

5-2010

Work support, work-family enrichment, work demand and work well-being among Chinese employees : a study of mediating and moderating processes

Shuwen TANG

Follow this and additional works at: https://commons.ln.edu.hk/soc_etd

 Part of the [Family, Life Course, and Society Commons](#), [Labor Relations Commons](#), and the [Organizational Behavior and Theory Commons](#)

Recommended Citation

Tang, S. (2010). Work support, work-family enrichment, work demand and work well-being among Chinese employees: A study of mediating and moderating processes (Master's thesis, Lingnan University, Hong Kong). Retrieved from http://dx.doi.org/10.14793/soc_etd.28

This Thesis is brought to you for free and open access by the Department of Sociology and Social Policy at Digital Commons @ Lingnan University. It has been accepted for inclusion in Theses & Dissertations by an authorized administrator of Digital Commons @ Lingnan University.

Terms of Use

The copyright of this thesis is owned by its author. Any reproduction, adaptation, distribution or dissemination of this thesis without express authorization is strictly prohibited.

All rights reserved.

WORK SUPPORT, WORK-FAMILY ENRICHMENT, WORK DEMAND AND WORK
WELL-BEING AMONG CHINESE EMPLOYEES:
A STUDY OF MEDIATING AND MODERATING PROCESSES

by
TANG Shuwen

A thesis
submitted in partial fulfillment
of the requirements for the Degree of
Master of Philosophy in Social Sciences
(Behavioural Science)

Lingnan University

2010

ABSTRACT

Work Support, Work-Family Enrichment, Work Demand and Work Well-being among
Chinese Employees: A study of Mediating and Moderating Processes

by

TANG Shuwen

Master of Philosophy

Work and family are the central and salient domains in one's life. Juggling work and family life has become a challenge for many employees and families (Hammer et al., 2005). This study proposed a theoretical model in which work to family enrichment functioned as the mediator between work support (support from supervisor, co-workers and organization) and work well-being (job satisfaction and psychological health), and also examined whether work demand buffered the impact of work support on work well-being. The inclusion of work to family enrichment extends prior research on Job Demands – Resources model (Demerouti & Bakker, 2007), and allows for a more detailed assessment of the effects of work support on work well-being from a perspective of positive organizational behavior. A total of 978 employees in Chinese society were recruited. An exploratory factor analyses and a confirmatory factor analyses supported a 10-item Work Support Scale measuring supervisor support, co-worker support and organization support. Structural equation modeling (SEM) and Sobel Test results showed that work to family enrichment partially mediated the influence of work support on job satisfaction and full mediated the influence of work support on psychological health, whereas the regression results showed that work demand indeed buffered the positive relationship between work support and job satisfaction. Implications for future research on work-family enrichment were discussed.

Keywords: work-family enrichment, work support, work well-being, work demand.

DECLARATION

I declare that this is an original work based primarily on my own research, and I warrant that all citations of previous research, published or unpublished, have been duly acknowledged.

(TANG Shuwen)
May, 2010

CERTIFICATE OF APPROVAL OF THESIS

WORK SUPPORT, WORK-FAMILY ENRICHMENT, WORK DEMAND AND WORK
WELL-BEING AMONG CHINESE EMPLOYEES:
A STUDY OF MEDIATING AND MODERATING PROCESSES

by
TANG SHUWEN

Master of Philosophy

Panel of Examiners :

_____	(Chairman)
(Prof.)	
_____	(External Member)
(Prof.)	
_____	(Internal Member)
(Dr.)	
_____	(Internal Member)
(Dr.)	

Chief Supervisor : Prof. Siu Oi-ling

Co-supervisor : Dr. Cheung Yue-lok, Francis

Approved for the Senate :

