bad" indicators are good', *Psychological Methods*, 4(2), pp.192-211.

Liu, J., Kwan, H.K., Lee, C. and Hui, C. (2013) 'Work-to-Family Spillover Effects of Workplace Ostracism: The Role of Work-Home Segmentation Preferences', *Human Resource Management*, 52(1), pp.75-93.

Livingston, B.A. and Judge, T.A. (2008) 'Emotional responses to work-family conflict: An examination of gender role orientation among working men and women', *Journal of Applied Psychology*, 93(1), pp.207-216.

Livingston, M.M. and Burley, K.A. (1991) 'Surprising initial findings regarding sex, sex role, and anticipated work-family conflict', *Psychological Reports*, 68(3), pp.735-738.

Lo, S. (2003) 'Perceptions of work-family conflict among married female professionals in Hong Kong', *Personnel Review*, 32(3), pp.376-390.

Lo, S., Wright, P. and Wright, R. (2003) 'Job-family Satisfaction and Job-family Satisfaction and Female Married Professionals in Hong Kong: A Dichotomy of Attitude and Outlook', *International Journal of Employment Studies*, 11(2), pp.25-45.

Lobel, S.A. (1991) 'Allocation of investment in work and family roles: Alternative theories and implications for research', *Academy of Management Review*, 16(3), pp.507-521.

Loerch, K.J., Russell, J.E. and Rush, M.C. (1989) 'The relationships among family domain variables and work–family conflict for men and women', *Journal of Vocational Behavior*, 35(3), pp.288-308.

Lu, L., Gilmour, R., Koa, S. and Huang, M. (2006) 'A cross cultural study of work/family demands, work/family conflict and wellbeing: the Taiwanese vs British', *Career development international*, 11(1), pp.9-27.

Lundberg, U., Mardberg, B. and Frankenhaeuser, M. (1994) 'The total workload of male and female white collar workers as related to age, occupational level, and number of children', *Scandinavian Journal of Psychology*, 35(4), pp.315-27.

MacCallum, R.C. (1990) 'The need for alternative measures of fit in covariance structure modeling', *Multivariate Behavioral Research*, 25(2), pp.157-162.

MacCallum, R.C., Widaman, K.F., Zhang, S. and Hong, S. (1999) 'Sample size in factor analysis', *Psychological methods*, 4(1), pp.84-99.

MacInnes, J. (2005) 'Work–Life Balance and the Demand for Reduction in Working Hours: Evidence from the British Social Attitudes Survey 2002', *British Journal of Industrial Relations*, 43(2), pp.273-295.

Macrory, I. (2012) *Measuring National Well-being -Households and Families*. Office for National Statistics: UK.

Mainiero, L.A. and Sullivan, S.E. (2005) 'Kaleidoscope careers: An alternate explanation for the "opt-out "revolution', *The Academy of Management Executive*, 19(1), pp.106-123.

Major, D.A., Fletcher, T.D., Davis, D.D. and Germano, L.M. (2008) 'The influence of work-family culture and workplace relationships on work interference with family: a multilevel model', *Journal of Organizational Behavior*, 29(7), pp.881-897.

Major, V.S., Klein, K.J. and Ehrhart, M.G. (2002) 'Work time, work interference with family, and psychological distress', *Journal of applied psychology*, 87(3), pp.427-436.

Martin, C.L. and Ruble, D. (2004) 'Children's search for gender cues cognitive perspectives on gender development', *Current Directions in Psychological Science*, 13(2), pp.67-70.

Martinengo, G., Jacob, J.I. and Hill, E.J. (2010) 'Gender and the work-family interface: Exploring differences across the family life course', *Journal of Family Issues*, 31(10), pp. 1363-1390.

Matsui, T., Ohsawa, T. and Onglatco, M.L. (1995) 'Work-family conflict and the stress buffering effects of husband support and coping behavior among Japanese married working women', *Journal of vocational Behavior*, 47(2), pp.178-192.

Matthews, R.A., Kath, L.M. and Barnes-Farrell, J.L. (2010) 'A Short, Valid, Predictive Measure of Work–Family Conflict: Item Selection and Scale Validation', *Journal of Occupational Health Psychology*, 15(1), pp.75-90.

Mavridis, D. and Moustaki, I. (2008) 'Detecting outliers in factor analysis using the forward search algorithm', *Multivariate behavioral research*, 43(3), pp.453-475.

May, T. (1997) *Social Research: Issues, Methods and Process.* 2nd edn. Buckingham: Open University Press.

McGrath, R.E. and Meyer, G.J. (2006) 'When effect sizes disagree: The case of r and d', *Psychological Methods*, 11(4), pp.386-401.

Mennino, S.F., Rubin, B.A. and Brayfield, A. (2005) 'Home-to-job and job-to-home spillover: The impact of company policies and workplace culture', *The Sociological Quarterly*, 46(1), pp.107-135.

Mesmer-Magnus, J., Murase, T., DeChurch, L.A. and Jimenez, M. (2010) 'Co worker informal work accommodations to family: Scale development and validation', *Educational and Psychological Measurement*, 70(3), pp.511-531.

Mesquita, B. (2001) 'Emotions in collectivist and individualist contexts', *Journal of Personality and Social Psychology*, 80(1), pp.68-74.

Milliken, F.J., Martins, L.L. and Morgan, H. (1998) 'Explaining organizational responsiveness to work– family issues: The role of human resource executives as issue interpreters', *Academy of Management Journal*, 41(5), pp.580-592.

Minnotte, K.L., Minnotte, M.C. and Pedersen, D.E. (2013) 'Marital satisfaction among dual-earner couples: Gender ideologies and family-to-work conflict', *Family Relations*, 62(4), pp.686-698.

Minnotte, K.L., Minnotte, M.C., Pedersen, D.E., Mannon, S.E. and Kiger, G. (2010) 'His and her perspectives: Gender ideology, work-to-family conflict, and marital satisfaction', *Sex Roles*, 63(5), pp.425-438.

Minnotte, K.L., Stevens, D.P., Minnotte, M.C. and Kiger, G. (2007) 'Emotion-work performance among dual-earner couples testing four theoretical perspectives', *Journal of Family Issues*, 28(6), pp.773-793.

Moen, P. and Yu, Y. (2000) 'Effective work-life strategies: Working couples, work conditions, gender and life quality', *Social problems*, 47(3), pp.291-326.

Nameda, A. (2013) 'Sense of fairness in the division of labor in close relationships: Procedure and gender role ideology', *Japanese Psychological Research*, 55(1), pp.33-44.

Nasser, H.E and Overberg, P. (2011) 'After 50 years of decline, household size is growing', USA TODAY, 5 MAY [Online]. Available at: http://usatoday30.usatoday.com/news/nation/census/2011-05-04-Census-Households-Demographics_n.htm (Accessed: 5 May 2012)

Netemeyer, R.G., Boles, J.S. and McMurrian, R. (1996) 'Development and validation of work-family and family–work conflict scales', *Journal of Applied Psychology*, 81(4), pp.400-410.

Neuman, W.L. (2003) *Social research methods: qualitative and quantitative approaches.* 5th edn. Boston: Allyn and Bacon.

Nielson, T.R., Carlson, D.S. and Lankau, M.J. (2001) 'The supportive mentor as a means of reducing work–family conflict', *Journal of Vocational Behavior*, 59(3), pp.364-381.

Nomaguchi, K. M. (2009) 'Change in work-family conflict among employed parents between 1977 and 1997', *Journal of Marriage and Family*, 71(1), pp.15-32.

Noor, N. M. (2006) 'Malaysian women's state of well-being: empirical validation of a conceptual model', *The Journal of social psychology*, 146(1), pp.95-115.

O'Driscoll, M.P., Brough, P. and Kalliath, T.J. (2004) 'Work/family conflict, psychological well-being, satisfaction and social support: a longitudinal study in New Zealand', *Equal Opportunities International*, 23(1/2), pp.36-56.

O'Driscoll, M.P., Poelmans, S., Spector, P.E., Kalliath, T., Allen, T.D., Cooper, C.L. and Sanchez, J.I. (2003) 'Family-responsive interventions, perceived organizational and supervisor support, work-family conflict, and psychological strain', *International Journal of Stress Management*, 10(4), pp.326-344.

Office for National Statistics UK (2013) 'Women in the labour market', 25 September 2013, [Online].Available at: http://www.ons.gov.uk/ons/rel/lmac/women-in-the-labour-market/2013/rpt---women-in-the-labour-market.html?format=print (Accessed: 23 June 2014).

Olson, D.M. and Borman, W.C. (1989) 'More evidence on relationships between the work environment and job performance', *Human Performance,* 2(2), pp.113-130.

Oppenheim, A.N. (1992) *Questionnaire design, interviewing and attitude measurement.* London: Pinter Publishers.

Pallant, J. (2010) *SPSS: Survival Manual.* 4th edn. England: Open University press

Parasuraman, S. and Greenhaus, J. H. (2002) 'Toward reducing some critical gaps in work-family research',. *Human Resource Management Review*, 12(3), pp.299-312.

Parasuraman, S., Purohit, Y.S., Godshalk, V.M. and Beutell, N.J. (1996) 'Work and family variables, entrepreneurial career success, and psychological well-being', *Journal of Vocational Behavior*, 48(3), pp.275-300.

Parasurman, S. and Simmers, C.A. (2001) 'Type of employment, work–family conflict and well-being: A comparative study', *Journal of Organizational Behavior*, 22(5), pp.551-568.

Pleck, J.H., Staines, G.L. and Lang, L. (1980) 'Conflicts between work and family life', *Monthly Labor Review*, 103, pp.29-32.

Podsakoff, P.M. and Organ, D.W. (1986) 'Self-reports in organizational research: Problems and prospects', *Journal of management*, 12(4), pp.531-544.

Poster, W.R. and Prasad, S. (2005) 'Work-family relations in transnational perspective: a view from high-tech firms in India and the United States', *Social Problems*, 52(1), pp.122-146.

Powell, G.N., Francesco, A.M. and Ling, Y. (2009) 'Toward culture-sensitive theories of the work–family interface', *Journal of Organizational Behavior*, 30(5), pp.597-616.

Powell, G.N. and Greenhaus, J.H. (2010) 'Sex, gender, and the work-to-family interface: Exploring negative and positive interdependencies', *Academy of Management Journal*, 53(3), pp.513-534.

Rathi, N. and Barath, M. (2013) 'Work-family conflict and job and family satisfaction: Moderating effect of social support among police personnel', *Equality, Diversity and Inclusion: An International Journal*, 32(4), pp.438-454.

Rattray, J. and Jones, M.C. (2007) 'Essential elements of questionnaire design and development', *Journal of clinical nursing*, 16(2), pp.234-243.

Restubog, S.L.D. and Bordia, P. (2007) *One Big Happy Family: Understanding the Role of Workplace Familism in the Psychological Contract Dynamics*, Australian Academic Press: Bowen Hills.

Ridgeway, C. (1991) 'The social construction of status value: Gender and other nominal characteristics', *Social Forces*, 70(2), pp.367-386.

Robinson, J.P., P.R. Shaver, and L.S. Wrightsman (1991) 'Criteria for Scale Selection and Evaluation', in Robinson, J.P., Shaver, P.R. and Wrightsman, L.S. (eds.) *Measures of Personality and Social Psychological Attitudes*. San Diego, CA: Academic Press.

Robson, C. (2002) *Real World Research: A Resource for Social Scientists and Practitioner-Researchers*. 2nd edn. Oxford: Blackwell.

Russell, H., O'Connell, P.J. and McGinnity, F. (2009) 'The Impact of Flexible Working Arrangements on Work–life Conflict and Work Pressure in Ireland', *Gender, Work and Organization*, 16(1), pp.73-97.

Sajanthan, K., Rasnayake, S., Kamalrathne, T., Chamikara, M.A.P. and Gnanaratne, A.K.A.S. (2014) 'Vulnerability of war-widows in the post- war development scenario: a case study of war-torn Kandawalai divisional secretariat division of the Kilinochchi district in Sri Lanka', *Proceedings of the Peradeniya Univ. International Research* Sessions Sri Lanka, 18, p.666.

Saunders, M., Lewis, P. and Thornhill, A. (2007) *Research Methods for Business Students*. London: Prentice Hall.

Schieman, S. and Glavin, P. (2011) 'Education and work-family conflict: Explanations, contingencies and mental health consequences', *Social Forces*, 89(4), pp.1341-1362.

Schieman, S., Whitestone, Y.K. and Van Gundy, K. (2006) 'The nature of work and the stress of higher status', *Journal of health and social behavior*, 47(3), pp.242-257.

Schriesheim, C.A., Powers, K.J., Scandura, T.A., Gardiner, C.C. and Lankau, M.J. (1993) 'Improving construct measurement in management research: Comments and quantitative approach for assessing the theoretical content adequacy of paper-and-pencil survey-type instruments', *Journal of Management*, 19(2), pp.385-417.

Sekaran, U. and Bougie, R. (2010) *Research methods for business: A skill building approach.* 5th edn. United Kingdom: John Wiley & Sons Ltd.

Shaffer, M.A., Joplin, J.R. and Hsu, Y.S. (2011) 'Expanding the boundaries of work-family research: A review and agenda for future research', *International Journal of Cross Cultural Management*, 11(2), pp.221-268.

Shamir, B. (1983) 'Some antecedents of work–nonwork conflict', *Journal of Vocational Behavior*, 23(1), pp.98-111.

Slan-Jerusalim, R. and Chen, C.P. (2009) 'Work-Family Conflict and Career Development Theories: A Search for Helping Strategies', *Journal of Counseling & Development*, 87(4), pp. 492-499.

Small, S.A. and Riley, D. (1990) 'Toward a multidimensional assessment of work spillover into family life', *Journal of Marriage and the Family,* 52(1), pp.51-61.

Sok, J., Blomme, R. and Tromp, D. (2014) 'Positive and Negative Spillover from Work to Home: The Role of Organizational Culture and Supportive Arrangements', *British Journal of Management,* 25(3), pp.456-472.

Spector, P.E., Allen, T.D., Poelmans, S.A.Y., Lapierre, L.M., Cooper, C.L., O'Driscoll, M., Sanchez, J.I., Abarca, N., Alexandrova, M., Beham, B., Brough, P., Ferreiro, P. Fraile, G., Qin lu, C., Lu, L., Vela´ Zquez, I.M., Pagon, M., Pitariu, H., Salamatov, V., Shima, S., Simoni, A.S., Siu, O. and Widerszal-bazyl, M. (2007) 'Cross-national differences in relationships of work demands, job satisfaction and turnover intentions with work-family conflict', *Personnel Psychology,* 60(4), pp.805-835.

Spence, J.T. and Helmreich, R.L. (1978) *Masculinity and femininity: Their psychological dimensions, correlates and antecedents.* Austin: University of Texas Press.

Stevens, D., Kiger, G. and Riley, P.J. (2001) 'Working hard and hardly working: domestic labor and marital satisfaction among dual-earner couples', *Journal of Marriage and Family*, 63(2), pp.514-526.

Stevens, D.P., Minnotte, K.L., Mannon, S.E. and Kiger, G. (2007) 'Examining the "Neglected Side of the Work-Family Interface' Antecedents of Positive and Negative Family-to-Work Spillover', *Journal of Family Issues*, 28(2), pp.242-262.

Stevens, J.P. (2002) *Applied multivariate statistics for the social sciences.* 4th edn.. Hillsdale, NJ: Lawrence Erlbaum Associates.

Sweeney, P.D. and McFarlin, D.B. (1993) 'Workers' Evaluations of the" Ends" and the" Means": An Examination of Four Models of Distributive and Procedural Justice', *Organizational behavior and human decision processes*, 55(1), pp.23-40.

Tabachnick, B.G. and Fidell, L.S. (2007) *Using multivariate statistics.* 4thedn. New York: Harper Collins.

Thalgodapitiya, R. and Bhoumik, A. (2012) 'The Sri Lankan Banking Sector: Special Report', *FitchRatings,* 27 January [Online]. Available at: file:///C:/ Users/kenga/Downloads/Banking%20sector%20report%2027%20JAN%202012%20 (4).pdf (Accessed: 04 March 2012).

Thomas, A.B. (2004) *Research skills for management studies.* London: Routledge.

Thomas, L.T. and Ganster, D.C. (1995) 'Impact of family-supportive work variables on work-family conflict and strain: A control perspective', *Journal of Applied Psychology,* 80(1), pp.6-15.

Thompson, C.A., Beauvais, L.L. and Lyness, K.S. (1999) 'When work-family benefits are not enough: The influence of work-family culture on benefit utilization, organizational attachment, and workfamily conflict', *Journal of Vocational Behavior*, 54(3), pp.392-415.

Thompson, C.A. and Prottas, D.J. (2006) 'Relationships among organizational family support, job autonomy, perceived control, and employee well-being', *Journal of occupational health psychology*, 11(1), pp.100-118.

Tomaskovic-Devey, D., Leiter, J. and Thompson, S. (1994) 'Organizational survey nonresponse', *Administrative Science Quarterly*, 39(3), pp.439-457.

Tuckman, B.W. (1999) *Conducting educational research.* 5th edn. Fort Worth, TX: Harcourt Brace & Company.

UNDP (2013) *HDI values and rank changes in the 2013 Human Development Report: Sri Lanka.* [Online]. Available at: http://hdr.undp.org/sites/default/files/Country-Profiles/LKA.pdf (Accessed: 4 January 2014).

Van der Stede, W.A., Young, S.M. and Chen, C.X. (2005) 'Assessing the quality of evidence in empirical management accounting research: the case of survey studies', *Accounting, Organizations and Society*, 30(7), pp.655-684.