(Prof.)
Chairman, Research and Postgraduate Studies Committee

Date

Table of Contents

Abstract	
Table of Contents	i
List of Tables	iii
List of Figures	iv
Acknowledgements	v
Chapter 1 Introduction	1
1.1 Background	1
1.2 Rationale for the Study.....	3
1.2.1 The growing importance of positive organizational behavior (POB).....	3
1.2.2 Work-Family Enrichment.....	4
1.2.3 Work Support as the Antecedent	6
1.2.4 Work Well-being as the Outcome.....	8
1.2.5 Work Demand as the Moderator	9
1.2.6 The importance of studying work-family enrichment in China.....	10
1.3 Objectives and Research Questions	11
Chapter 2 Literature Review	
2.1 The Development of Theories in Work-Family Interaction.....	13
2.2 Work-Family Enrichment.....	14
2.2.1 The Concept and Structure of Work-Family Enrichment	14
2.2.2 The Fundamental Theory of Work-Family Enrichment.....	17
2.2.3 Differences between Work-family Enrichment and Work-Family Conflict	19
2.2.4 Comparisons with Other Related Concepts	21
2.3 Work Support	22
2.4 Work Well-being	24
2.5 Work Demand	25
2.6 Summary	27
Chapter 3 Theoretical Frameworks and Hypothesis	
3.1 Relationship between Work Support and Work Well-being.....	28
3.2 Relationship between Work Support and Work to Family Enrichment	32
3.3 Relationship between Work to Family Enrichment and Work Well-being	33

3.4 The Mediating Role of Work to Family Enrichment	36
3.5 The Moderating Role of Work Demand.....	40
3.6 Summary	41
Chapter 4 Methodology	
4.1 Participants.....	44
4.2 Procedures.....	45
4.3 Measurements.....	46
4.3.1 Work Support	46
4.3.2 Work to Family Enrichment.....	47
4.3.3 Job Satisfaction	47
4.3.4 Psychological Health.....	48
4.3.5 Work Demand	48
4.3.6 Demographics	49
4.4 Analyses.....	49
Chapter 5 Results	
5.1 Validation of Work Support Scale.....	52
5.2 Correlational Analyses.....	54
5.3 Mediation Model Testing.....	57
5.4 Moderating Effect Testing	62
Chapter 6 Discussion and Conclusion	
6.1 Summary of findings.....	67
6.2 Practical Implications.....	69
6.3 Limitations and Directions for Future Study	70
6.4 Conclusion	72
Appendix I	74
Appendix II	81
References	87

List of Tables

Table 1 Demographic Characteristics of the Sample	45
Table 2 Standardized factor loadings for 10 items	53
Table 3 Estimate of fit indices for competing models of work support	54
Table 4 Descriptive Statistics, Correlations, and Reliabilities for Analysis Variables	55
Table 5 Factor correlations of the latent variables	56
Table 6 Model Fit Summary and Nested Model Comparison.....	58
Table 7 Goodness-of-Fit Information for Within- and Between-Group Comparisons on location	61
Table 8 Regression of Work Support and Work Demand on Job Satisfaction	63
Table 9 Regression of Work Support and Job Demand on Psychological Health	64

List of Figures

Figure 1 The Job Demands – Resources Model.....	42
Figure 2 The Proposed Theoretical Model of the Study	43
Figure 3 Path Diagram and Standardized Estimates	59
Figure 4 Moderating Effect of Work Support on Job Satisfaction by Work Demand	65

Acknowledgements

I would like to take this opportunity to show my sincere appreciation for the people, who enlightened, encouraged and helped me make the completion of this thesis possible.

First and foremost, I would like to express my deepest gratitude to my esteemed supervisor, Prof. Siu Oi-ling, generously contributed her time, knowledge and support to me and my study. Not only research knowledge I have learned from her, but also how to be a successful person. One simply could not wish for a better or friendlier supervisor. I am also indebted to Francis, my co-supervisor. His attitude toward research inspires my interest, and he is always accessible and happy to share his valuable knowledge and experience.

I sincerely thank the faculty and staff in Department of Sociology and Social Policy at Lingnan. Thanks go to Grace and Bobo for always being helpful and warm to me. I am also grateful to Prof. Siu Oi-ling and Dr. Danny Lo from Shue Yan University to share the HK dataset with me.

Special thanks to my friends in Lingnan, Jiang Jin, Zhou Youqing and Huang Kai Wai. I really appreciate their emotional support and share of experience and resource. I cherish the friendship that we developed at Lingnan, and it will last for the rest of my life. I would like to extend my thanks to Jiang Xinhui and Wang Haijiang for helpful discussions, and assistance in the statistic. Sincere gratitude also goes to my dear friends who help me to collect data in Hangzhou.

Last but not least, I am indebted to my dearest parents and my husband, who

support me and love me for so many years. I am not who I am now without any of you!

The thesis is not an ending, but a new start.

CHAPTER 1 INTRODUCTION

1.1 Background

The composition of the workforce has changed dramatically in recent decades all over the world. In the year 2000, 61% of all married women over age 16 in the US were in the workforce, compared to just 41% in 1970 (US Census Bureau, 2001); More employees are now engaged in a dual- earner lifestyle where both partners work and share responsibility for family care-giving (Greenhaus et al., 2000). In fact, recent research indicates that 85% of employees report having some day-to-day family responsibilities (Bond et al., 1998). These changing demographic trends, coupled with greater family involvement by men (Pleck, 1985) and heightened interest of employers in employee's quality of life (Zedeck & Mosier, 1990) prompted a proliferation of research on the relationship between work and family roles.

Work and family are the most central and salient domains in one's life. From the perspective of ecological systems theory, work and family are micro-systems consisting of patterns of activities, roles and interpersonal relationships experienced in networks of face-to-face relationships (Bronfenbrenner, 1989). The myth that work and family are independent is demonstrated instead that work and family are closely interconnected domains of human life (Burke & Greenglass, 1987; Kanter, 1977).

Since the late 1970s, and particular in the 1990s, there has been increasing

interest and concern in the interface between work and non-work life, especially family life. Numerous scholars (e.g. O' Driscoll, 1996; Edwards & Rothbard, 2000; Frone, 2003; Grzywacz & Marks, 2000) have observed that changing social demographics, altering family-role expectations, shifting family structure, aging workforce, as well as recent technological developments, increasing globalization, and international business competitiveness have contributed to a blurring of boundaries between the domains of employment and family and to greater permeability between these domains. For example, globalization may require key employees to travel or work abroad, straining family relationships and compelling employees to withdraw or resign (Shaffer & Harrison, 1998), which in turn hinders global operations. Traditional family consisting of the husband going out to work and the wife staying at home to look after the children is now less common, which leads to new work and family demands and resources for men and women (Powell & Greenhaus, 2006). Furthermore, technological advancement is seen in increased reliance on and use of internet and telecommunication. As a result, many employees are taking work outside office, which has blurred the boundary between work and family (Cooper, 1998). Consequently, work-family balance is becoming increasingly important but also perhaps increasingly complex.

It is imperative that both roles in work and family domain have to offer varied resources to facilitate the role in another domain. For instance, many families require income from both partners to cover expenses, and these dual-earner families place pressure on organizations to implement family-friendly policies, which help to ease family demands and reduce employee absenteeism and turnover. Analogously, the fierce competition and stress in today's work environment enlarge the need of

employees to search instrumental and expressive support from family members.

Cross-domain processes include resource drain, resource generation, and positive and negative spillover (Edwards & Rothbard, 2000; Voydanoff, 2004). Linkages between work and family affect organizational performance and family functioning, both of which are important markers of societal well-being (Kossek & Ozeki, 1998; Greenhaus & Parasuraman, 1999).

1.2 Rationale for the study

1.2.1 The growing importance of positive organizational behavior (POB)

Positive psychology has emerged since the late 1990s with a renewed emphasis on what is right with people in contrast to the preoccupation psychology has had over the years with what is wrong with people (Seligman & Csikszentmihalyi, 2000; Snyder & Lopez, 2002). This approach is an attempt to adopt a more open and appreciative perspective regarding human potentials, motives, capacities, and virtues (Sheldon & King, 2001).

Positive psychology and organizational theory merge in the new approach of positive organizational behavior (POB), which is defined as ‘the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today’s workplace’ (Luthans, 2002, p. 59; see also Bakker & Schaufeli, 2008; Cooper & Nelson, 2006; Wright, 2003). Typically, POB involves the study of individual positive psychological conditions and human

resource strengths that are often related to employee well-being or performance improvement (Bakker & Derks, 2009). For example, research may focus on the cognitive capacities of creativity and wisdom, and the affective capacities of work engagement and humor in the workplace. POB studies also examine the role of states like self-efficacy, optimism, hope, resilience, and other personal resources utilized in coping with organizational demands or in fostering performance.