Velicer, W.F. and Fava, J.L. (1998) 'Affects of variable and subject sampling on factor pattern recovery', *Psychological methods*, 3(2), pp.231-251.

Velicer, W.F. and Jackson, D.N. (1990) 'Component analysis versus common factor analysis: Some issues in selecting an appropriate procedure', *Multivariate behavioral research*, 25(1), pp.1-28.

Verma, G.K. and Beard, R.N. (1981) *What is Educational Research: perspectives and techniques of research.* Aldershot: Gower.

Voydanoff, P. (1988) 'Work role characteristics, family structure demands, and work/family conflict', *Journal of Marriage and the Family*, 50(3), pp.749-761.

Voydanoff, P. (2004) 'The effects of work demands and resources on work-to-family conflict and facilitation', *Journal of Marriage and Family*, 66(2), pp.398-412.

Voydanoff, P. (2005) 'Toward a Conceptualization of Perceived Work-Family Fit and Balance: A Demands and Resources Approach', *Journal of Marriage and Family*, 67(4), pp.822-836.

Wagner, D.L. and Hunt, G.G. (1994) 'The use of work place elder care programme by employed caregivers', *Research on aging*, 16(1), pp.69-84.

Wallace, R.O. and Mellor, C.J. (1988) 'Nonresponse bias in mail accounting surveys: a pedagogical note', *The British Accounting Review*, 20(2), pp.131-139.

Wayne, J.H., Musisca, N. and Fleeson, W. (2004) 'Considering the role of personality in the work–family experience: Relationships of the big five to work–family conflict and facilitation', *Journal of vocational behavior*, 64(1), pp.108-130.

Werner, S., Praxedes, M. and Kim, H.G. (2007) 'The reporting of nonresponse analyses in survey research', *Organizational Research Methods*, 10(2), pp.287-295.

West, S.G., Finch, J.F. and Curran, P.J. (1995) 'Structural equation models with nonnormal variables: Problems and remedies', in R.H. Hoyle (ed.), *Structural equation modelling: concepts, issues, and applications.* Thousand Oaks, CA: Sage, pp.56-75.

Williams, K. and Alliger, G.M. (1994) 'Role stressors, mood spillover, and perceptions of work-family conflict in employed parents', *Academy of Management Journal,* 37(4), pp.837-868.

Willmott, P. (1971) 'Family, Work and Leisure Conflicts Among Male Employees Some Preliminary Findings', *Human Relations*, 24(6), pp.575-584.

Winslow, S. (2005) 'Work-family conflict, gender, and parenthood, 1977–1997', *Journal of Family Issues*, 26(6), pp.727-755.

Worthington, R.L. and Whittaker, T.A. (2006) 'Scale development research a content analysis and recommendations for best practices', *The Counseling Psychologist*, 34(6), pp. 806-838.

Yang, N., Chen, C.C., Choi, J. and Zhou, Y. (2000) 'Sources of work-family conflict: A Sino-U.S. comparison of the effects of work and family demands', *Academy of Management Journal*, 43(1), pp.113-123.

Yuan, K.H., Marshall, L.L. and Bentler, P.M. (2002) 'A unified approach to exploratory factor analysis with missing data, nonnormal data, and in the presence of outliers', *Psychometrika*, 67(1), pp.95-121.

Zedeck, S. and Mosier, K.L. (1990) 'Work in the family and employing organization', *American Psychologist*, 45(2), pp.240-251.

Zikmund, W.G., Babin, B.J., Carr, J.C. and Griffin, M. (2010) *Business research methods.* 8th edn. USA: South-Western Cengage learning.

Appendices

Appendix A: Survey questionnaire

Kingston University London

Survey on work and family balance

Dear Participants,

I am Navaneethakrishnan Kengatharan, lecturer at the University of Jaffna. I am currently studying for a PhD at Kingston University, London, and doing a research project about work and family related issues. The aim of the research is to get a better understanding of how people balance their work and home lives. The success of the research is dependent on the cooperation of people like you, who can provide valuable information on this topic. It takes about 20 minutes.

I assure you that the data you provided will be kept totally confidential and anonymous. It is merely used for academic research purposes and no individuals will be named in my thesis report. The research is supervised by Professor Christine Edwards and Dr Miao Zhang, and subject to the strict professional ethical codes of the Kingston University, London. We know very little about how people balance work and family life in Sri Lanka and this study will provide information that can be used to tackle the problems that arise.

After completing this questionnaire, please seal it immediately with pre addressed and stamped envelope provided. One of my colleagues will collect it

Please do not hesitate to get in touch with me or my supervisors if you have any questions about the research. With many thanks for your assistance

N.Kengatharan
PhD student
Kingston University
k0916498@kingston.ac.uk

Details of Supervisors

Professor Christine Edwards
Leadership, HRM and Organisation
Kingston University
C.Edwards@kingston.ac.uk

Dr. Miao Zhang
Director of Studies
Kingston University
Miao.Zhang@kingston.ac.uk

PART I

Please use the following scale to indicate the degree to which you agree or disagree with the following statements.
Please circle one number for each statement:

Circle 1 if you ***strongly disagree*** with the statement
Circle 2 if you ***disagree*** with the statement
Circle 3 if you are ***uncertain*** whether you agree or disagree with the statement
Circle 4 if you ***agree*** with the statement
Circle 5 if you ***strongly agree*** with the statement

1. The following questions describe about work family interference

My work keeps me from my family activities more than I would like (Q1)	1	2	3	4	5
The time I must devote to my job keeps me from participating equally in household responsibilities and activities (Q2)	1	2	3	4	5
I have to miss family activities due to the amount of time I must spend on work responsibilities (Q3)	1	2	3	4	5
When I get home from work I am often too frazzled to participate in family activities/responsibilities (Q4)	1	2	3	4	5
I am often so emotionally drained when I get home from work that it prevents me from contributing to my family (Q5)	1	2	3	4	5
Due to all the pressures at work, sometimes when I come home I am too stressed to do the things I enjoy (Q6)	1	2	3	4	5
The problem-solving behaviours I use in my job are not effective in resolving problems at home (Q7)	1	2	3	4	5
Behaviour that is effective and necessary for me at work would be counterproductive at home (Q8)	1	2	3	4	5
The behaviours I perform that make me effective at work do not help me to be a better parent or spouse (Q9)	1	2	3	4	5
The time I spend on family responsibilities often interferes with my work responsibilities (Q10)	1	2	3	4	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 (Q11)	1	2	3	4	5
I have to miss work activities due to the amount of time I must spend on family responsibilities (Q12)	1	2	3	4	5
Due to stress at home, I am often preoccupied with family matters at work(Q13)	1	2	3	4	5
Because I am often stressed from family responsibilities, I have a hard time concentrating on my work (Q14)	1	2	3	4	5
Tension and anxiety from my family life often weakens my ability to do my job (Q15)	1	2	3	4	5
The behaviours that work for me at home do not seem to be effective at work (Q16)	1	2	3	4	5
Behaviour that is effective and necessary for me at home would be counterproductive at work (Q17)	1	2	3	4	5
The problem-solving behaviours that work for me at home do not seem to be as useful at my work (Q18)	1	2	3	4	5
I often think about work related problems at home that prevent me doing the tasks at home (Q19)	1	2	3	4	5
When I am at work I see things that need doing at home; planning and scheduling family related activities that prevent me doing the tasks at work (Q20)	1	2	3	4	5
I often think about work matters at home that prevent me doing the tasks at home (Q21)	1	2	3	4	5
I am often not in good mood at work due to the preoccupation with family responsibilities that prevent me doing the tasks at work (Q22)	1	2	3	4	5
I often think about family related problems at work that prevent me doing the tasks at work (Q23)	1	2	3	4	5
When I am at home I see things needs doing at work; planning and scheduling work related activities that prevent me doing the tasks at home (Q24)	1	2	3	4	5
I often think about family matters at work that prevent me doing the tasks at work (Q25)	1	2	3	4	5
I am often not in good mood at home due to the preoccupation with work responsibilities that prevent me doing the tasks at home (Q26)	1	2	3	4	5
I take work home that prevents me from doing family responsibilities (Q27)	1	2	3	4	5

2. **The following questions describe about work and family demand.**

I never seem to have enough time to get everything done at work	1	2	3	4	5
I feel like I have a lot of work demand	1	2	3	4	5
I have a lot of responsibility at work	1	2	3	4	5
I never seem to have enough time to get everything done at home	1	2	3	4	5
I feel like I have a lot of family demand	1	2	3	4	5
I have to work hard on family related activities	1	2	3	4	5

3. **The following questions describe about work and family support.**

My family members do their fair share of household chores	1	2	3	4	5
If my job gets very demanding, someone in my family will take on extra household responsibilities	1	2	3	4	5
Extended family members (parents or spouse parents/brother in law/sister in law etc) support in doing routine household chores	1	2	3	4	5
My relative supports looking after my children	1	2	3	4	5
I feel my supervisor is like a family member and understands my family demands	1	2	3	4	5
My supervisors usually attend my family events such as marriage, birthday, funeral etc	1	2	3	4	5
My supervisor is supportive when I have a work problem	1	2	3	4	5
My supervisor accommodates me when I have family or personal business to take care of—for example, medical appointments, meeting with child's teacher, etc.	1	2	3	4	5
My colleagues are supportive when I have a work problem	1	2	3	4	5
My colleagues usually attend my family events such as marriage, birthday, funeral etc	1	2	3	4	5

4. **The following questions describe about work and family satisfaction**

All in all I am satisfied with my job	1	2	3	4	5
In general, I like working here	1	2	3	4	5
In general, I don't like my job	1	2	3	4	5
All in all, I am satisfied with my family life	1	2	3	4	5
In general, I like being a member of family	1	2	3	4	5
Sometimes I am glad to go to work to get away from the demands of the family	1	2	3	4	5

5. **The following questions describe about traditional gender role concepts.**

A woman should not expect to have the same freedom as a man	1	2	3	4	5
A husband should earn more money than his wife	1	2	3	4	5
A working mother can have just as good a relationship with her children as a mother who does not work.	1	2	3	4	5
Even if the wife works outside the home, the husband should be the main breadwinner and the wife should carry the responsibility for the home and children.	1	2	3	4	5

6. **The following questions describe about work place policies**

Generally speaking I am very satisfied with available work life policies	1	2	3	4	5
I feel my organisation should consider additional work life policies	1	2	3	4	5
Organisational work life policies alleviate family problems	1	2	3	4	5
Organisational informal practices help me out to work and family related problems	1	2	3	4	5

7. **Are there any formal policies in this organisation to help you manage your family/caring responsibility?**
   Yes ☐ No ☐
8. **Are there any informal arrangements that help in practice say, leaving from work early?**
   Yes ☐ No ☐
9. **Does your organisation provide the following options to help balance home and work?**

Flexible working hours	Yes ☐	No ☐
Compressed working week	Yes ☐	No ☐
Paid leave to deal with family problems	Yes ☐	No ☐
Unpaid leave	Yes ☐	No ☐
Maternity leave	Yes ☐	No ☐
Paternity leave	Yes ☐	No ☐
Part time working	Yes ☐	No ☐
Eldercare	Yes ☐	No ☐
Childcare e.g., nursery at work	Yes ☐	No ☐
Job sharing	Yes ☐	No ☐
Working from home	Yes ☐	No ☐
Transportation facilities	Yes ☐	No ☐
Childcare advice and support	Yes ☐	No ☐
Work training	Yes ☐	No ☐
Career break, sabbatical or returner schemes	Yes ☐	No ☐
Other arrangements (Please write in and circle:		

Part II

Please can you answer the questions about yourself. This enables us to know if any particular group has particular issue.

1. Would you mind telling your age group you belong to:

18-25	☐
26- 35	☐
36-45	☐
46-55	☐
Over 55	☐

2. You are : Male ☐ Female ☐

\You are : Married ☐ Widow ☐
Divorced ☐ Single ☐

3. Do you have children? Yes ☐ No ☐

If yes

How many children do you have?

What are the ages of your children?

Age group	No of Children
0-4 years	
5-11 years	
12-18 years	
Over 18 years	

Who takes primary responsibility for the care of your child/children during the working week?

You ☐ Your spouse ☐ Parents (of yours/your spouse) ☐

Any other extended family member.☐ Paid carer ☐

Please specify if any others:

How many hours you spend with your children during the working week:

4. Number of dependents at home?

Parents (of yours/ your spouse)	☐
Relatives/close family members	☐
Family members (disabled)	☐

Please specify if any others:

If anyone needs care other than your children.... Yes ☐ No ☐

If yes how many:

Who takes primary responsibility for this care?

You ☐ your spouse ☐ Parents (of yours/your spouse) ☐

Any other extended family member ☐ Paid carer ☐

Please specify if any others:

How many hours you spend with care during the work days:

5. Could you tell me a little about your educational qualification (please tick all applicable)?

A/L	☐
Advanced diploma	☐
Degree	☐
Postgraduate	☐
PhD	☐
Any other qualification	

6. If you don't mind, please tell me which bank you are working for:

Private Bank	☐
Public Bank	☐
Multi national Bank	☐

7. Do you work full time or part time?

Full time ☐
Part time ☐

How many hours per week:

Does your spouse work?

Yes ☐
No ☐

If yes,

Full time ☐
Part time ☐

How many hours per week?

8. How long have you worked in baking sector: (years)

9. How long does it normally take you to get to work? (minutes)

What is your main method of travel to work?

Own vehicle ☐ Public transport ☐ Walking ☐ Office transport ☐

Please specify if any other:

Would you expect any transportation service from organisation? Yes ☐ No ☐

10. Does anyone directly report to you

Yes ☐
No ☐

If yes,

How many:

11. Are you main earner of your family? Yes ☐ No ☐

If you don't mind could you tell me your average monthly income?

10 000 – 20 000 ☐
20001- 30000 ☐
30 001-40 000 ☐
40 001 – 60 000 ☐
Over 60 000 ☐

12. If you don't mind could you tell me your average monthly income of your family?

10 000 – 20 000 ☐
20001- 30000 ☐
30 001-40 000 ☐
40 001 – 60 000 ☐
Over 60 000 ☐

13. Nature of employment

Permanent ☐
Temporary ☐
Contract ☐

14. Do you have a domestic helper at home? Yes ☐ No ☐

If yes,

How many hours spend during your working days?

Childcare:
Eldercare:
Household chores:

15. How many hours do you spend with household activities during the working days: hours Minutes

16. How many members of your family (living together):

	No of members
Your family	
Parents of you	
Parents of your spouse	
Any relatives	
Please specify if any others	

Translation

பகுதி I

பின்வரும் கூற்றுக்களினை நீர் எந்தளவிற்கு உடன்படுகின்றீர் அல்லது உடன்படவில்லை என்பதனை பின்வரும் அளவுத்திட்டத்தினைப் பயன்படுத்தி வட்டமிட்டுக் காட்டுக

1 முழுமையாக ஏற்றுக்கொள்ளவில்லை
2 ஏற்றுக்கொள்ளவில்லை
3 நடுநிலையான தன்மை
4 ஏற்றுக்கொள்ளுகின்றேன்
5 முழுமையாக ஏற்றுக்கொள்ளுகின்றேன்