1.2.2 Work-Family Enrichment

Juggling work and family life has become a challenge for many employees and families (Hammer et al., 2005). Furthermore, unbalanced work-family relationships can result in reduced health and performance outcomes for individuals, families and organizations (Wayne, Musisca, & Fleeson, 2004; Voydanoff, 2004). However, previous studies tend to focus on the exploration of the work-family interface has focused more on work-to-family and family-to-work conflict or incompatibility between the simultaneous demands of work and family roles, which has been extensively studied and has been linked to outcomes such as lower satisfaction, poorer performance and increased stress in both work and family roles (Adams, King, & King, 1996; Netemeyer, Boles, & McMurrin, 1996; Frone, Yardley & Markel, 1997; Perrewe, Hochwarter, & Kiewitz, 1999).

Balance, however, would be demonstrated by not only low conflict, but also high facilitation levels between the different domains (Frone, 2003; Grzywacz & Bass, 2003; Keene & Quadagno, 2004). For instance, Grzywacz and Bass (2003) found that most positive outcomes accrued almost exclusively from low levels of work-family conflict and high levels of work-family facilitation. Additionally, some

research suggest that work-family facilitation (which is one manifestation of positive spillover) may be a crucial component of work-family balance (e.g., Frone, 2003) and balance may be improved by increasing facilitation levels.

Recognizing the preoccupation with negative outcomes (e.g., work-family conflict, stress and lower satisfaction), and also in line with the growing importance of positive organizational behavior (POB) research (Bakker & Schaufeli, 2008), scholars are beginning to shift the focus and increasingly calling for an expansion of the work–family paradigm to include the positive side of the work–family interface (Barnett & Hyde, 2001; Hammer, 2003; Eby, et al., 2005; Frone, 2003; Glass & Finley, 2002; Grzywacz, 2002; Parasuraman & Greenhaus, 2002; Werbel & Walter, 2002).

Work-family enrichment could be a form of synergy in which resources associated with one role enhance or make easier participation in the other role. For instance, support from members of one’s family can be a source of strength when faced with demanding job challenges (Crouter, 1984; Grzywacz & Marks, 2000; Kirchmeyer, 1992a); techniques acquired managing family demands can improve performance at work (Rotondo & Kincaid, 2008) (family to work enrichment –FWE). Similarly, family-supportive work environments have been shown to be associated with greater levels of benefit usage, family and job satisfaction and organizational commitment (Allen et al., 2000); skills and experiences gained through work involvement can enhance functioning in the family domain (Rotondo & Kincaid, 2008) (work to family enrichment – WFE). Thus, involvement in one domain (work or family) can facilitate enhanced engagement in the other domain (family or work). The positive interaction between work and family results from not only improved

skills, but additional resources, such as better moods and better psychological health as well for those individuals engaged in work and family activities (Hanson et al., 2006; Grzywacz & Butler, 2005; Witt & Carlson, 2006; Van Steenbergen et al., 2007).

1.2.3 Work Support as an the Antecedent

In general, conflict is negatively related to work–family outcomes (e.g., lower job and family effort and satisfaction) whereas enrichment is positively related to the same outcomes. Conflict and enrichment are shown, however, to be orthogonal rather than opposite constructs (Wayne, Musisca & Fleeson, 2004). One implication of the orthogonal nature of conflict and enrichment is that their origins are distinct, and they may have different antecedents (Grzywacz & Butler, 2005; Hanson et al., 2006). Results of several studies suggest that factors and processes influencing conflict are not the same as those influencing facilitation (Grzywacz & Marks, 2000; Grzywacz & Butler, 2005; Hanson et al., 2006; Van Steenbergen et al. 2007; Witt & Carlson, 2006). As antecedents, job demands are expected to be related more strongly to work-family conflict while job resources are expected to show stronger relationships with facilitation (Voydanoff, 2004), since resources available in the environment are critical to the occurrence of enrichment (Wayne et al., 2006). Support is a crucial component of job resource. Receiving support either at work or in the family is a resource that generates positive affect in one domain that enhances the quality of life in the other (Grzywacz & Marks, 2000) and facilitates individuals to their goals. Thus, domain support is likely a primary antecedent of affective and instrumental enrichment. In general, however, the impact of work-based supportive relationships has been separated from the impact of personal supportive relationships;

the first has been linked to work outcomes and the latter to family outcomes. So this study will just focus on work support to explore the effective process of work-family enrichment in the context of workplace.

Work-based social support may come from the organization at large, immediate supervisors, and coworkers. Studies on organizations have equated support to work-family practices and viewed it as part of “family friendliness” (Jahn, Thompson & Kopelman, 2003). When support is viewed in this way, organizations address (or ignore) the issue of support for the balance between work life and family life through their policies, benefits, culture, and career paths (Gordon, Beatty, & Whelan-Berry, 2002; Hall & Richter, 1988) , which showed a linkage between work support and work-family balance. Despite their popularity, formal organizational supports such as some family-friendly policy may not be as important as how supportive an employee’s supervisor, co-workers and organizational culture is towards employee work-life balance (Thompson & Prottas, 2005).

Based on perceived organizational support theory (Eisenberger et al., 1986) and the assumptions that unwritten rules and expectations are more powerful in influencing attitudes and behaviors than formal and written rules (O’Reilly et al., 1991), past research findings have shown positive associations between supportive supervisor, co-workers and organizational culture and job satisfaction (Allen, 2001; Lu, Siu, Spector & Shi, 2009; Lyness et al., 1999; Mauno et al., 2006; Thompson, Beauvais, & Lyness, 1999; Carlson & Perrewe, 1999) and can enhance performance and well-being in the family (Frone, Yardley & Markel, 1997), suggesting the possibility of affective enrichment from work to family.

1.2.4 Work Well-being as the Outcome

Positive events are associated with increased well-being, especially when the individual enjoys the activity and puts a high value rating on the activity, possibly due to the influence it has on mood (Eden, 2001; Haworth, 1997; Sonnentag, 2001). Positive well-being incorporates affects and aspects of mental health and satisfaction.

During the past three decades, many studies have shown that job characteristics can have a profound impact on employee well-being (e.g. job strain, burnout, and work engagement). For example, job resources such as social support, performance feedback, and autonomy may instigate a motivational process leading to job-related learning, work engagement, and organizational commitment (e.g. Demerouti et al., 2001; Salanova et al., 2005; Taris & Feij, 2004).

On the other hand, work-family interface will produce a great impact on work well-being. Research evidence is consistent and overwhelming –work and family life interfere with each other is associated with dissatisfaction with both the job and family life, along with reduced feelings of well-being (or, conversely, heightened psychological and physical strain) (e.g. Brough & O’Driscoll, 2005).

However, following enhancement theory, being engaged in multiple roles is generally thought to promote well-being and is synergistic for an individual (Ruderman et al., 2002). Satisfactory role engagement between domains is expected to be associated positively with individuals’ well-being because it can reduce inter-domain conflict and stress, both of which detract from well-being (Greenhaus et al., 2003). Conflict and stress should be minimal in the presence of facilitation, resulting

in higher well-being. These cross-domain effects are supported by Ford et al. (2007) in their meta-analysis, which reported that reduced stressors and higher level of support that are specific to one domain were positively related to satisfaction in another domain.

Warr (1987) categorized concepts such as job satisfaction, job-related tension, and job-related depression as work well-being. Many Chinese studies have taken job satisfaction, physical and psychological symptoms as three facets of work well-being (Liu, Siu, & Shi, 2010; Siu, Lu & Spector, 2007; Siu, Spector, & Cooper, 2006; Siu, Spector, Cooper, & Lu, 2005). In the current study, work well-being including job satisfaction and psychological health is proposed to be the outcome variable.

1.2.5 Work Demand as the Moderator

In addition to studies investigating the direct associations between work family conflict and facilitation themselves and their antecedents and outcomes, some other researchers have examined the moderating (or buffering) role of certain variables. However, compared with research examining antecedents and consequences of both work family conflict and work family enrichment, less attention has been paid to moderator effects. Research has revealed that job demands such as high work pressure, emotional demands, and role ambiguity may lead to sleeping problems, exhaustion, and impaired health (e.g. Doi, 2005; Halbesleben & Buckley, 2004). Although researchers have assumed that demand is a negative experience when meeting those demands requires high effort from which the employee has not adequately recovered (Meijman & Mulder, 1998), it may be perceived as neutral or even positive by some individuals, in fact, advocate challenge in the workplace as

one aspect that contributes to job success (Hackman & Oldham, 1980). In the Job Demands-Resources (JD-R) Model (Bakker & Demerouti, 2007), it showed that job resources particularly have an impact on work engagement when job demands are high. Thus, this finding has supported the hypothesis that resources gain their salience in the context of high demands/threats.

The present study will move beyond previous studies by hypothesizing work demand as a moderator for the relationship between work support and work well-being.