1. பின்வரும் வினாக்கள் வேலை குடும்ப தலையீடுகளுடன் தொடர்புபட்டவை

எனது வேலையானது நான் விரும்புவதைவிட கூடுதலான அளவிற்கு எனது குடும்ப செயற்பாடுகளிலிருந்து என்னை அந்நியப்படுத்துகின்றுத	1	2	3	4	5
எனது வேலைக்காக நான் அர்ப்பணிக்க வேண்டிய நேரம் அதேயளவு நான் பங்குபற்ற வேண்டிய வீட்டுப்பொறுப்புகள் மற்றும் செயற்பாடுகளிலிருந்து என்னை அந்நியப்படுத்துகின்றது.	1	2	3	4	5
எனது வேலைப்பொறுப்புகளில் நான் செலவுசெய்ய வேண்டிய நேரம் காரணமாக எனது குடும்பச்செயற்பாடுகளை நான் தவறவிட வேண்டியிருக்கின்றது.	1	2	3	4	5
வேலையிலிருந்து வீடு திரும்பும்போது நான் மிகக்களைத்து விடுகின்றேன் அதனால் எனது குடும்பத்தின் செயற்பாடுகள் மற்றும் பொறுப்புகளில் பங்கெடுப்பதற்கு முடியாது இருக்கின்றது.	1	2	3	4	5
நான் வேலையிலிருந்து வீடு திரும்பும்போது உளரீதியாக மிகவும் சோர்வடைந்து விடுவதால் எனது குடும்பச்செயற்பாடுகளில் பங்குபெறுவது தடைப்படுகின்றது.	1	2	3	4	5
வேலையில் காணப்படும் பல்வேறு அழுத்தங்கள் காரணமாக சிலவேளைகளில் வீடுதிரும்பும் போது நான் மிகவும் அனுபவித்துச் செய்யும் விடயங்களைச் செய்வதிலும் மிகவும் மனஅழுத்தம் அடைகின்றேன்.	1	2	3	4	5
எனது வேலையில் பிரச்சனைகளைத் தீர்ப்பதற்காக நான் பயன்படுத்தும் நடத்தை அம்சங்கள் வீட்டில் பிரச்சனைகளைத் தீர்ப்பதில் பயனுடையவையாக இருப்பதில்லை	1	2	3	4	5
வேலையில் பயனுடையதாகவும் எனக்குத் தேவையானவையாகவும் இருக்கும் நடத்தை அம்சங்களை வீட்டில் நான் பயன்படுத்தும்போது மேலும் பிரச்சனைகளை உருவாக்குவனவாகவே இருக்கின்றன.	1	2	3	4	5
வேலையில் நான் சிறப்பாகச் செயற்படுவதற்கு நான் பயன்படுத்தும் நடத்தை அம்சங்கள் வீட்டிலே ஒரு நல்ல தந்தை/தாயாக இல்லது நல்ல வாழ்க்கைத் துணையாக இருப்பதற்கு எனக்கு உதவுவதில்லை	1	2	3	4	5
எனது குடும்பப்பொறுப்புகளில் நான் செலவுசெய்யும் நேரம் எனது வேலைப்பொறுப்புகளில் அடிக்கடி இடையூறு செய்கின்றது.	1	2	3	4	5
நான் எனது குடும்பத்துடன் செலவுசெய்யும் நேரமானது எனது தொழிலுக்கு உதவியாக இருக்கக்கூடிய வேலைச்செயற்பாடுகளில் நேரத்தைச் செலவிடமுடியாமல் இருப்பதற்குக் காரணமாக இருக்கின்றது.	1	2	3	4	5
நான் குடும்பச்செயற்பாடுகளில் நான் செலவுசெய்யவேண்டியிருக்கும் நேரம் காரணமாக எனது வேலையுடன் தொடர்புடைய செயற்பாடுகளை நான் தவறவிட வேண்டியிருக்கின்றது.	1	2	3	4	5
வீட்டில் இருக்கும் அழுத்தங்கள் காரணமாக வேலையிலும் கூட அடிக்கடி வீடுபற்றிய சிந்தனையில் மூழ்கிப் போகின்றேன்.	1	2	3	4	5
குடும்பப்பொறுப்புக்களால் நான் அடிக்கடி மனஅழுத்தமடைவதால் எனது வேலையில் புலனைச் செலுத்துவது கடினமாக இருக்கின்றது.	1	2	3	4	5
எனது குடும்ப வாழ்க்கை மூலமான பதட்டமும் கவலையும் எனது வேலையைச்செய்வதற்கான என்னுடைய ஆற்றலைப் பலவீனப்படுத்துகின்றன.	1	2	3	4	5
எனது வீட்டில் பயனுடையதாக இருக்கும் நடத்தைகள் எனது வேலையில் பயனுடையதாக இருப்பதில்லை.	1	2	3	4	5
எனது வீட்டில் பயனுடையதாகவும் எனக்குத் தேவையானவையாகவும் இருக்கும் நடத்தை வடிவங்கள் எனது வேலையில் மேலும் பிரச்சனைகளை ஏற்படுத்துபவையாகவே இருக்கும்.	1	2	3	4	5
வீட்டில் பிரச்சனைகளைத் தீர்ப்பதற்குப் பயன்படுத்தும் நடத்தை அம்சங்கள் வேலையில் பயனற்றவையாக இருப்பதாகவே தெரிகின்றன.	1	2	3	4	5
நான் வேலை தொடர்பான பிரச்சனைகளினை வீட்டில் இருக்கும்போது சிந்திப்பதால் அது எனது வேலைச் செயறபாடுகளினை பாதிக்கின்றது	1	2	3	4	5
நான் வேலையில் இருக்கும்போது வீட்டில் செய்யப்பட வேண்டிய வேலைகள் தொடர்பாக சிந்திக்கின்றேன், திட்டமிடுகின்றேன். இது எனது வேலைச் செயற்பாதுகளினைப் பாதிக்கின்றது	1	2	3	4	5
நான் அடிக்கடி வேலைதொடர்பான விடயங்களினை வீட்டில் சிந்திக்கின்றேன. இது எனது குடும்ப செயற்பாடுகளினைப் பாதிக்கின்றது	1	2	3	4	5
குடும்ப பொறுப்புகள் தொடர்பான சிந்தனையில் வேலையில் இருக்கும் போது நான் மூழ்கியிருப்பது வேலைச் செயற்பாடுகளினைப் பாதிக்கின்றது	1	2	3	4	5
நான் குடும்பம் தொடர்பான பிரச்சனைகளினை வேலையிலிருக்கும்போது சிந்திப்பதால் அது எனது வேலைச் செயறபாடுகளினை பாதிக்கின்றது	1	2	3	4	5
நான் வீட்டில் இருக்கும்பொது வேலையில் செய்யப்பட வேண்டிய வேலைகள் தொடர்பாக சிந்திக்கின்றேன், திட்டமிடுகின்றேன். இது எனது குடும்ப செயற்பாதுகளினைப் பாதிக்கின்றது	1	2	3	4	5
நான் அடிக்கடி குடும்பம் தொடர்பான விடயங்களினை வேலையில் சிந்திக்கின்றேன. இது எனது வேலைச் செயற்பாடுகளினைப் பாதிக்கின்றது	1	2	3	4	5
வேலைப் பொறுப்புகள் தொடர்பான சிந்தனையில் வீட்டில் இருக்கும் போது நான் மூழ்கியிருப்பது குடும்ப செயற்பாடுகளினைப் பாதிக்கின்றது	1	2	3	4	5
வேலைச் செயற்பாடுகளினை வீட்டிற்கு கொண்டு செல்லுதல் குடும்ப பொறுப்புக்களினை நிறைவேற்றுவதற்கு தடையாக அமைகின்றது	1	2	3	4	5

2. **பின்வரும் வினாக்கள் வேலை மற்றும் குடும்ப சுமைகள் பற்றிவிபரிக்கின்றது**

எல்வா வேலைகளையும் வேலையில் செய்துமுடிக்க போதுமான நேரம் காணப்படவில்லை	1	2	3	4	5
நான் வேலையில் கூடுதலான சுமை இருப்பதாக உணர்கின்றேன்	1	2	3	4	5
வேலையில் கூடுதலான பொறுப்புக்கள் இருப்பதாக உணர்கின்றேன்	1	2	3	4	5
எல்வா வேலைகளையும் வீட்டில் செய்துமுடிக்க போதுமான நேரம் காணப்படவில்லை	1	2	3	4	5
நான் குடும்பத்தில் கூடுதலான சுமை இருப்பதாக உணர்கின்றேன்	1	2	3	4	5
குடும்பத்தில் கூடுதலான பொறுப்புக்கள் இருப்பதாக உணர்கின்றேன்	1	2	3	4	5

3. **பின்வரும் வினாக்கள் வேலை மற்றும் குடும்பத்திலிருந்தான உதவிகள் பற்றிவிபரிக்கின்றது**

எனது குடும்ப அங்கத்தவர்கள் தமது நியாயமான பங்கு வீட்டு வேலைகளினைச் செய்கின்றார்கள்	1	2	3	4	5
எனது வேலைப்பழு கூடுதலாக காணப்படுமிடத்து எனது குடும்ப அங்கத்தவர் மேலதிக வீட்டு வேலைப் பொறுப்புக்கயினை ஏற்றுக்கொள்ளுகிறார்கள்	1	2	3	4	5
கூட்டுக்குடும்ப அங்கத்தவர்கள்(பெற்றோர்கள், மச்சான், மச்சாள் போன்றோர்) வழமையான வீட்டு வேலைகளினைச் செய்வதற்கு உதவுகிறார்கள்)	1	2	3	4	5
எனது சொந்தக்காரர்கள் எனது குழந்தைகளினை பராமரிப்பதற்கு உதவுகின்றார்கள்)	1	2	3	4	5
நான் எனது மேற்பார்வையாளரினை குடும்ப அங்கத்தவராகவே கருதுகின்றேன. அவர் குடும்ப தேவையினை புரிந்துகொள்ளக்கூடியவராக காணப்படுகின்றார்.	1	2	3	4	5
திருமண வீடு, பிறந்தநாள், செத்தவீடு போன்ற நிகழ்சிகளில் எனது மேற்பார்வையாளர்கள் கலந்துகொள்கின்றார்கள்	1	2	3	4	5
வேலையில் பிரச்சனைகள் காணப்படும் போது மேற்பார்வையாளர்கள் ஆதரவளிக்கின்றார்கள்	1	2	3	4	5
எனக்கு குடும்ப அல்லது தனிப்பட்ட தேவைகள் (உதாரணமாக மருத்துவ சந்திப்புக்கள், பிள்ளைகளின் ஆசிரியருடனான சந்திப்புக்கள போன்ற) காணப்படுமிடத்து எனது மேற்பார்வையாளர்கள்	1	2	3	4	5
வேலையில் பிரச்சனைகள் காணப்படும் போது எனது சக ஊழியர்கள் ஆதரவளிக்கின்றார்கள்)	1	2	3	4	5
வேலையில் திருமண வீடு, பிறந்தநாள், செத்தவீடு போன்ற நிகழ்சிகளில் எனது சக ஊழியர்கள் கலந்துகொள்கின்றார்கள்	1	2	3	4	5

4. **பின்வரும் வினாக்கள் வேலை மற்றும் குடும்ப திருப்தி தொடர்பாக பற்றிவிபரிக்கின்றது**

மொத்தத்தில் எனது வேலையில் நான் திருப்தி அடைகின்றேன்	1	2	3	4	5
பொதுவாக நான் இங்கு வேலை செய்வதமான விரும்புகின்றேன்	1	2	3	4	5
பொதுவாக நான் எனது வேலையினை விரும்பவில்லை	1	2	3	4	5
மொத்தத்தில் குடும்ப வாழ்க்கையில் நான் திருப்தி அடைகின்றேன	1	2	3	4	5
பொதுவாக நான் ஒரு குடும்ப அங்கத்தவராக இருப்பதனை விரும்புகின்றேன்	1	2	3	4	5
சில வேளைகளில் நான் குடும்ப வேலைகளினைக்காட்டிலும் வேலைக்கு போவதனை விரும்புகின்றேன்	1	2	3	4	5

5. **பின்வரும் வினாக்கள் பாரம்பரிய பாலின பங்கு தொடர்பாக பற்றிவிபரிக்கின்றது**

பெண் ஒருவர் ஆண் போன்ற சம சுகந்திரத்தினை வைத்திருக்க எதிர்பார்க கூடாது	1	2	3	4	5
கணவன் மனைவியினைக் காட்டிலும் கூடுதலான வருமானத்தினை உழைக்க வேண்டும்	1	2	3	4	5
வேலை அற்ற மனைவி எவ்வாறு குழந்தைகள் தொடர்பில் அக்கறை காட்டுகிறாளோ அதேயளவு அக்கறையினை வேலை செய்யும் மனைவியும் காட்ட வேண்டும்	1	2	3	4	5
மனைவி வேலை செய்கின்றவளாகக் காணப்பட்டாலும் கணவனே பிரதான வருமானமீட்டுபவராக காணப்படவேண்டும் அதேநேரம் மனைவி குழந்தைகள் மற்றும் குடும்ப வேலைப் பொறுப்புக்களினைக் கவனிக்க வேண்டும்	1	2	3	4	5

6. **பின்வரும் வினாக்கள் வேலைத்தள கொள்கைகள் தொடர்பாக பற்றிவிபரிக்கின்றது**

பொதுவாக நான் நிறுவன வேலை மற்றும் வாழ்கைதொடர்பான கொள்கைகளில் மிகவும் திருப்தி அடைகின்றேன்	1	2	3	4	5
நான் எனது நிறுவனம் வேலை மற்றும் வாழ்கைதொடர்பான கொள்கைகளில் மேலும் கூடுதல் கவனம் செலுத்தவேண்டும் என உணர்கின்றேன்	1	2	3	4	5
நிறுவன வேலை மற்றும் வாழ்கைதொடர்பான கொள்கைகள் குடும்ப பிரச்சனைகளினைக் குறைக்கும்	1	2	3	4	5
நிறுவன முறைசாரா நடைமுறைகள் வேலை மற்றும் குடும்ப பிரச்சனைகளினைக் குறைப்பதற்கு உதவுகின்றன.	1	2	3	4	5

7. நிறுவனத்தில் காணப்படுகின்ற ஏதாவது முறைசார் கொள்கைகள் குடும்ப பொறுப்புக்களினை/ வேலைகளினை நிறைவேற்றுவதற்கு உதவி செய்கின்றனவா?

ஆம் ☐ இல்லை ☐

8. நடைமுறையில் ஏதாவது முறைசாரா ஒழுங்குகள் குடும்ப பொறுப்புக்களினை/ வேலைகளினை நிறைவேற்றுவதற்கு உதவி செய்கின்றனவா (உதாரணமாக வேலையினை விட்டு சீக்கிரம் வீடு செல்ல அனுமதித்தல் ?

ஆம் ☐ இல்லை ☐

9. வேலை மற்றும் வீட்டு பொறுப்புக்களினை சமநிலைப்படுத்த பின்வருவனவற்றில் எவற்றினை உமது நிறுவனம் வழங்குகின்றது

நெகிழ்வான வேலை நேரம்	ஆம் ☐	இல்லை ☐
வாரத்தில் குறிப்பிட்ட சில நாட்களுக்கு மட்டும் வேலை செய்தல்	ஆம் ☐	இல்லை ☐
குடும்ப பிரச்சனைகளினை தீர்ப்பதற்கு சம்பளத்தினுடனான விடுமுறை	ஆம் ☐	இல்லை ☐
சம்பளமற்ற விடுமுறை	ஆம் ☐	இல்லை ☐
மகப்பேற்று விடுமுறை	ஆம் ☐	இல்லை ☐
தந்தைநிலை விடுமுறை	ஆம் ☐	இல்லை ☐
பகுதி நேர வேலை	ஆம் ☐	இல்லை ☐
முதியோர் பராமரிப்பு	ஆம் ☐	இல்லை ☐
குழந்தைகள் பராமரிப்பு உதாரணமாக வேலையில் சிறுவர் கற்கைப்பகுதி	ஆம் ☐	இல்லை ☐
வேலைப் பகிர்வு	ஆம் ☐	இல்லை ☐
வீட்டிலிருந்து வேலை செய்தல்	ஆம் ☐	இல்லை ☐
போக்கவரத்து வசதிகள்	ஆம் ☐	இல்லை ☐
சிறவர் பராமரிப்பு ஆலோசனையும் உதவியும்	ஆம் ☐	இல்லை ☐
வேலை நிறைவேற்ற தேவையான பயிற்சியளித்தல்கள்	ஆம் ☐	இல்லை ☐
வேலையிலிருந்து குறிப்பிட்ட காலம் விலகியிருத்தல், வேலைக்கு மீண்டும் திரும்பும் போதான திட்டங்கள்	ஆம் ☐	இல்லை ☐
ஏனைய ஒழுங்கைகள் (தயவுசெய்து குறிப்பிடுக):		

பகுதி II

பின்வரும் வினாக்கள் உம்முடன் தொடர்புபட்டதாகக் காணப்படுகின்றது. இவ்வினாக்களுக்கு விடையளிப்பதன் மூலமாக எந்தக் குழுவினைச் சேர்ந்த குழு எவ்வகையான பிரச்சனைகளினை கொண்டுள்ளார்கள் என்பதனை அடையாளப்படுத்த முடியும் எனவே தயவு செய்து விடையளிக்க

1. பின்வருவனவற்றில் பொருத்தமான உமது வயது எல்லை :

18-25 ☐
26- 35 ☐
36-45 ☐
46-55 ☐
55 க்கு மேல் ☐

2. உமது பால் : ஆண் ☐ பெண் ☐

3. நான் : திருமணமானவர் ☐ கணவன் அல்லது மனைவியை இழந்தவர் ☐
விவாகரத்து பெற்றவர் ☐ திருமணமாகாதவர் ☐

4. உங்களுக்க குழந்தைகள் உள்ளதா? ஆம் ☐ இல்லை ☐

ஆம் எனில்

எத்தனை குழந்தைகள்?

உங்கள் குழந்தைகளின் வயது?

வயது	எத்தனை குழந்தைகள்
0-4 ஆண்டுகள்	
5-11 ஆண்டுகள்	
12-18 ஆண்டுகள்	
18 ஆண்டுகளுக்கு மேல்	

வேலை செய்யும் வாரத்தில் உங்கள் குழந்தைகளின் பிரதான பொறுப்புக்களினை யார் ஏற்கிறார்கள்?

நீர் ☐ உமது கணவன்/ மனைவி ☐ உமது கணவன்/ மனைவியின் பெற்றோர் ☐

கூட்டுக் குடும்ப அங்கத்தவர்☐ சம்பளம் பெறும் பராமரிப்பாளர் ☐

வேறு யாராவது எனில் தயவுசெய்து குறிப்பிடுக

வேலை செய்யும் வாரத்தில் நீங்கள் உங்கள் குழந்தைகளுடன் எத்தனை மணித்தியாலயங்கள் செலவழிக்கின்றீர்கள்

5. வீட்டில் தங்கி வாழ்வோர் எத்தனை பேர்?

உமது கணவன்/ மனைவியின் பெற்றோர் ☐
உறவினர்கள் / நெருங்கிய நண்பர்கள் ☐
குடும்ப அங்கத்தவர்கள் (அங்கவீனர்கள்) ☐
வேறு யாராவது எனில் தயவுசெய்து குறிப்பிடுக

உங்கள் குழந்தைகள் தவிர வேறு யாருக்கும் பராமரிப்பு தேவை காணப்படுகின்றதா? ஆம் ☐ இல்லை ☐

ஆம் எனில் எத்தனை:

இப் பிரதான பரதமரிப்புப் பொறுப்பினை யார் ஏற்கின்றார்கள்

நீர் ☐ உமது கணவன்/ மனைவி ☐ உமது கணவன்/ மனைவியின் பெற்றோர் ☐
கூட்டுக் குடும்ப அங்கத்தவர் ☐ சம்பளம் பெறும் பராமரிப்பாளர் ☐
வேறு யாராவது எனில் தயவுசெய்து குறிப்பிடுக

வேலை செய்யும் நாட்களில் நீங்கள் உங்கள் குழந்தைகளுடன் எத்தனை மணித்தியாலயங்கள் செலவழிக்கின்றீர்கள் :

6. நீங்கள் உங்கள் கல்வித் தகுதிபற்றி பின்வருவனவற்றில் எது பொருத்தமானது என கருதுகின்றீர்கள்(பொருத்தமான எல்லாவற்றினையும் தெரிவுசெய்க)

உயர்தரம் ☐
உயர்தர டிப்புளோமா ☐
பட்டப்படிப்பு ☐
முதுகலை ☐
கலாநிதி ☐
வேறு ஏதாவது எனின் குறிப்பிடுக

7. நீர் எந்த வங்கியில் வேலை செய்கின்றீர்கள்

தனியார் வங்கி ☐
அரச வங்கி ☐
பல்தேசிய வங்கி ☐

8. நீங்கள் முழு நேரமா அல்லது பகுதிநேரமா வேலைபுரிகின்றீர்கள்

முழு நேரம் ☐
பகுதி நேரம் ☐

வாரத்தில் எத்தனை மணித்தியாலயங்கள்?

வாழ்க்கைத் துணை தொழில் புரிகின்றாரா?

ஆம் ☐
இல்லை ☐

ஆம் எனில்,

முழு நேரம் ☐
பகுதி நேரம் ☐

வாரத்தில் எத்தனை மணித்தியாலயங்கள்?

9. எத்தனை வருடங்கள் நீங்கள் இந்த நிறுவனத்தில் வேலை புரிகின்றீர்கள் : (வருடங்கள்)

10. நீங்கள் வேலையிடத்திற்கு செல்ல எவ்வளவு நேரம் தேவைப்படும்? (நிமிடங்கள்)

பிரதான பயண மார்கம் எது?

செந்த வாகனம் ☐ பொதுப் போக்குவரத்து ☐ நடை ☐ நிறுவன போக்குவரத்து வாகனம் ☐
வேறு ஏதாவது எனின் குறிப்பிடுக

நீங்கள் நிறுவனத்திடமிருந்து போக்குவரத்து சேவையினை எதிர்பார்க்கின்றீர்களா? ஆம் ☐ இல்லை ☐

11. யாராவது உமக்கு நேரடியாக பொறுப்புக் கூறவேண்டியுள்ளார்களா?

ஆம் ☐
இல்லை ☐

ஆம் எனில்

எத்தனை பேர்:

12. நீரா உமது குடும்பத்தில் பிரதான வருமானம் ஈட்டுபவர்? ஆம் ☐ இல்லை ☐

உமது மாதாந்த வருமானம்?

10 000 – 20 000	☐
20001- 30000	☐
30 001-40 000	☐
40 001 – 60 000	☐
60 000 க்கு மேல்	☐

13. உமது குடும்ப மாதாந்த வருமானம்?

10 000 – 20 000	☐
20001- 30000	☐
30 001-40 000	☐
40 001 – 60 000	☐
60 000 க்கு மேல்	☐

14. வேலையின் தன்மை

நிரந்தரம்	☐
தற்காலிகம்	☐
ஒப்பந்த அடிப்படை	☐

15. வீட்டு உதவியாளர் உண்டா? ஆம் ☐ இல்லை ☐

ஆம் எனில்

வேலை நாட்களில் எத்தனை மணித்தியாலயங்கள் செலவழிக்கின்றார்?

குழந்தை பராமரிப்பு:

முதியோர் பராமரிப்பு:

வீட்டுவேலை:

16. வேலை நாட்களில் எத்தனை மணித்தியாலயங்கள் வீட்டு வேலைகளில் செலவளிக்கின்றீர்கள்?

மணித்தியாலயங்கள் நிமிடங்கள்

17. நீங்கள் எத்தனைபேர் ஒன்றாக வசிக்கின்றீர்கள்:

	எண்ணிக்கை
உமது குடும்பம்	
உமது பெற்றோர்	
துணையின் பெற்றோர்	
உறவினர்கள்	
வேறு யாராவது எனின் குறிப்பிடுக	

PLEASE SEALED IT AND RETURN IMMEDIATELY TO THE ADDRESS IN THE STAMPED ENVELOPE PROVIDED

THANK YOU VERY MUCH FOR HAVING COMPLETED THIS SURVEY

Appendix B: Exploratory interview questions

Step 1: General introduction: I am Navaneethakrishnan Kengatharan, lecturer at the University of Jaffna. Presently, I am taking up my PhD studies at the Kingston University, UK, and doing research about work and family related issues. The aim of the research is to get a better understanding of how people balance their work and home lives. The success of the research is dependent on the cooperation of people like you, who can provide valuable information on this topic. . It will last maximum of one and a half hours.....

The data you provided will be kept totally confidential and anonymous. I will never give your data to anybody at anytime for any reason and it is only used for academic research purposes.

The research is supervised by Professor Christine Edwards and Dr Miao Zhang, and subject to the strict professional ethical codes of the University

Step 2: General questions

1. First of all, I thank you for your consent to participate the interview. Would you mind recording our interview?

   Yes ☐
   No ☐

2. Would you mind telling your age group you belong to:

   18-25 ☐
   26- 35 ☐
   36-45 ☐
   Over 45 ☐

3. Could you tell me the name and type of the organisation you are working for?

4. What is your current position at work?

5. If you don't mind could you tell me average monthly income? I would use income bands for this :

10 000 – 20 000	☐
20001- 30000	☐
30 001-40 000	☐
40 001 – 60 000	☐
Over 60 000	☐

6. Could you tell me a little about your educational qualification and work experience?

A/L	☐
Advanced diploma	☐
Degree	☐
Postgraduate	☐
PhD	☐
Any other qualification	

Experience:

7. Are you married?

Yes	☐
No	☐

8. Do you have any children? If yes, how many children you have and their ages?

Yes	☐
No	☐

If yes, how many:

Age:

9. Who takes main reasonability for the care of your children?

10. What amount of time each week if any do the following people spend caring for your children
    Yourself:
    Your wife/husband:
    Your Family members (please specify):
    Paid carer:
11. Do you experience any problems with managing childcare and working? If yes please explain what

12. What amount of time each week if any do the following people spend on looking after the home (eg cooking and cleaning)

    Yourself:

    Your wife/husband:

    Your Family members (please specify):

    Paid help:

13. Do you experience any problems with managing housework such as cooking and cleaning, and working? If yes please explain what

14. Do you have any caring responsibilities for relatives who need help with?
15. Do you experience any problems with managing caring for them and working? If yes please explain what

16. Are your parents/relatives living with you? Who are they?

17. Do they need any kind of support to your parents in doing their day to day (routine) activities? Or are they able to look after themselves?

18. .....Do your parent/ relatives provide any support in doing household chores (family related let say...cleaning)? If yes, for what kind of things do they need support? Do they provide you with any support e.g., with household chores or looking after your children ...etc?

Step 3: Work and family related questions

1. Could you please tell me what household chores you are doing?
2. Are you able to do the entire task regularly at home? Or having any difficulties?

3. What factors actually cause the problems in doing your household chores?...Discuss more about that...
4. Do you work full time or part time? How many hours are you working per week?

   Full time ☐

   Part time ☐

   Hours worked per week:

5. How long does it take you to get to your workplace? Do you experience any problems?
6. Do you feel you have plenty of time to look after household chores and tasks at work? .....If time is the problem, could you please let me know how challenging this is for you?....How do you manage balancing your home and your work life

   Yes ☐

   No ☐

   Challenges:

   Manage home:

   Manage life:

7. What responsibility assigned to you in your working place?
8. Are you able to perform all tasks assigned to you at your work/any pressure?
9. Are you doing any work related tasks at home (bring them home)? Discuss a little bit more...
10. As you know work is necessary for running family and also it gives social status.....do you have any problems in doing household chores due to your involvement at work?.....or do you have any problems in doing tasks at work due to your involvement at family (household chores)?
11. Do you think what factors that cause you inconvenience in doing work or family related tasks?

12. Are you tired when you get to work from home? Or ..... tired when you get home from work? .....If so...why...? ...could you please tell me a little bit more?

13. Could you please tell me any examples of how you have adapted work or home life caused due to adapting same behavioural pattern, for example, if you adapt same communication pattern at work and home.....

14. Do you think any work related issues when you are at home? Could you please share one of your experiences?

15. Do you think any family related problems/tasks when you are at work? ..... Could you please share one of your experiences?

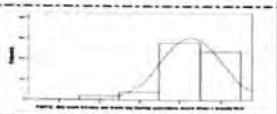
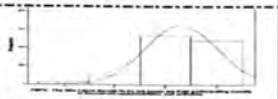
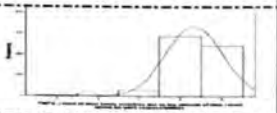
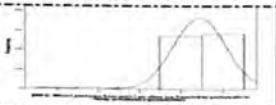
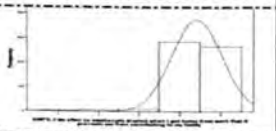
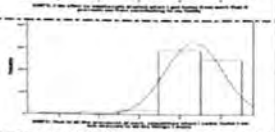
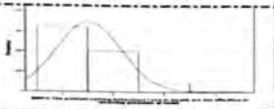
16. Are there any organisational polices/practices support you to easily perform work and family task? E.g., flexible working hours; unpaid leave; workplace nursery

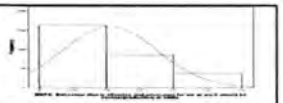
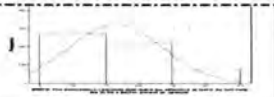
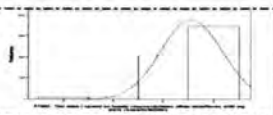
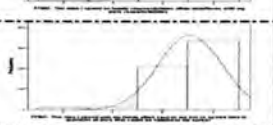
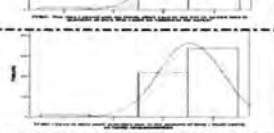
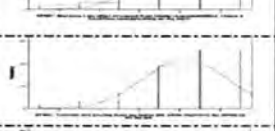
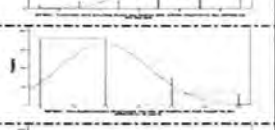
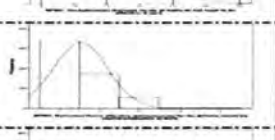
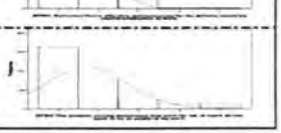
17. What would you like your organisation to do to help people balance work and family life .....?

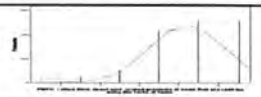
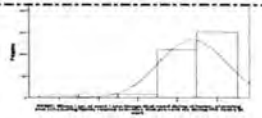
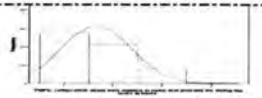
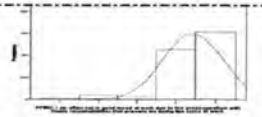
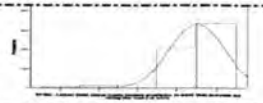
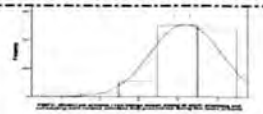
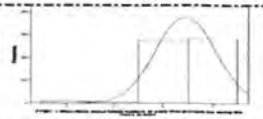
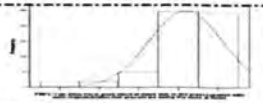
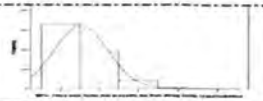
18. What kind of support if any you are getting from your peers/managers to look after your work related activities? Needs to be more precise? You mean to if you have problems at home you need to attend to – or to assist with WLB?

Appendix C: Statistical results

Table 1: Respondents' responses on work family conflict

			Strongly disagree	Disagree	Uncertain	Agree	Strongly agree	
	Mean	SD	Percentage	Percentage	Percentage	Percentage	Percentage	Normality curve
My work keeps me from my family activities more than I would like	4.28	.75	1	3	6	49	41	
The time I must devote to my job keeps me from participating equally in household responsibilities and activities	4.30	.70	0	2	8	47	43	
I have to miss family activities due to the amount of time I must spend on work responsibilities	4.33	.68	1	2	5	50	42	
When I get home from work I am often too frazzled to participate in family activities/responsibilities	4.45	.62	1	1	1	47	50	
I am often so emotionally drained when I get home from work that it prevents me from contributing to my family	4.42	.61	1	1	2	50	46	
Due to all the pressures at work, sometimes when I come home I am too stressed to do the things I enjoy	4.34	.69	1	2	3	51	43	
The problem-solving behaviours I use in my job are not effective in resolving problems at home	1.52	.65	56	35	8	1	0	

Behaviour that is effective and necessary for me at work would be counterproductive at home	1.55	.71	57	30	13	0	0	
The behaviours I perform that make me effective at work do not help me to be a better parent or spouse	1.65	.70	48	39	13	0	0	
The time I spend on family responsibilities often interferes with my work responsibilities	4.56	.61	0	1	2	37	60	
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	4.54	.62	0	2	2	37	59	
I have to miss work activities due to the amount of time I must spend on family responsibilities	4.54	.63	0	2	1	38	59	
Due to stress at home, I am often preoccupied with family matters at work	3.98	1.02	3	7	13	42	35	
Because I am often stressed from family responsibilities, I have a hard time concentrating on my work	4.14	.94	2	4	12	41	41	
Tension and anxiety from my family life often weakens my ability to do my job	4.14	1.03	3	6	12	33	46	
The behaviours that work for me at home do not seem to be effective at work	1.47	.68	63	26	11	0	0	
Behaviour that is effective and necessary for me at home would be counterproductive at work	1.51	.69	59	30	9	1	1	
The problem-solving behaviours that work for me at home do not seem to be as useful at my work	1.70	1.03	57	27	8	4	4	

I often think about work related problems at home that prevent me doing the tasks at home	4.20	.96	3	4	9	38	46	
When I am at work I see things that need doing at home; planning and scheduling family related activities that prevent me doing the tasks at work	4.38	.85	2	3	3	39	53	
I often think about work matters at home that prevent me doing the tasks at home	1.66	.72	49	37	13	1	0	
I am often not in good mood at work due to the preoccupation with family responsibilities that prevent me doing the tasks at work	4.42	.76	1	3	2	40	54	
I often think about family related problems at work that prevent me doing the tasks at work	4.51	.69	1	2	2	36	59	
When I am at home I see things needs doing at work; planning and scheduling work related activities that prevent me doing the tasks at home	4.20	.89	2	2	10	44	42	
I often think about family matters at work that prevent me doing the tasks at work	4.45	.60	0	2	1	48	49	
I am often not in good mood at home due to the preoccupation with work responsibilities that prevent me doing the tasks at home	4.19	.92	3	3	9	43	42	
I take work home that prevents me from doing family responsibilities	1.58	.70	57	33	8	1	1	

Source: Survey data

Table 2: WFC measure -Skewness and Kurtosis

	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
My work keeps me from my family activities more than I would like	-1.110	.102	1.654	.204
The time I must devote to my job keeps me from participating equally in household responsibilities and activities	-.832	.102	.642	.204
I have to miss family activities due to the amount of time I must spend on work responsibilities	-1.019	.102	1.879	.204
When I get home from work I am often too frazzled to participate in family activities/responsibilities	-1.194	.102	3.040	.204
I am often so emotionally drained when I get home from work that it prevents me from contributing to my family	-1.000	.102	2.606	.204
Due to all the pressures at work, sometimes when I come home I am too stressed to do the things I enjoy	-1.404	.102	3.950	.204
The problem-solving behaviours I use in my job are not effective in resolving problems at home	.960	.102	.138	.204
Behaviour that is effective and necessary for me at work would be counterproductive at home	.885	.102	-.518	.204
The behaviours I perform that make me effective at work do not help me to be a better parent or spouse	.602	.102	-.804	.204
The time I spend on family responsibilities often interferes with my work responsibilities	-1.413	.102	2.722	.204
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	-1.406	.102	2.591	.204
I have to miss work activities due to the amount of time I must spend on family responsibilities	-1.554	.102	3.456	.204
The problem-solving behaviours that work for me at home do not seem to be as useful at my work	1.670	.102	2.298	.204
I often think about work related problems at home that prevent me doing the tasks at home	-1.427	.102	1.959	.204
When I am at work I see things that need doing at home; planning and scheduling family related activities that prevent me doing the tasks at work	-1.895	.102	4.313	.204
I often think about work matters at home that prevent me doing the tasks at home	.710	.102	-.470	.204
I am often not in good mood at work due to the preoccupation with family responsibilities that prevent me doing the tasks at work	-1.725	.102	3.900	.204
I often think about family related problems at work that prevent me doing the tasks at work	-1.711	.102	4.073	.204
When I am at home I see things needs doing at work; planning and scheduling work related activities that prevent me doing the tasks at home	-1.442	.102	2.605	.204
I often think about family matters at work that prevent me doing the tasks at work	-1.043	.102	2.194	.204
I am often not in good mood at home due to the preoccupation with work responsibilities that prevent me doing the tasks at home	-1.464	.102	2.456	.204
Due to stress at home, I am often preoccupied with family matters at work	-1.099	.102	.808	.204
Because I am often stressed from family responsibilities, I have a hard time concentrating on my work	-1.241	.102	1.550	.204
Tension and anxiety from my family life often weakens my ability to do my job	-1.255	.102	1.095	.204
The behaviours that work for me at home do not seem to be effective at work	1.113	.102	-.049	.204
Behaviour that is effective and necessary for me at home would be counterproductive at work	1.145	.102	.793	.204
I take work home that prevents me from doing family responsibilities	1.396	.102	2.551	.204