1.2.6 The importance of studying work-family enrichment in China

Compared to research conducted in Western cultures, there is a paucity of work on work-family enrichment in Mainland China, a ‘Big-Country’ with a large workforce. In recent years, organizations in China too have started introducing process about employee work-life balance issues (Yang et al., 2000; Yang 2005; Spector et al., 2007; Lu et al., 2009), it is imperative to further examine these issues in China.

In comparison to many developed countries, such as North Americans, China has different culture and socioeconomic condition. A number of researchers have noted that Chinese tend to place more emphasis on work than on leisure, less concern about work intruding on non-work, and see work as contributing to the family rather than competing with it (e.g., Bu & McKeen, 2000; Shenkar & Ronen, 1987). For instance, Yang and colleagues (Yang et al., 2000; Yang 2005) tied these differences to Individualistic–Collectivistic, focusing specifically on China versus the United

States. In individualistic society, people view work as a means to personal achievement and development. Excessive efforts spent in work pursuits are seen as being devoted to the self and neglecting the family. On the other hand, in collectivistic society where people view the individual in terms of social networks, work roles are seen as serving the needs of the in-group rather than the individual. People who put extra effort into work are seen as making sacrifices for their in-group (e.g., family) and enjoy support from the family. In the cross-national study by Spector et al. (2007), country cluster (individualistic vs. collectivistic) moderated the relationship between work demands and strain-based work interference with family (WIF) as well as the relationship between strain-based WIF and both job satisfaction and turnover intentions, with the individualistic countries cluster having the stronger relationships. Lu et al. (2009) provided validity evidence for a four-fold taxonomy of work-family balance which comprises direction of influence (work to family vs. family to work) and types of effect (work-family conflict vs. work-family enrichment) with a Chinese sample. In light of these studies mentioned above, the present study assumes that work and family facilitation in Chinese context will be worthwhile and appropriate to study and different from the western countries.

What is more, Hong Kong and Hangzhou are both Chinese cities, but different in culture, economy and policy: Hong Kong has international culture, developed economy and emphasis on life efficiency; in comparison, Hangzhou has traditional culture, developing economy, one-child policy and emphasis on quality of life. I expect to find differences, or perhaps similarities, about work and family facilitation in these two typical Chinese cities.

1.3 Objectives and Research Questions

To reiterate, one of the purposes of the present study is to examine the role of work-family enrichment in two Chinese regions. Specifically, by elucidating an empirical investigation of work to family enrichment, which serves as the mediating role on the psychosocial path from work support to work well-being, in two samples in China (Hong Kong and one city in PR China), the current study will offer a significant contribution to the validation and generalization of Western theories. Another purpose of the study is to develop and validate a concise work support scale comprising the facets of supervisor support, co-worker support, and organization support. The newly developed measure in positive organizational behavior research will be another contribution to academic research and practical human resource practices.

CHAPTER 2 LITERATURE REVIEW

2.1 The Development of Theories in Work-Family Interaction

Early research on work and family resulted in several taxonomies of models to describe the relationship between work and family life. Edwards and Rothbard (2000) provide an exhaustive review on six basic models or linking mechanisms in work-family interface. Among them, the segmentation model, the congruence model and the identity or integrative model are non-causal models which posit that even if work and family variables are interrelated, no causal relationship exists between work and family life. In contrast, the spillover model, the compensation model, the resource drain model are characterized as causal models which posit that what happens in one domain of life (e.g., work) can have a causal impact on what happens in another domain of life (e.g., family).

Based on Positive Organizational Behavior (POB), scholars have started to examine the positive impact of work-family interface and their positive consequences on individual' health and organizational performance rather than the incompatibility between work and family. Frone (2003) conceptualized a four-fold taxonomy of work-family balance that can be classified along two dimensions: (a) direction of influence between work and family roles (work to family vs. family to work), and (b) the type of effect (conflict vs. facilitation). This conceptualization produced four separate constructs: work to family conflict (WFC), family to work conflict (FWC), work to family facilitation (WFF), and family to work facilitation (FWF). This four-fold taxonomy of work-family balance further explores the relationship between work and family from a more integrative and dynamic vantage

point.