Valid N (listwise) 569

Table 3: WFC measure -Test of Normality: Kolmogorov-Smirnov and Shapiro-Wilk

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Stat	df	Sig.	Stat	df	Sig.
My work keeps me from my family activities more than I would like	.257	569	.000	.760	569	.000
The time I must devote to my job keeps me from participating equally in household responsibilities and activities	.263	569	.000	.774	569	.000
I have to miss family activities due to the amount of time I must spend on work responsibilities	.262	569	.000	.747	569	.000
When I get home from work I am often too frazzled to participate in family activities/responsibilities	.310	569	.000	.692	569	.000
I am often so emotionally drained when I get home from work that it prevents me from contributing to my family	.296	569	.000	.699	569	.000
Due to all the pressures at work, sometimes when I come home I am too stressed to do the things I enjoy	.261	569	.000	.714	569	.000
The problem-solving behaviours I use in my job are not effective in resolving problems at home	.352	569	.000	.721	569	.000
Behaviour that is effective and necessary for me at work would be counterproductive at home	.356	569	.000	.719	569	.000
The behaviours I perform that make me effective at work do not help me to be a better parent or spouse	.304	569	.000	.763	569	.000
The time I spend on family responsibilities often interferes with my work responsibilities	.370	569	.000	.662	569	.000
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	.363	569	.000	.673	569	.000
I have to miss work activities due to the amount of time I must spend on family responsibilities	.360	569	.000	.654	569	.000
Due to stress at home, I am often preoccupied with family matters at work	.278	569	.000	.814	569	.000
Because I am often stressed from family responsibilities, I have a hard time concentrating on my work	.257	569	.000	.791	569	.000
Tension and anxiety from my family life often weakens my ability to do my job	.258	569	.000	.780	569	.000
The behaviours that work for me at home do not seem to be effective at work	.390	569	.000	.679	569	.000
Behaviour that is effective and necessary for me at home would be counterproductive at work	.364	569	.000	.710	569	.000
The problem-solving behaviours that work for me at home do not seem to be as useful at my work	.326	569	.000	.697	569	.000
I often think about work related problems at home that prevent me doing the tasks at home	.258	569	.000	.760	569	.000
When I am at work I see things that need doing at home; planning and scheduling family related activities that prevent me doing the tasks at work	.300	569	.000	.681	569	.000
I often think about work matters at home that prevent me doing the tasks at home	.305	569	.000	.770	569	.000
I am often not in good mood at work due to the preoccupation with family responsibilities that prevent me doing the tasks at work	.312	569	.000	.688	569	.000
I often think about family related problems at work that prevent me doing the tasks at work	.350	569	.000	.671	569	.000
When I am at home I see things needs doing at work; planning and scheduling work related activities that prevent me doing the tasks at home	.267	569	.000	.763	569	.000
I often think about family matters at work that prevent me doing the tasks at work	.312	569	.000	.687	569	.000
I am often not in good mood at home due to the preoccupation with work responsibilities that prevent me doing the tasks at home	.272	569	.000	.759	569	.000
I take work home that prevents me from doing family responsibilities	.349	569	.000	.708	569	.000

a. Lilliefors Significance Correction

Table 4a: WFC measure- Anti Image Correlation

Anti-image Matrices

		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27
Anti-image Correlation	Q1	.725[a]	-.526	-.355	-.053	.064	.025	.036	.046	.069	.065	-.009	-.090	-.072	-.003	.052	.037	-.070	-.035	-.008	.011	-.104	-.035	.020	.088	-.085	-.020	-.017
	Q2	-.526	.723a	-.402	.088	-.040	-.053	.008	.002	.092	-.017	-.014	.033	.054	.037	-.145	-.045	.053	.023	.041	-.044	-.077	.008	.013	.025	-.014	.008	.002
	Q3	-.355	-.402	.745a	-.001	-.004	-.062	-.087	-.115	-.122	-.069	.085	.072	.025	-.001	.041	-.016	.040	.027	-.028	.080	.161	-.022	-.041	-.126	.027	.037	.034
	Q4	-.053	.088	-.001	.682a	-.372	-.366	-.034	-.058	.063	.023	.068	.002	.014	.010	.009	.044	.099	-.060	.054	.004	-.099	-.001	-.058	-.060	-.021	.001	.082
	Q5	.064	-.040	-.004	-.372	.649a	-.316	-.049	.072	-.100	-.058	.059	-.001	-.040	-.008	.068	.016	-.075	-.013	-.116	-.052	.071	.091	.098	.048	.015	.070	.017
	Q6	.025	-.053	-.062	-.366	-.316	.684a	.050	-.005	.106	-.004	-.133	.037	-6.960E-5	.001	-.096	.040	-.044	.061	-.009	-.029	-.068	-.033	-.001	-.011	-.097	-.035	-.054
	Q7	.036	.008	-.087	-.034	-.049	.050	.595a	.085	.076	-.046	.020	-.014	.027	-.002	-.073	.031	-.049	-.730	.081	-.067	-.059	-.013	-.031	-.038	.094	.063	.048
	Q8	.046	.002	-.115	-.058	.072	-.005	.085	.850a	-.246	.033	-.126	-.110	-.122	.043	.038	-.006	.140	-.112	.052	-.151	-.086	.068	.189	-.001	.059	.000	-.132
	Q9	.069	.092	-.122	.063	-.100	.106	.076	-.246	.635a	.098	.084	-.112	.123	.016	-.108	.002	-.107	-.049	-.018	-.015	-.915	.037	-.107	.065	-.108	-.021	-.036
	Q10	.065	-.017	-.069	.023	-.058	-.004	-.046	.033	.098	.672a	-.430	-.681	-.042	-.003	-.022	-.046	.114	-.008	-.021	-.046	-.108	.079	-.024	.060	-.054	-.025	-.096
	Q11	-.009	-.014	.085	.068	.059	-.133	.020	-.126	.084	-.430	.786a	-.146	.075	.036	-.005	.020	-.193	-.028	-.046	.093	-.045	-.039	-.041	-.045	-.057	.096	-.041
	Q12	-.090	.033	.072	.002	-.001	.037	-.014	-.110	-.112	-.681	-.146	.694a	-.034	-.024	.064	.048	.001	-.003	-.089	.031	.157	-.095	-.014	-.027	.133	.012	.190
	Q13	-.072	.054	.025	.014	-.040	-6.960E-5	.027	-.122	.123	-.042	.075	-.034	.653a	-.351	-.366	.054	-.063	-.088	-.049	.044	-.087	-.060	.061	-.077	-.030	-.012	.035
	Q14	-.003	.037	-.001	.010	-.008	.001	-.002	.043	.016	-.003	.036	-.024	-.351	.686a	-.309	-.059	.000	.134	.064	.096	-.037	9.900E-5	-.084	.021	.060	-.007	-.042
	Q15	.052	-.145	.041	.009	.068	-.096	-.073	.038	-.108	-.022	-.005	.064	-.366	-.309	.641a	.039	.022	.031	-.013	-.076	.101	-.006	.061	.084	.027	-.084	-.002
	Q16	.037	-.045	-.016	.044	.016	.040	.031	-.006	.002	-.046	.020	.048	.054	-.059	.039	.599a	-.159	-.126	-.072	-.135	.000	.042	.041	.015	.162	-.030	.167
	Q17	-.070	.053	.040	.099	-.075	-.044	-.049	.140	-.107	.114	-.193	.001	-.063	.000	.022	-.159	.542a	-.024	.010	-.148	.091	.051	.130	-.020	.172	-.050	.136
	Q18	-.035	.023	.027	-.060	-.013	.061	-.730	-.112	-.049	-.008	-.028	-.003	-.088	.134	.031	-.126	-.024	.549a	.038	.068	.069	-.023	-.003	.033	-.169	-.101	-.079
	Q19	-.008	.041	-.028	.054	-.116	-.009	.081	.052	-.018	-.021	-.046	-.089	-.049	.064	-.013	-.072	.010	.038	.786a	-.039	-.004	-.019	-.006	-.185	.071	-.392	-.033
	Q20	.011	-.044	.080	.004	-.052	-.029	-.067	-.151	-.015	-.046	.093	.031	.044	.096	-.076	-.135	-.148	.068	-.039	.628a	.017	-.381	-.329	-.045	-.054	.067	-.018
	Q21	-.104	-.077	.161	-.099	.071	-.068	-.059	-.086	-.915	-.108	-.045	.157	-.087	-.037	.101	.000	.091	.069	-.004	.017	.645a	-.042	.060	-.051	.129	.007	.065
	Q22	-.035	.008	-.022	-.001	.091	-.033	-.013	.068	.037	.079	-.039	-.095	-.060	9.900E-5	-.006	.042	.051	-.023	-.019	-.381	-.042	.709a	-.302	.055	-.208	-.023	-.073
	Q23	.020	.013	-.041	-.058	.098	-.001	-.031	.189	-.107	-.024	-.041	-.014	.061	-.084	.061	.041	.130	-.003	-.006	-.329	.060	-.302	.688a	-.014	.009	-.022	.007
	Q24	.088	.025	-.126	-.060	.048	-.011	-.038	-.001	.065	.060	-.045	-.027	-.077	.021	.084	.015	-.020	.033	-.185	-.045	-.051	.055	-.014	.679a	-.048	-.557	.003
	Q25	-.085	-.014	.027	-.021	.015	-.097	.094	.059	-.108	-.054	-.057	.133	-.030	.060	.027	.162	.172	-.169	.071	-.054	.129	-.208	.009	-.048	.679a	-.005	.116
	Q26	-.020	.008	.037	.001	.070	-.035	.063	.000	-.021	-.025	.096	.012	-.012	-.007	-.084	-.030	-.050	-.101	-.392	.067	.007	-.023	-.022	-.557	-.005	.658a	-.015
	Q27	-.017	.002	.034	.082	.017	-.054	.048	-.132	-.036	-.096	-.041	.190	.035	-.042	-.002	.167	.136	-.079	-.033	-.018	.065	-.073	.007	.003	.116	-.015	.458a

a. Measures of Sampling Adequacy(MSA)

Table 4b: WFC measure - Anti image correlation after removal of Q27

Anti-image Matrices

		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26
Anti-image Correlation	Q1	.726a	-.526	-.355	-.052	.064	.024	.037	.044	.068	.063	-.009	-.088	-.071	-.003	.052	.041	-.068	-.037	-.009	.011	-.103	-.037	.020	.088	-.084	-.020
	Q2	-.526	.722a	-.403	.088	-.040	-.053	.007	.002	.092	-.017	-.014	.033	.054	.037	-.145	-.046	.054	.023	.041	-.044	-.078	.008	.013	.025	-.014	.008
	Q3	-.355	-.403	.747a	-.003	-.005	-.060	-.088	-.112	-.120	-.066	.086	.067	.024	4.953E-6	.042	-.022	.036	.029	-.027	.081	.159	-.020	-.041	-.126	.023	.037
	Q4	-.052	.088	-.003	.686a	-.375	-.364	-.038	-.048	.067	.032	.072	-.014	.011	.014	.010	.031	.089	-.054	.057	.006	-.105	.005	-.058	-.061	-.031	.002
	Q5	.064	-.040	-.005	-.375	.647a	-.316	-.050	.075	-.100	-.056	.059	-.004	-.041	-.007	.068	.014	-.078	-.012	-.115	-.052	.070	.093	.097	.048	.013	.070
	Q6	.024	-.053	-.060	-.364	-.316	.588a	.052	-.012	.104	-.009	-.135	.048	.002	-.001	-.096	.050	-.037	.057	-.011	-.030	-.065	-.037	-.001	-.011	-.091	-.036
	Q7	.037	.007	-.088	-.038	-.050	.052	.594a	.092	.078	-.042	.022	-.024	.026	.000	-.073	.023	-.056	-.730	.083	-.066	-.063	-.009	-.031	-.038	.089	.064
	Q8	.044	.002	-.112	-.048	.075	-.012	.092	.852a	-.253	.021	-.133	-.087	-.118	.038	.038	.016	.161	-.124	.048	-.155	-.078	.059	.192	-.001	.075	-.002
	Q9	.068	.092	-.120	.067	-.100	.104	.078	-.253	.634a	.095	.083	-.107	.125	.015	-.108	.008	-.103	-.052	-.019	-.016	-.915	.035	-.107	.065	-.104	-.021
	Q10	.063	-.017	-.066	.032	-.056	-.009	-.042	.021	.095	.678a	-.436	-.678	-.038	-.007	-.022	-.030	.129	-.016	-.024	-.048	-.103	.072	-.023	.060	-.044	-.027
	Q11	-.009	-.014	.086	.072	.059	-.135	.022	-.133	.083	-.436	.784a	-.141	.076	.034	-.005	.027	-.190	-.032	-.047	.093	-.043	-.042	-.041	-.045	-.053	.095
	Q12	-.088	.033	.067	-.014	-.004	.048	-.024	-.087	-.107	-.678	-.141	.712a	-.041	-.016	.065	.016	-.025	.013	-.084	.035	.148	-.083	-.016	-.028	.114	.015
	Q13	-.071	.054	.024	.011	-.041	.002	.026	-.118	.125	-.038	.076	-.041	.654a	-.351	-.366	.049	-.068	-.086	-.048	.045	-.090	-.058	.061	-.077	-.034	-.012
	Q14	-.003	.037	4.953E-6	.014	-.007	-.001	.000	.038	.015	-.007	.034	-.016	-.351	.689a	-.309	-.053	.005	.131	.062	.095	-.035	-.003	-.084	.021	.065	-.008
	Q15	.052	-.145	.042	.010	.068	-.096	-.073	.038	-.108	-.022	-.005	.065	-.366	-.309	.641a	.040	.022	.031	-.013	-.077	.102	-.006	.061	.084	.028	-.084
	Q16	.041	-.046	-.022	.031	.014	.050	.023	.016	.008	-.030	.027	.016	.049	-.053	.040	.618a	-.186	-.114	-.068	-.134	-.011	.055	.041	.014	.145	-.028
	Q17	-.068	.054	.036	.089	-.078	-.037	-.056	.161	-.103	.129	-.190	-.025	-.068	.005	.022	-.186	.519a	-.013	.015	-.147	.083	.061	.130	-.020	.158	-.049
	Q18	-.037	.023	.029	-.054	-.012	.057	-.730	-.124	-.052	-.016	-.032	.013	-.086	.131	.031	-.114	-.013	.553a	.035	.066	.074	-.028	-.002	.033	-.161	-.103
	Q19	-.009	.041	-.027	.057	-.115	-.011	.083	.048	-.019	-.024	-.047	-.084	-.048	.062	-.013	-.068	.015	.035	.787a	-.040	-.002	-.021	-.006	-.185	.076	-.393
	Q20	.011	-.044	.081	.006	-.052	-.030	-.066	-.155	-.016	-.048	.093	.035	.045	.095	-.077	-.134	-.147	.066	-.040	.627a	.018	-.383	-.329	-.045	-.052	.067
	Q21	-.103	-.078	.159	-.105	.070	-.065	-.063	-.078	-.915	-.103	-.043	.148	-.090	-.035	.102	-.011	.083	.074	-.002	.018	.646a	-.037	.059	-.051	.123	.008
	Q22	-.037	.008	-.020	.005	.093	-.037	-.009	.059	.035	.072	-.042	-.083	-.058	-.003	-.006	.055	.061	-.028	-.021	-.383	-.037	.713a	-.303	.055	-.201	-.025
	Q23	.020	.013	-.041	-.058	.097	-.001	-.031	.192	-.107	-.023	-.041	-.016	.061	-.084	.061	.041	.130	-.002	-.006	-.329	.059	-.303	.687a	-.014	.009	-.022
	Q24	.088	.025	-.126	-.061	.048	-.011	-.038	-.001	.065	.060	-.045	-.028	-.077	.021	.084	.014	-.020	.033	-.185	-.045	-.051	.055	-.014	.678a	-.049	-.557
	Q25	-.084	-.014	.023	-.031	.013	-.091	.089	.075	-.104	-.044	-.053	.114	-.034	.065	.028	.145	.158	-.161	.076	-.052	.123	-.201	.009	-.049	.712a	-.003
	Q26	-.020	.008	.037	.002	.070	-.036	.064	-.002	-.021	-.027	.095	.015	-.012	-.008	-.084	-.028	-.049	-.103	-.393	.067	.008	-.025	-.022	-.557	-.003	.657a

a. Measures of Sampling Adequacy(MSA)

Table 5: WFC measure - Correlation matrix

Correlation Matrix[a]

		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26
Correlation	Q1	**1.000**	.791	.727	.030	-.019	.105	.053	-.003	-.035	-.025	-.043	-.030	.049	-.009	.075	-.040	-.061	.047	-.074	.020	-.013	.119	.028	-.069	.176	-.061
	Q2	.791	**1.000**	.746	-.001	.001	.133	.055	-.045	-.091	-.030	-.052	-.062	.024	-.009	.128	-.015	-.087	.024	-.094	.029	-.070	.104	.026	-.069	.161	-.077
	Q3	.727	.746	**1.000**	.046	.021	.134	.093	.007	-.049	-.037	-.083	-.065	.007	-.034	.054	-.012	-.089	.063	-.032	.000	-.050	.086	.036	.030	.141	-.012
	Q4	.030	-.001	.046	**1.000**	.545	.521	.067	.162	.176	-.045	-.071	-.061	.025	-.024	.001	-.094	-.093	.085	.008	.071	.198	.013	.025	.057	.095	.024
	Q5	-.019	.001	.021	.545	**1.000**	.500	.076	.048	.071	.052	.011	.026	.042	-.012	-.005	-.032	.058	.066	.074	.017	.074	-.092	-.090	.006	.019	-.014
	Q6	.105	.133	.134	.521	.500	**1.000**	-.002	-.034	-.068	.079	.104	.032	.084	.030	.106	-.104	-.003	-.017	.079	.066	-.040	.070	.027	.081	.157	.057
	Q7	.053	.055	.093	.067	.076	-.002	**1.000**	-.161	-.221	.181	.140	.156	.015	-.122	.007	.083	.102	.755	-.111	.087	-.218	.121	.103	-.018	.102	-.056
	Q8	-.003	-.045	.007	.162	.048	-.034	-.161	**1.000**	.818	.039	.030	.054	.053	.007	-.013	-.002	-.148	-.028	.048	.099	.811	-.096	-.112	-.003	-.158	.036
	Q9	-.035	-.091	-.049	.176	.071	-.068	-.221	.818	**1.000**	-.115	-.131	-.099	-.013	.027	-.012	.004	-.105	-.112	.051	.117	.973	-.076	-.034	-.014	-.156	.048
	Q10	-.025	-.030	-.037	-.045	.052	.079	.181	.039	-.115	**1.000**	.766	.855	.088	-.017	-.018	.032	.007	.177	.203	.028	-.100	.072	.093	.054	-.010	.047
	Q11	-.043	-.052	-.083	-.071	.011	.104	.140	.030	-.131	.766	**1.000**	.708	.016	-.066	-.058	.020	.112	.152	.165	.001	-.115	.072	.072	.047	.008	.006
	Q12	-.030	-.062	-.065	-.061	.026	.032	.156	.054	-.099	.855	.708	**1.000**	.087	-.016	-.042	.036	.046	.156	.234	.025	-.101	.087	.092	.083	-.061	.072
	Q13	.049	.024	.007	.025	.042	.084	.015	.053	-.013	.088	.016	.087	**1.000**	.512	.529	-.032	.049	.025	.137	-.062	.012	.009	-.086	.140	-.028	.173
	Q14	-.009	-.009	-.034	-.024	-.012	.030	-.122	.007	.027	-.017	-.066	-.016	.512	**1.000**	.498	-.006	.008	-.181	.015	-.097	.041	-.040	-.034	.006	-.119	.056
	Q15	.075	.128	.054	.001	-.005	.106	.007	-.013	-.012	-.018	-.058	-.042	.529	.498	**1.000**	-.038	.009	-.041	.046	.007	-.012	.029	-.041	.019	-.021	.103
	Q16	-.040	-.015	-.012	-.094	-.032	-.104	.083	-.002	.004	.032	.020	.036	-.032	-.006	-.038	**1.000**	.250	.114	.111	.085	.000	-.066	-.038	.063	-.192	.092
	Q17	-.061	-.087	-.089	-.093	.058	-.003	.102	-.148	-.105	.007	.112	.046	.049	.008	.009	.250	**1.000**	.073	.084	.031	-.120	-.097	-.114	.081	-.183	.090
	Q18	.047	.024	.063	.085	.066	-.017	.755	-.028	-.112	.177	.152	.156	.025	-.181	-.041	.114	.073	**1.000**	-.055	.064	-.121	.110	.071	.021	.169	.027
	Q19	-.074	-.094	-.032	.008	.074	.079	-.111	.048	.051	.203	.165	.234	.137	.015	.046	.111	.084	-.055	**1.000**	.047	.053	.017	.039	.547	-.100	.622
	Q20	.020	.029	.000	.071	.017	.066	.087	.099	.117	.028	.001	.025	-.062	-.097	.007	.085	.031	.064	.047	**1.000**	.103	.532	.495	.026	.165	.004
	Q21	-.013	-.070	-.050	.198	.074	-.040	-.218	.811	.973	-.100	-.115	-.101	.012	.041	-.012	.000	-.120	-.121	.053	.103	**1.000**	-.080	-.051	-.004	-.171	.051
	Q22	.119	.104	.086	.013	-.092	.070	.121	-.096	-.076	.072	.072	.087	.009	-.040	.029	-.066	-.097	.110	.017	.532	-.080	**1.000**	.537	.001	.330	.006
	Q23	.028	.026	.036	.025	-.090	.027	.103	-.112	-.034	.093	.072	.092	-.086	-.034	-.041	-.038	-.114	.071	.039	.495	-.051	.537	**1.000**	.038	.197	.026
	Q24	-.069	-.069	.030	.057	.006	.081	-.018	-.003	-.014	.054	.047	.083	.140	.006	.019	.063	.081	.021	.547	.026	-.004	.001	.038	**1.000**	-.005	.710
	Q25	.176	.161	.141	.095	.019	.157	.102	-.158	-.156	-.010	.008	-.061	-.028	-.119	-.021	-.192	-.183	.169	-.100	.165	-.171	.330	.197	-.005	**1.000**	-.041
	Q26	-.061	-.077	-.012	.024	-.014	.057	-.056	.036	.048	.047	.006	.072	.173	.056	.103	.092	.090	.027	.622	.004	.051	.006	.026	.710	-.041	**1.000**

a. Determinant = 6.26E-007

Table 6: WFC measure- Communalities

Communalities

	Initial	Extraction
My work keeps me from my family activities more than I would like (Q1)	1.000	.840
The time I must devote to my job keeps me from participating equally in household responsibilities and activities (Q2)	1.000	.861
I have to miss family activities due to the amount of time I must spend on work responsibilities (Q3)	1.000	.814
When I get home from work I am often too frazzled to participate in family activities/responsibilities (Q4)	1.000	.730
I am often so emotionally drained when I get home from work that it prevents me from contributing to my family (Q5)	1.000	.721
Due to all the pressures at work, sometimes when I come home I am too stressed to do the things I enjoy (Q6)	1.000	.728
The problem-solving behaviours I use in my job are not effective in resolving problems at home (Q7)	1.000	.851
Behaviour that is effective and necessary for me at work would be counterproductive at home (Q8)	1.000	.902
The behaviours I perform that make me effective at work do not help me to be a better parent or spouse (Q9)	1.000	.887
The time I spend on family responsibilities often interferes with my work responsibilities (Q10)	1.000	.896
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 (Q11)	1.000	.795
I have to miss work activities due to the amount of time I must spend on family responsibilities (Q12)	1.000	.860
Due to stress at home, I am often preoccupied with family matters at work (Q13)	1.000	.713
Because I am often stressed from family responsibilities, I have a hard time concentrating on my work (Q14)	1.000	.691
Tension and anxiety from my family life often weakens my ability to do my job (Q15)	1.000	.692
The behaviours that work for me at home do not seem to be effective at work (Q16)	1.000	.583
Behaviour that is effective and necessary for me at home would be counterproductive at work (Q17)	1.000	.588
The problem-solving behaviours that work for me at home do not seem to be as useful at my work (Q18)	1.000	.884
I often think about work related problems at home that prevent me doing the tasks at home (Q19)	1.000	.708
When I am at work I see things that need doing at home; planning and scheduling family related activities that prevent me doing the tasks at work (Q20)	1.000	.749
I am often not in good mood at work due to the preoccupation with family responsibilities that prevent me doing the tasks at work (Q22)	1.000	.723
I often think about family related problems at work that prevent me doing the tasks at work (Q23)	1.000	.658
When I am at home I see things needs doing at work; planning and scheduling work related activities that prevent me doing the tasks at home (Q24)	1.000	.778
I often think about family matters at work that prevent me doing the tasks at work (Q25)	1.000	.511
I am often not in good mood at home due to the preoccupation with work responsibilities that prevent me doing the tasks at home (Q26)	1.000	.827

Extraction Method: Principal Component Analysis.

Table 7a: WFC measure -Pattern matrix

Pattern Matrix[a]

	Component								
	1	2	3	4	5	6	7	8	9
Q10	.941								
Q12	.918								
Q11	.889								
Q2		.927							
Q1		.919							
Q3		.903							
Q26			.909						
Q24			.891						
Q19			.780						
Q5				.844					
Q6				.813					
Q4				.805					
Q20					-.857				
Q22					-.814				
Q23					-.797				
Q8						.952			
Q9						.925			
Q15							.829		
Q13							.821		
Q14							.811		
Q18								.942	
Q7								.897	
Q16									.747
Q17									.736
Q25									-.490

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Table 7b: WFC measure- Pattern matrix

Pattern Matrix[a]									
	Factor								
	1	2	3	4	5	6	7	8	9
Q10	.952								
Q12	.886								
Q11	.802								
Q2		.910							
Q1		.876							
Q3		.837							
Q26			.903						
Q24			.804						
Q19			.669						
Q8				.955					
Q9				.867					
Q20					.804				
Q22					.742				
Q23					.664				
Q5						.751			
Q4						.729			
Q6						.713			
Q13							.740		
Q15							.722		
Q14							.704		
Q18								.962	
Q7								.775	
Q17									.511
Q16									.493
Q25									-.368

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Table 8: WFC measure- parallel analysis

Monte Carlo PCA for Parallel Analysis

06/05/2014 13:40:29
Number of variables: 26
Number of subjects: 569
Number of replications: 200

Eigenvalue #	Random Eigenvalue	Standard Dev
1	1.4000	.0373
2	1.3374	.0265
3	1.2918	.0231
4	1.2527	.0201
5	1.2166	.0163
6	1.1829	.0159
7	1.1508	.0172
8	1.1197	.0161
9	1.0928	.0142
10	1.0643	.0136
11	1.0363	.0127
12	1.0114	.0137
13	0.9872	.0133
14	0.9618	.0136
15	0.9367	.0126
16	0.9132	.0136
17	0.8893	.0137
18	0.8640	.0137
19	0.8378	.0145
20	0.8132	.0146
21	0.7867	.0148
22	0.7588	.0166
23	0.7318	.0159
24	0.7011	.0176
25	0.6617	.0205

06/05/2014 13:40:53
Monte Carlo PCA for Parallel Analysis

Table 9: WFC measure -Component matrix

Component Matrix[a]

	Component								
	1	2	3	4	5	6	7	8	9
Q10	.817								
Q12	.806								
Q11	.758								
Q2		.742							
Q1		.728							
Q3		.700							
Q25		.493							
Q26			.538		-.427				
Q13			.534				.474		
Q24			.484		-.403				
Q19	.449		.467						
Q6			.416						
Q4				.573					
Q20				.475	-.430				
Q23					-.498				
Q22		.446			-.491				
Q5				.407	.487	-.406			
Q8				.432		.600			
Q9				.502		.533			
Q14			.440				.575		
Q15			.494				.531		
Q18								.615	
Q7								.568	
Q17									.571
Q16								.410	.531

Extraction Method: Principal Component Analysis.

a. 9 components extracted.

Table 10: WFC measure- Structure matrix

	Component								
	1	2	3	4	5	6	7	8	9
Q10	.944								
Q12	.925								
Q11	.889								
Q2		.925							
Q1		.915							
Q3		.898							
Q26			.904						
Q24			.878						
Q19			.812						
Q5				.832					
Q4				.821					
Q6				.815					
Q22					-.835				
Q20					-.819				
Q23					-.803				
Q8						.941			
Q9						.934			
Q13							.825		
Q15							.824		
Q14							.812		
Q18								.936	
Q7								.913	
Q16									.739
Q17									.730
Q25									-.547

Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization.

Table 11a: WFC measure- Component Correlation matrix

Component	1	2	3	4	5	6	7	8	9
1	1.000	-.052	.118	.014	-.045	-.048	.008	.115	.054
2	-.052	1.000	-.045	.061	-.096	-.074	.038	.087	-.117
3	.118	-.045	1.000	.056	-.037	.022	.091	-.014	.087
4	.014	.061	.056	1.000	-.029	.032	.031	.066	-.069
5	-.045	-.096	-.037	-.029	1.000	.061	.060	-.133	.119
6	-.048	-.074	.022	.032	.061	1.000	-.004	-.124	.036
7	.008	.038	.091	.031	.060	-.004	1.000	-.077	.012
8	.115	.087	-.014	.066	-.133	-.124	-.077	1.000	.015
9	.054	-.117	.087	-.069	.119	.036	.012	.015	1.000

Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization.

Table 11b: Test of Reliability

Factor 1

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.912	.912	3

Inter-Item Correlation Matrix			
	Q10	Q11	Q12
Q10	1.000	.766	.855
Q11	.766	1.000	.708
Q12	.855	.708	1.000

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q10	9.08	1.337	.877	.783	.829
Q11	9.10	1.409	.765	.597	.921
Q12	9.09	1.336	.830	.738	.867

Factor 2

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.902	.902	3

Inter-Item Correlation Matrix

	Q1	Q2	Q3
Q1	1.000	.791	.727
Q2	.791	1.000	.746
Q3	.727	.746	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q1	8.63	1.674	.813	.668	.854
Q2	8.60	1.757	.828	.687	.840
Q3	8.58	1.882	.778	.607	.882

Factor3

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.833	.834	3

Inter-Item Correlation Matrix

	Q19	Q24	Q26
Q19	1.000	.547	.622
Q24	.547	1.000	.710
Q26	.622	.710	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q19	8.39	2.804	.633	.409	.831
Q24	8.39	2.861	.696	.523	.767
Q26	8.40	2.651	.756	.583	.706

Factor 4

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.763	.766	3

Inter-Item Correlation Matrix

	Q4	Q5	Q6
Q4	1.000	.545	.521
Q5	.545	1.000	.500
Q6	.521	.500	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q4	8.76	1.272	.614	.379	.663
Q5	8.79	1.317	.597	.361	.682
Q6	8.87	1.162	.581	.338	.705

Factor 5

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.762	.766	3

Inter-Item Correlation Matrix

	Q20	Q22	Q23
Q20	1.000	.532	.495
Q22	.532	1.000	.537
Q23	.495	.537	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q20	8.93	1.613	.587	.345	.697
Q22	8.89	1.768	.617	.383	.653
Q23	8.80	1.985	.588	.350	.692

Factor 7

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.759	.759	3

Inter-Item Correlation Matrix

	Q13	Q14	Q15
Q13	1.000	.512	.529
Q14	.512	1.000	.498
Q15	.529	.498	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q13	8.27	2.893	.601	.362	.663
Q14	8.12	3.230	.577	.333	.692
Q15	8.12	2.924	.591	.349	.675

Factor 9

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.091	.136	3

Inter-Item Correlation Matrix

	Q16	Q17	Q25
Q16	1.000	.250	.192
Q17	.250	1.000	.183
Q25	.192	.183	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q16	5.97	.691	.068	.085	.442
Q17	5.93	.671	.073	.081	.472
Q25	2.99	1.179	-.237	.056	.400

Table 12: A Six factor structure of WFC measure

a. KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.709
Bartlett's Test of Sphericity	Approx. Chi-Square	4559.031
	df	153
	Sig.	.000

b. Communalities

Communalities		
	Initial	Extraction
Q1	1.000	.840
Q2	1.000	.859
Q3	1.000	.815
Q4	1.000	.714
Q5	1.000	.707
Q6	1.000	.678
Q10	1.000	.897
Q11	1.000	.796
Q12	1.000	.858
Q13	1.000	.698
Q14	1.000	.677
Q15	1.000	.689
Q19	1.000	.693
Q24	1.000	.770
Q26	1.000	.823
Q20	1.000	.677
Q22	1.000	.713
Q23	1.000	.674

Extraction Method: Principal Component Analysis.

c. **Factor extraction**

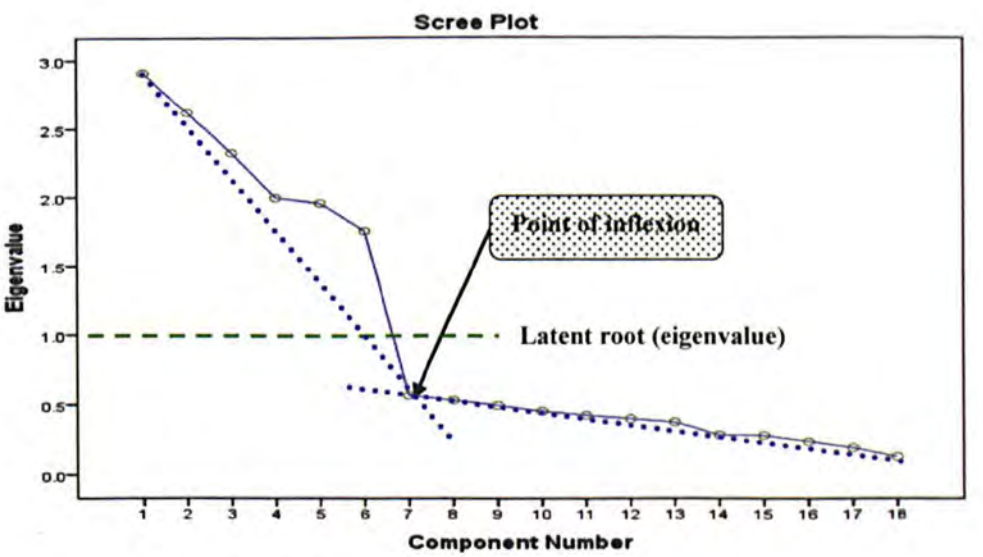
Total Variance Explained

Component	Initial Eigenvalues Total	% of Variance	Cumulative %	Extraction Sums of Squared Loadings Total	% of Variance	Cumulative %	*Rotation Sums of* Squared Loadings[a] Total
1	2.907	16.152	16.152	2.907	16.152	16.152	2.657
2	2.620	14.556	30.708	2.620	14.556	30.708	2.576
3	2.330	12.946	43.653	2.330	12.946	43.653	2.360
4	1.997	11.096	54.749	1.997	11.096	54.749	2.095
5	1.959	10.883	65.632	1.959	10.883	65.632	2.074
6	1.762	9.786	75.419	1.762	9.786	75.419	2.078
7	.570	3.164	78.583				
8	.535	2.973	81.556				
9	.499	2.772	84.329				
10	.458	2.542	86.870				
11	.429	2.383	89.254				
12	.404	2.245	91.499				
13	.381	2.115	93.613				
14	.291	1.617	95.230				
15	.287	1.597	96.826				
16	.242	1.344	98.171				
17	.197	1.094	99.265				
18	.132	.735	100.000				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

d. **Scree plot**



e. **Parallel analysis**

Monte Carlo PCA for Parallel Analysis

13/05/2014 22:43:50

Number of variables: 18

Number of subjects: 569

Number of replications: 200

Eigenvalue #	Random Eigenvalue	Standard Dev
1	1.3260	.0361
2	1.2627	.0243
3	1.2155	.0234
4	1.1713	.0199
5	1.1320	.0184
6	1.0970	.0156
7	1.0657	.0157
8	1.0347	.0152
9	1.0059	.0153
10	0.9748	.0166
11	0.9456	.0158
12	0.9174	.0143
13	0.8876	.0148
14	0.8593	.0164
15	0.8303	.0164
16	0.7965	.0180
17	0.7607	.0185
18	0.7170	.0251