Meanwhile, different terms were used to identify the facilitative process through which one domain positively influences the other, including positive spillover (Crouter, 1984, Allis & O'Driscoll, 2008; Hammer et al., 2005), facilitation (Grzywacz, 2002; Frone, 2003; Rotondo & Kincaid, 2008; Wayne et al., 2006; Balmforth & Gardner, 2006), enhancement (Sieber, 1974; Greenhaus & Parasuraman, 1999), synergy (Beutell & Wittig-Berman, 2008) and enrichment (Greenhaus & Powell, 2006; Rothbard, 2001). Among them, work-family enrichment was considered best capture the mechanism combining work and family domains (Greenhaus & Powell, 2006), which I will discuss in details in the next section.

2.2 Work-Family Enrichment

2.2.1 The Concept and Structure of Work-Family Enrichment

Work-family enrichment is defined as the extent to which experiences in one role improve the quality of life, namely performance or affect, in the other role (Greenhaus & Powell, 2006). 'Work' is conceived as a social group comprising two or more individuals connected by common organizational affiliation, such as members of a section or department, as well as individuals bound by a profession, vocation, or other means of livelihood. Similarly, 'family' is also conceived as a social group comprising two or more people related by common ancestry, adoption, marriage and other legal or socially recognized unions (Grzywacz et al., 2007). Greenhaus and Powell proposed that enrichment occurs when resource gains generated in Role A (e.g. work) promotes improved individual performance in Role

B (e.g. family). More specifically, enrichment occurs when resources (skills and perspectives, flexibility, psychological and physical social-capital, and material resources) gained from one role either directly improve performance in the other role by the instrumental path, or indirectly through their influence on positive affect by the affective path.

Instrumental pathway occurs when resources such as skills and perspectives gained from one role directly improve performance in the other role. It is exemplified through research suggesting that workers believe their family lives have taught them new ways of interacting with co-workers or have improved their ability to multitask on the job (Crouter, 1984; Kirchmeyer, 1992; Ruderman et al., 2002). For example, employees might learn conflict resolution skills in training at work that, when used in their families, enables them to resolve conflicts more effectively with their children, spouses, or other family members. Similarly, parents report developing greater patience with their children which help them relate better to others in their work environments (Carlson et al, 2006).

The affective pathway occurs when a resource in one domain produces positive affect within that domain which in turn improves individual functioning in the other domain. It is exemplified in Rothbard's (2001) recent analysis, which indicated that greater attentiveness in one domain is indirectly associated with enhanced engagement in another domain through positive affect. Positive affect refers to a valenced feeling state reflecting positive moods, emotions, or attitudes (Pettit et al., 2001). In particular, high positive affect reflects the degree to which one feels enthusiastic, alert, has high energy, and experiences pleasurable mood (Pettit et al., 2001). For example, an individual in a positive mood when leaving work likely

responds more positively, patiently, and happily to his or her family members who can ultimately enhance his or her affect and performance as a parent or spouse (Carlson et al, 2006).

Carlson, Kacmar, Wayne, and Grzywacz (2006) described the bi-directional and multidimensional concept of work-family enrichment that work and family provide individuals with somewhat distinct resources that can be used to improve role performance and quality of life in other domains. Specifically, family roles benefit from work roles through developmental resources, positive affect and psychosocial capital derived from involvement in work (work to family enrichment, WFE); while work roles benefit from family roles through developmental resources, positive affect and gains in efficiency derived from involvement in family (family to work enrichment, FWE).

On work to family enrichment, there are three directions: Firstly, development occurs when involvement in work leads to the acquisition or refinement of skills, knowledge, behaviors, or ways of viewing things that help and individual be a better family member. Secondly, affect is defined as a positive emotional state or attitude which results when involvement in work helps the individual be a better family member. Finally, capital occurs when involvement in work promotes levels of psycho-social resources such as a sense of security, confidence, accomplishment, or self-fulfillment that helps the individual is a better family member.

Similarly to work to family enrichment, family to work enrichment also consists of three dimensions: Firstly, development occurs when involvement in family leads to the acquisition or refinement of skills, knowledge, behaviors or ways of viewing

things that help an individual be a better worker. Secondly, affect occurs when involvement in family results in a positive emotional state or attitude which helps the individual be a better worker. Finally, efficiency occurs when involvement with family provides a sense of focus or urgency which helps the individual is a better worker. Both work-to-family enrichment and family-to-work enrichment are positively related to individual's mental health (Allis & O'Driscoll, 2008; Grzywacz & Bass, 2003), family functioning (Grzywacz & Marks, 2000) and job outcomes such as job satisfaction (Beutell & Wittig-Berman, 2008) and organizational commitment (Wayne et al., 2004, 2006; Van Steenbergen et al., 2007).