13/05/2014 22:44:03

Monte Carlo PCA for Parallel Analysis

f. Pattern matrix

Pattern Matrix[a]

	Component					
	1	2	3	4	5	6
Q10	.947					
Q12	.920					
Q11	.894					
Q2		.922				
Q1		.915				
Q3		.903				
Q26			.909			
Q24			.885			
Q19			.800			
Q22				.835		
Q20				.822		
Q23				.816		
Q4					-.841	
Q5					-.838	
Q6					-.794	
Q14						.825
Q15						.825
Q13						.811

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Table 13: WFC measure -Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
TIMEWFC	.428	.034	12.744	***	
STRWFC	.215	.025	8.624	***	
PSYWFC	.446	.050	8.841	***	
TIMEFWC	.338	.023	14.917	***	
STRFWC	.597	.070	8.573	***	
PSYFWC	.348	.043	8.056	***	
err2	.093	.011	8.520	***	
err1	.127	.013	10.160	***	
err3	.146	.011	12.815	***	
err5	.177	.016	10.807	***	
err4	.169	.017	9.696	***	
err6	.246	.021	11.462	***	
err8	.298	.027	10.895	***	
err7	.473	.034	13.965	***	
err9	.166	.030	5.512	***	
err11	.142	.010	14.604	***	
err12	.082	.008	10.474	***	
err10	.028	.007	4.126	***	
err14	.468	.040	11.851	***	
err15	.519	.048	10.850	***	
err13	.459	.049	9.370	***	
err17	.242	.026	9.137	***	
err18	.235	.021	11.208	***	
err16	.370	.032	11.620	***	

Table 14: GOF measures

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	51	249.553	120	.000	2.080
Saturated model	171	.000	0		
Independence model	18	4614.546	153	.000	30.160

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.026	.954	.934	.669
Saturated model	.000	1.000		
Independence model	.133	.537	.483	.480

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.946	.931	.971	.963	.971
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.784	.742	.762
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	129.553	88.094	178.778
Saturated model	.000	.000	.000
Independence model	4461.546	4243.471	4686.874

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	.439	.228	.155	.315
Saturated model	.000	.000	.000	.000
Independence model	8.124	7.855	7.471	8.252

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.044	.036	.051	.915
Independence model	.227	.221	.232	.000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	351.553	355.084	573.091	624.091
Saturated model	342.000	353.836	1084.804	1255.804
Independence model	4650.546	4651.792	4728.736	4746.736

ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	.619	.546	.706	.625
Saturated model	.602	.602	.602	.623
Independence model	8.188	7.804	8.584	8.190

HOELTER

Model	HOELTER .05	HOELTER .01
Default model	334	362
Independence model	23	25

Table 15: WFC measure -Standardized Residual Covariances (Group number 1 - Default model)

	Q23	Q20	Q22	Q15	Q13	Q14	Q12	Q10	Q11	Q19	Q26	Q24	Q4	Q6	Q5	Q1	Q3	Q2
Q23	.000																	
Q20	.043	.000																
Q22	-.059	.029	.000															
Q15	-.262	.870	1.477	.000														
Q13	-1.277	-.718	1.029	-.143	.000													
Q14	-.126	-1.625	-.194	.242	-.037	.000												
Q12	.748	-.827	.510	-1.337	1.709	-.704	.000											
Q10	.653	-.872	.022	-.808	1.695	-.761	-.002	.000										
Q11	.423	-1.248	.316	-1.680	.055	-1.870	-.024	.012	.000									
Q19	.596	.802	.050	-.775	1.294	-1.433	4.077	3.231	2.606	.000								
Q26	.178	-.325	-.328	.056	1.577	-.970	-.195	-.941	-1.566	-.040	.000							
Q24	.519	.254	-.374	-1.666	1.093	-1.887	.294	-.527	-.394	-.076	.046	.000						
Q4	.355	1.455	.051	-.661	-.118	-1.209	-1.829	-1.465	-2.024	-.508	-.312	.584	.000					
Q6	.435	1.368	1.428	1.903	1.335	.112	.411	1.496	2.161	1.248	.537	1.191	-.080	.000				
Q5	-2.381	.174	-2.447	-.766	.312	-.898	.262	.852	-.048	1.109	-1.179	-.598	.136	-.079	.000			
Q1	-.633	-.814	1.434	.907	.255	-1.047	.154	.338	-.251	-.642	-.007	-.355	-.377	1.476	-1.511	.000		
Q3	-.379	-1.207	.712	.468	-.690	-1.609	-.721	.008	-1.243	.295	1.077	1.921	.057	2.217	-.496	.020	.000	
Q2	-.724	-.633	1.022	2.152	-.383	-1.077	-.585	.250	-.437	-1.075	-.355	-.333	-1.156	2.124	-1.063	-.013	.003	.000

Table 16: WFC measure- Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
Jsat	<---	TIMEWFC	-.268	.036	-7.480	***	
Jsat	<---	STRWFC	-.316	.054	-5.824	***	
Jsat	<---	PSYWFC	-.333	.039	-8.490	***	
Fsat	<---	PSYFWC	-.318	.047	-6.809	***	
Fsat	<---	STRFWC	-.319	.039	-8.145	***	
Fsat	<---	TIMEFWC	-.186	.039	-4.774	***	
Fsat	<---	Jsat	.196	.074	2.642	.008	
Q2	<---	TIMEWFC	.970	.035	27.362	***	
Q3	<---	TIMEWFC	.862	.035	24.757	***	
Q1	<---	TIMEWFC	1.000				
Q5	<---	STRWFC	.917	.070	13.015	***	
Q6	<---	STRWFC	1.010	.078	12.872	***	
Q4	<---	STRWFC	1.000				
Q24	<---	PSYWFC	1.064	.064	16.629	***	
Q26	<---	PSYWFC	1.234	.073	16.935	***	
Q19	<---	PSYWFC	1.000				
Q11	<---	TIMEFWC	.853	.033	26.190	***	
Q10	<---	TIMEFWC	1.000				
Q12	<---	TIMEFWC	.956	.030	32.382	***	
Q14	<---	STRFWC	.902	.070	12.946	***	
Q13	<---	STRFWC	1.000				
Q15	<---	STRFWC	.991	.076	12.957	***	
Q22	<---	PSYFWC	1.001	.077	13.031	***	
Q20	<---	PSYFWC	1.000				
Q23	<---	PSYFWC	.817	.064	12.858	***	
Q1FS	<---	Fsat	1.000				
Q2FS	<---	Fsat	1.250	.073	17.210	***	
Q3FS	<---	Fsat	1.044	.065	15.964	***	
Q1JS	<---	Jsat	1.000				
Q2JS	<---	Jsat	1.167	.054	21.732	***	
Q3JS	<---	Jsat	1.071	.057	18.747	***	

Table 17: ANOVA- Predictors of work demand

ANOVA[g]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	78.072	1	78.072	160.426	.000[a]
	Residual	275.932	567	.487		
	Total	354.004	568			
2	Regression	84.542	2	42.271	88.790	.000[b]
	Residual	269.461	566	.476		
	Total	354.004	568			
3	Regression	86.663	3	28.888	61.052	.000[c]
	Residual	267.340	565	.473		
	Total	354.004	568			
4	Regression	89.153	4	22.288	47.463	.000[d]
	Residual	264.851	564	.470		
	Total	354.004	568			
5	Regression	93.676	5	18.735	40.518	.000[e]
	Residual	260.328	563	.462		
	Total	354.004	568			
6	Regression	96.048	6	16.008	34.876	.000[f]
	Residual	257.955	562	.459		
	Total	354.004	568			

a. Predictors: (Constant), Working hours
b. Predictors: (Constant), Working hours, Gender
c. Predictors: (Constant), Working hours, Gender, Formal Policies
d. Predictors: (Constant), Working hours, Gender, Formal Policies, Income
e. Predictors: (Constant), Working hours, Gender, Formal Policies, Income, Tenure
f. Predictors: (Constant), Working hours, Gender, Formal Policies, Income, Tenure , Supervisory status (how many reporting)
g. Dependent Variable: work demand

Table 18: Unstandardized Coefficients and Standardized Coefficients of the predictors of work demand

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
6	(Constant)	-1.269	.600		-2.114	.035		
	Formal policies	-.253	.082	-.118	-3.094	.002	.885	1.129
	Gender	-.224	.060	-.140	-3.732	.000	.922	1.085
	Working hours	.132	.013	.401	9.856	.000	.782	1.279
	Tenure	-.020	.005	-.202	-3.874	.000	.476	2.100
	Supervisory status	.013	.006	.117	2.274	.023	.486	2.057
	Income	.234	.076	.138	3.076	.002	.647	1.546

a. Dependent Variable: Work demand

Table 19: ANOVA- Predictors of family demand

ANOVA[g]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.070	1	26.070	57.834	.000[a]
	Residual	255.585	567	.451		
	Total	281.654	568			
2	Regression	44.165	2	22.083	52.629	.000[b]
	Residual	237.489	566	.420		
	Total	281.654	568			
3	Regression	55.612	3	18.537	46.335	.000[c]
	Residual	226.042	565	.400		
	Total	281.654	568			
4	Regression	63.975	4	15.994	41.439	.000[d]
	Residual	217.680	564	.386		
	Total	281.654	568			
5	Regression	67.963	5	13.593	35.812	.000[e]
	Residual	213.691	563	.380		
	Total	281.654	568			
6	Regression	69.615	6	11.603	30.752	.000[f]
	Residual	212.039	562	.377		
	Total	281.654	568			

a. Predictors: (Constant), Informal Policies
b. Predictors: (Constant), Informal Policies, hours spent on household chores
c. Predictors: (Constant), Informal Policies, hours spent on household chores ,Gender
d. Predictors: (Constant), Informal Policies, hours spent on household chores ,Gender, hours spent on dependent
e. Predictors: (Constant), Informal Policies, hours spent on household chores ,Gender, hours spent on dependent, Formal Policies
f. Predictors: (Constant), Informal Policies, hours spent on household chores ,Gender, hours spent on dependent, Formal Policies, hours spent on children
g. Dependent Variable: Family demand

Table 20: Unstandardized Coefficients and Standardized Coefficients of the predictors of work demand

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	*t*	Sig.	Tolerance	VIF
6	(Constant)	3.487	.202		17.237	.000		
	Hours spent on household chores	.301	.038	.350	7.931	.000	.690	1.450
	hours spent on children	.040	.019	.081	2.092	.037	.901	1.110
	hours spent on dependent	.156	.033	.201	4.690	.000	.727	1.375
	Formal policies	-.222	.070	-.117	-3.170	.002	.992	1.008
	Informal policies	-.327	.053	-.232	-6.177	.000	.946	1.057
	Gender	.304	.055	.213	5.488	.000	.890	1.123

a. Dependent Variable: Family demand

Table 21: The result of the conditional effect of work demand on work to family conflict at values of the *work support*

Conditional effect of X on Y at values of the moderator(s)

Work Support	Effect	se	*t*	*p*	LLCI	ULCI
-.5817	.4017	.0149	26.9100	.0000	.3724	.4311
.0000	.3737	.0147	25.3939	.0000	.3448	.4026
.5817	.3457	.0216	16.0326	.0000	.3033	.3881

Table 22: The result of the conditional effect of family demand on family to work conflict at values of the family support

Conditional effect of X on Y at values of the moderator(s)

Family Support	Effect	se	*t*	*p*	LLCI	ULCI
-.8462	.5080	.0169	30.0194	.0000	.4748	.5413
.0000	.4729	.0137	34.6070	.0000	.4460	.4997
.8462	.4377	.0193	22.6398	.0000	.3997	.4757

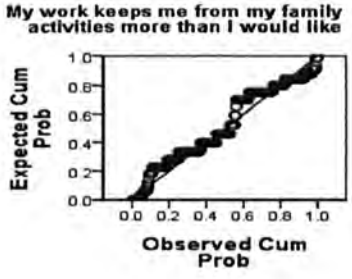
Table 23: The result of the conditional effect of family demand on family to work conflict at values of the GRI

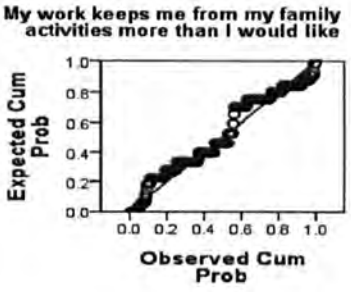
Conditional effect of X on Y at values of the *moderator(s)*

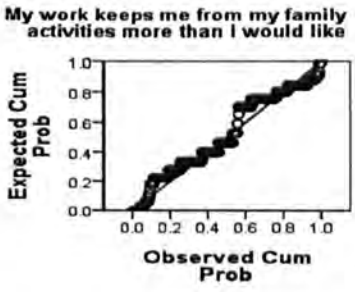
GRI	Effect	se	*t*	*p*	LLCI	ULCI
-.9339	.3699	.0517	7.1495	.0000	.2679	.4718
.0000	.4300	.0412	10.4348	.0000	.3488	.5111
.9339	.4901	.0487	10.0605	.0000	.3941	.5860

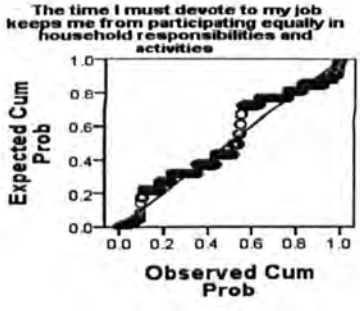
Appendix D: Normality figures

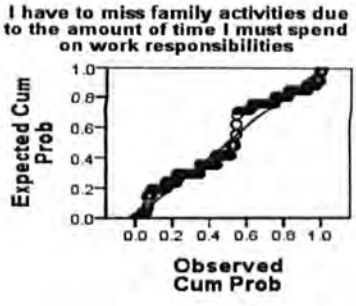
Figure 1: Normal P-P plot of manifest variables (WFC measure)

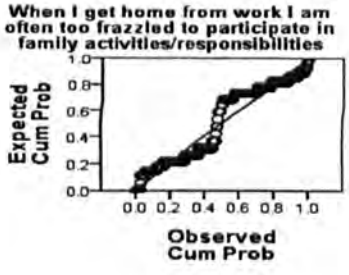


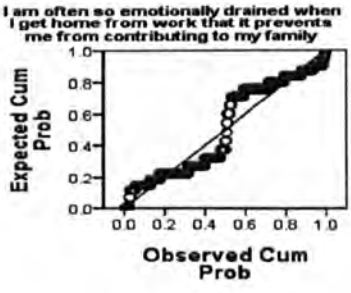


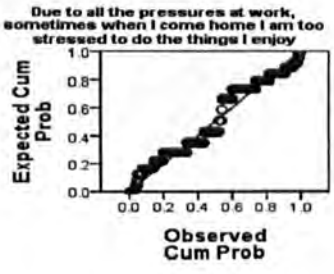


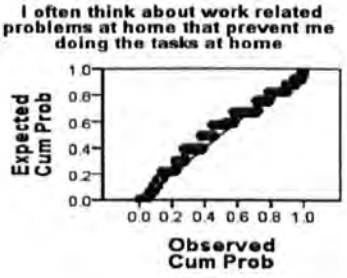


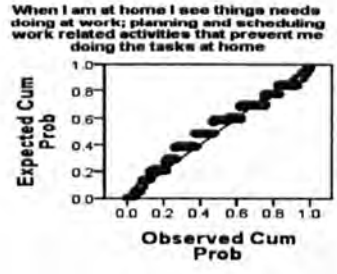


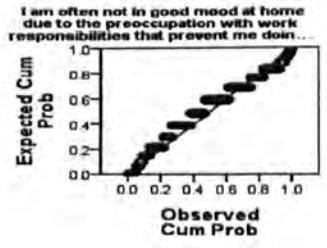


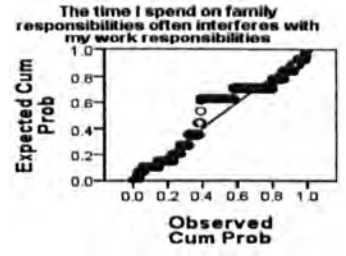


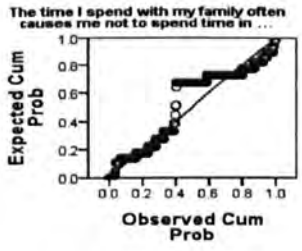


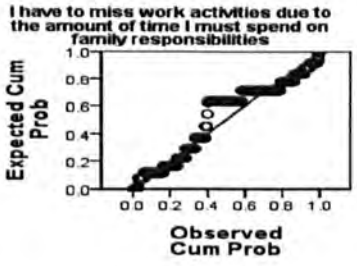


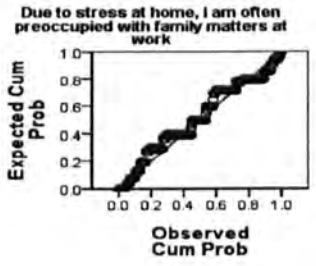


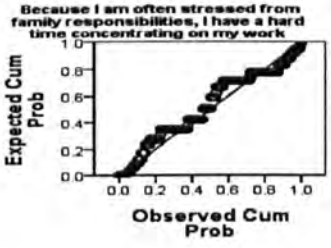


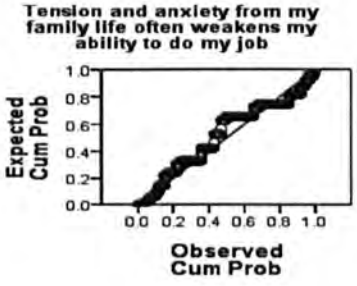


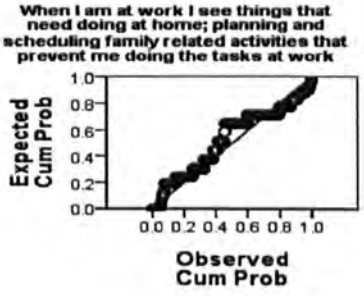

The time I spend with my family often causes me not to spend time in ...
Expected Cum Prob
Observed Cum Prob

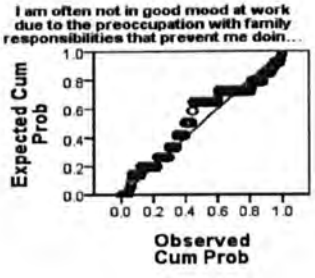

I have to miss work activities due to the amount of time I must spend on family responsibilities
Expected Cum Prob
Observed Cum Prob


Due to stress at home, I am often preoccupied with family matters at work
Expected Cum Prob
Observed Cum Prob


Because I am often stressed from family responsibilities, I have a hard time concentrating on my work
Expected Cum Prob
Observed Cum Prob


Tension and anxiety from my family life often weakens my ability to do my job
Expected Cum Prob
Observed Cum Prob


When I am at work I see things that need doing at home; planning and scheduling family related activities that prevent me doing the tasks at work
Expected Cum Prob
Observed Cum Prob


I am often not in good mood at work due to the preoccupation with family responsibilities that prevent me doin...
Expected Cum Prob
Observed Cum Prob

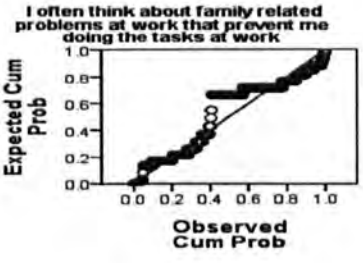

I often think about family related problems at work that prevent me doing the tasks at work
Expected Cum Prob
Observed Cum Prob

Figure 2: Work demand- Checking assumptions of linearity, homoscedasticity and normality

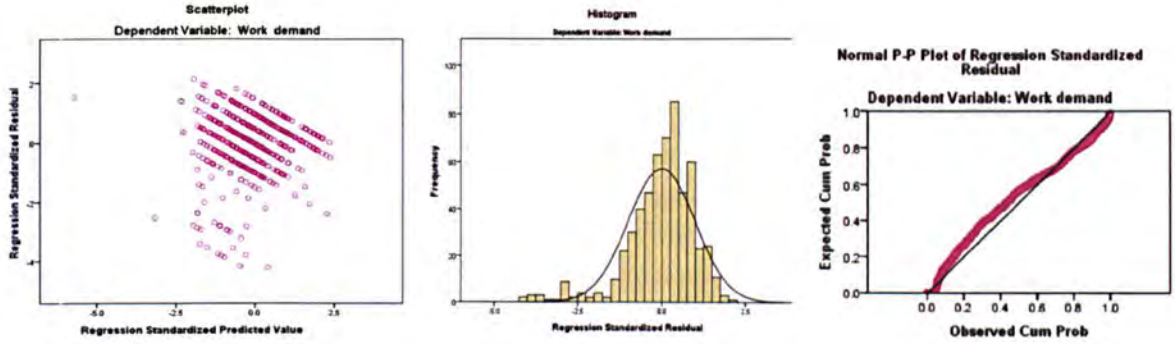
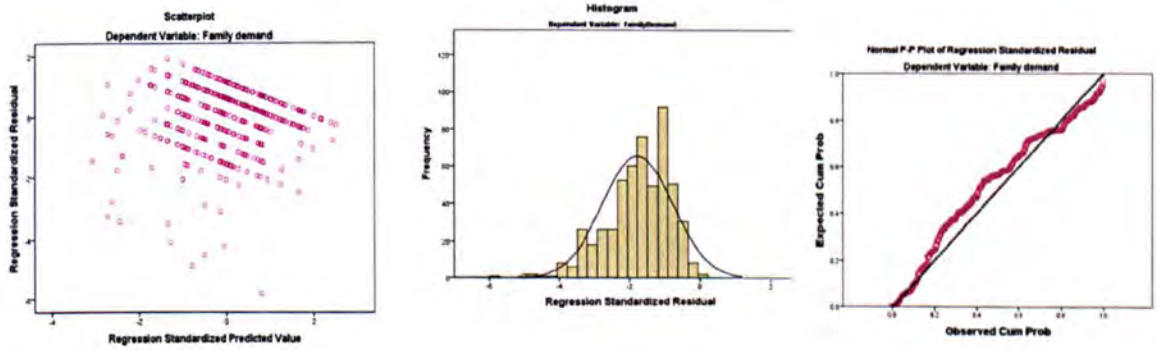


Figure 3: Family demand- Checking assumptions of linearity, homoscedasticity and normality



Appendix E: Additional summary of information

Table 1: Demographic spectrum of Informants

Informants	Gender	Age Group	Type of Banking Organisation	Position	Years of Experience	Educational Qualification	Average Monthly Income
1	Female	26-35	People's Bank	Assistant Manager	09 Years	Degree and a postgraduate	40001 to 60000
2	Male	Over 45	Commercial Bank	Bank Assistant	18 Years	Advanced Level	30001 to 40000
3	Female	36-45	People's Bank	Assistant Manager	11 Years	Degree and all IBSL courses	40001 to 60000
4	Male	Over 45	National Savings Bank	Manager	15 Years	Degree and a postgraduate	Over 60000
5	Female	18-25	Hatton National Bank	Management trainee	03 Years	Degree	30001 to 40000
6	Male	Over 45	National Savings Bank	Senior Assistant Manager	20 Years	Degree and a postgraduate	Over 60000
7	Male	26-35	Seylan Bank	Multi duty Assistant	06 Years	Advanced Level (A/L)	30001 to 40000
8	Male	26-35	Seylan Bank	Assistant Manager	08 Years	Degree and a postgraduate	40001 to 60000
9	Male	36-45	Bank of Ceylon	Cashier	10 Years	A/L and Advanced Diploma	30001 to 40000
10	Female	36-45	Bank of Ceylon	Executive Manager	10 Years	Degree and all IBSL courses	Over 60000
11	Male	18-25	National Savings Bank	Staff Assistant	03 Years	A/L and Advanced Diploma	30001 to 40000
12	Male	36-45	Hatton National Bank	Manager	20 Years	Degree and a postgraduate	Over 60000
13	Female	26-35	Sampath Bank	Assistant Manager	07 Years	Degree and all IBSL courses	40001 to 60000
14	Female	36-45	Commercial Bank	Assistant Manager	11 Years	Degree and a postgraduate	40001 to 60000
15	Male	Over 45	People's Bank	Senior Assistant Manager	11 Years	External Degree and a postgraduate	Over 60000

Table 2: Time spent on work and family

Informants	Time spent on work (week)	Time spent on household chores[+]	Time spent on Childcare[+]	Time spent on Eldercare[+]	Work travel[+]
1	45 hours	02 hours	03 hours	N/A	01 hour
2	50 hours*	01 hour	01 hour	01 hour	01 hour
3	48 hours*	03 hours	03 hours	N/A	01 hour
4	49 hours*	01 hour	01 hours	01 hours	1.5 hours
5	45 hours	02 hours	03 hours	N/A	02 hours
6	49 hours*	01 hour	02 hours	02 hours	1.5 hours
7	50 hours*	02 hours	02 hours	N/A	10 Minutes
8	49 hours*	02 hours	02 hours	1.5 hours	01 hour
9	48 hours*	02 hours	02 hours	N/A	30 Minutes
10	45 hours	02 hours	2.5 hours	N/A	02 hours
11	48 hours*	01 hour	03 hours	N/A	1.5 hours
12	48 hours*	01 hour	03 hours	N/A	01 hour
13	40 hours	02 hours	04 hours	N/A	01 hour
14	45 hours	03 hours	02 hours	01 hour	01 hour
15	48 hours*	02 hours	02 hours	01 hour	1.5 hours

*Informant works on Saturdays

[+]During the working day

Table 3: Characteristics of different Goodness-of-Fit model fit indices across different model situations

Measures	Statistics	Abbreviation	Description	Critical value	Note	Source
Absolute fit measures This group of fit measures represents how well the model fits the observed data (McDonald and Ho , 2002) and they basically compare the hypothesised model with no model (Hu and Bentler, 1995 cited in Byrne, 2010)	Minimum value of $\hat{C}$, of the discrepancy (a)	CMIN (χ^2)	Minimum of discrepancy function *C*	CMIN associated with insignificant value ($p > 0.05$) indicates better fitting model	*If* $N > 250$ and $12 < M > 30$ Significant *P* value is expected (b)	(a) Arbuckle (2010) (b) Hair et al. (2010)
	Minimum discrepancy divided by degrees of freedom	CMIN/DF	The ratio between CMIN and DF so called normal chi-square	The ratio of 2:1 or 3: 1 acceptable fit (a), sometimes as low as 2 as high as 5 (b)	Large χ^2 relative to degrees of freedom needs to modify model	(a) Carmines and McIver (1981 cited in Arbuckle ,2010) (b) Marsh and Hocevar (1985)
	Goodness-of-fit index	GFI	Measure of the relative amount of variance and covariance in sample (a)	GFI = 1 perfect fit (b) GFI ≥ .95 good fit (c) GFI ≥ .90 fairly well (a)	Many experts suggest that value should be greater than .95 (e.g., c)	(a) Byrne (2010) (b) Arbuckle (2010) (c) Hoelter (1983)
	Adjusted goodness-of-fit index	AGFI	GFI adjusted for the number of degrees of freedom (a)	AGFI = 1 perfect fit (b) AGFI close to 1 good fit AGFI ≥ .90 fairly well (a)	The AGFI penalises more complex models and its value is typically lower than GFI values in proportion to model complexity (c)	(a) Byrne (2010) (b) Arbuckle (2010) (c) Hair et al. (2010)
	Root mean square residual	RMR	Representing average residual value derived from the fitting of the variance-covariance matrix for the hypothesised model to the variance-covariance matrix of the sample data (a)	RMR = 0 perfect fit (b) RMR close to 0 better the model fit RMR < 0.05 good fit	The smaller the RMR the better (b)	(a) Byrne (2010) (b) Arbuckle (2010)

	Standardised root mean residual	SRMR	Representing average value across all standardised residuals (a)	SRMR = 0 perfect fit SRMR ≤ .05 good fit (a) *If N* > 250 and 12 < *M* > 30 SRMR ≤ 0.08 (with CFI above .92) good fit (b)	The smaller the SRMR, the better the model fit. SRMR > 1.0 diagnoses problems	(a) Byrne (2010) (b) Hair et al. (2010)
Relative (incremental) fit measures Relative fit indices called incremental fit indices assess how well estimated model fits relative to some alternative baseline model (Hair et al., 2010) by comparing the chi-square value to a baseline model (McDonald and Ho, 2002).	Normed fit index	NFI	It would say discrepancy of the model, i.e. in what percentage of the way the model is between the independence model and the saturated model(a)	NFI = 0.0 poor fit NFI = 1.0 perfect fit (b) NFI close to .95 good fit (c)	Model with NFI<.9 can usually be improved substantially, needs re-specifying (a)	(a) Arbuckle (2010) (c) Hair et al. (2010) (c) Hu and Bentler (1999)
	Relative fit index	RFI	The RFI is obtained from the NFI by substituting *F / d* for *F* (a)	RFI close to .95 superior fit (b) RFI close to 1 a very good fit (a)	RFI coefficient value ranges from 0 to 1.	(a) Arbuckle (2010) (b) Hu and Bentler (1999)
	Incremental fit index	IFI	Addressing the issue of parsimony and sample size associated with NFI (a)	IFI close to 1 a very good fit (b) IFI ≥ .90 to accept the model	IFI can also be greater than 1.0 and IFI is not recommended for routine use	(a) Byrne (2010) (b) Arbuckle (2010)
	The Tucker-Lewis Index	TLI	TLI is comparing the normed χ^2 value of the null and specified model (a)	TLI close to .95 (large sample size) good fit (b) TLI close to 1 a very good fit (a; c) *If N* > 250 and 12 < *M* > 30 TLI > .92 good fit (a)	TLI produces values similar to the CFI in most situations (a)	(a) Hair et al. (2010) (b) Hu and Bentler (1999) (c) Arbuckle (2010)

	Comparative fit index	CFI	Revised NFI taking sample size into account (a)	CFI > 0.95 well fitting model (b) CFI > 0.9 Marginally adequate (c) CFI close to 1 very good fit (d) *If N* > 250 and 12 < *M* > 30 CFI > .92 good fit (e)	The value derived from comparison of a hypothesised model with the independence model (c) CFI is more prevalent in reporting.(e)	(a) Bentler (1990) (b) Hu and Bentler (1999) (c) Byrne (2010) (d) Arbuckle (2010) (e) Hair et al. (2010)
Parsimony measures This group of fit measures provides information in choosing best model among set of competing models in terms of better fit or simpler model (Hair et al., 2010)	Parsimony ratio	PRATIO	Suggests number of constraint in a specified model as a fraction of the number of constraints in the independence model (a)	what percentage the current model is as complex as the independence model	the model developed is how much more efficient model than the independence model	(a) Arbuckle (2010)
	Parsimony goodness-of-fit index	PGFI	Address the parsimony in SEM, more realistic hypothesised model (a)	PGFI close to 1 perfect fit (b)	The PGFI is based upon the GFI by adjusting for loss of degrees of freedom (c)	(a) Byrne (2010) (b) Arbuckle (2010) (c) Hooper, Coughlan and Mullen (2008)
Non centrality fit measures This group measures is based on non centrality χ^2 distribution as ordinary χ^2 distribution (central) is variant with CMIN-DF (Blunch, 2008)	Estimate of the noncentrality parameter	NCP	NCP with lower 90% confidence limit (LO 90) and the upper 90% confidence interval (HI 90)	It would suggest the population value of the noncentrality parameter lies between LO 90 and HO 90 (a)	NCP value is CMIN minus its degrees of freedom	(a) Byrne (2010)

	Root mean square error of approximation	RMSEA	RMSEA takes into the error of approximation in the population	RMESA ≤ .05 good fit (a; d) RMESA from .08 to .10 mediocre fit (c) RMESA > 0.1 poor fit (c) RMSEA as high as 0.08 reasonable error of approximation (a) RMESA = 0.0 exact fit (d)	*If N* > 250 and 12 < *M* > 30 RMESA < 0.07 with CFI of .92 or higher good fit (b) RMSEA is a popular measure fit	(a) Browne and Cudeck (1993) (b) Hair et al. (2010) (c) MacCallum, Browne and Sugawara (1996) (d) Arbuckle (2010)
	p value of testing RMSEA ≤ 0.05	PCLOSE	PCLOSE gives a test of close fit while P gives a test of exact fit	PCLOSE > 0.5 close fit	If PCLOSE > 0.5 , null hypothesis of RMSEA ≤ .05 is supported (a)	(a) Arbuckle (2010)
Information theoretic fit measures This group of fit measures is in terms of idea to what extent present model will cross validate in future sample of the same size from the same population (Blunch, 2008)	The expected cross validation index	ECVI	Measuring the discrepancy between the fitted covariance matrix (analysed sample) and the expected covariance matrix (another sample of equivalent size) (a)	Smallest ECVI is an indicative of greatest potential replication. The hypothesised model is said to be best model if value of ECVI is lower than both independent model and saturated model(a)	Hypothesised well fitting model represents a reasonable approximation to population (a)	(a) Byrne (2010)
Fit measure based on sample size This focuses directly on the adequately of sample size than the model fit (Byrne , 2010)	Hoelter	HOELTER	A critical *N* for significance levels of 0.05 and 0.01; one would accept a model with this chi-square statistic and this many degrees of freedom	critical *N* ≥ 200 indicates a satisfactory fit at *p* = 0.05 (b)	Estimate whether the sample size would be sufficient to obtained adequate model fit for a chi square test (a)	(a) Hu and Bentler (1995 cited in Byrne , 2010) (b) Byrne (2010)

N stands for number of observation, *M* stands for number of indicators