2.2.2 The Fundamental Theory of Work-Family Enrichment

Work-family facilitation is rooted in two related sociological critiques of role theory. The argument suggests that a greater number of role commitments provide benefits to individuals rather than draining them (Sieber, 1974; Marks, 1977), which actually challenged the 'scarcity of resources' hypothesis which posit that work and family were vying for individuals' finite amounts of resources and proposes. Therefore, attention and energy can be expanded instead of being drained by greater number of role. Moreover, both Sieber and Marks argued that role accumulation provides benefits that may outweigh its costs. Sieber proposed that individuals occupying multiple roles accrue benefits (i.e. role privileges, status security, resources and personality enrichment), which lead to greater role gratification than stress. Marks pointed out that rather than feeling strained by multiple roles, abundant energy is found for roles to which an individual is committed and that more energy can be created by fulfilling multiple roles.

Sieber (1974) and Marks (1977) provided theoretical traction for two streams of research that have expanded perspectives of work and family. The first and most developed stream of inquiry focuses on ‘role expansion.’ The central thesis of role expansion theory and research is the idea that occupancy of multiple roles, such as participating in both work and family, contributes to individual enhancement if the perceived quality of the roles is high (Barnett & Hyde, 2001). Rather than draining energy from work and reducing performance, workers’ commitments in other domains may provide multiple opportunities for satisfaction and resource gaining and may energize them for work (Ruderman et al., 2002). Evidence suggests that individuals in both work and family roles enjoy better health and financial security, a strengthened sense of personal identity, greater social support and the possibility that experiences obtained in one role can be used to buffer stressors in another (see Barnett & Hyde, 2001). This “expansion” model considers personal resources to be abundant and expandable (Crouter, 1984) and provides the theoretical basis for facilitation (Hammer et al., 2005).

“Positive Spillover Theory” provides another foundation, which postulates the attitude, behaviors, and emotions associated with one role may spill over to another positively (Edwards & Rothbard, 2000). Positive experiences in one domain (e.g. affect, development, capital) are transferred to another domain (Carlson et al., 2006). Research in this area finds that people discern instances where the skills or perspectives developed in one domain were beneficial to them in another domain (e.g. Crouter, 1984; Kirchmeyer, 1992b; Ruderman et al., 2002). Research supports the notion that work flexibility, which enables individuals to integrate and overlap work and family responsibilities in time and space, leads to positive spillover and is

instrumental in achieving healthy work and family balance (Hill, Ferris & Martinson, 2003).

2.2.3 Differences between Work-family Enrichment and Work-family Conflict

Work and family conflict is an expanding field of research. Research on resource drain (Edwards & Rothbard, 2000) and role conflict (Greenhaus & Beutell, 1985)) is based on the hypothesis which states that people have fixed amounts of psychological and physiological resources (e.g. time and energy) to expend and that they make tradeoffs to accommodate these fixed resources. The more roles they have to fulfill, the greater the need to set priorities and negotiate with other parties and, consequently, the smaller the chance of meeting all expectations (Greenhaus & Beutell, 1985). That is, individuals have multiple roles within a domain, and as pressure increases to complete demands within that domain, there are less resources to meet the multiple roles and subsequent demands in other domains (Crouter, 1984; Lambert, 1990; Goode, 1960; Greenhaus & Beutell, 1985; Kahn, et al., 1964).

The different expectations from roles in both work and family life can create work-family conflict (WFC), which is defined as “a form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respect” (Greenhaus & Beutell, 1985, p. 77), and often results in negative consequences for both the individual (Kossek & Ozeki, 1998; Netemeyer, Boles, & McMurrin, 1996) and the organization (Frone, Yardel, & Markel, 1997; Kossek, Colquitt, & Noe, 2001), like reduced participation, satisfaction and performance in either or both of these domains.

Work-family enrichment is one construct representing how work and family

benefit each other (Greenhaus & Powell, 2006). The fundamental thinking behind enrichment is that work and family each provide individuals with resources such as enhanced esteem, income, and other benefits that may help the individual better perform across other life domains (Barnett & Hyde, 2001; Friedman & Greenhaus, 2000; Greenhaus & Powell, 2006). Research suggests that synergies between work and family exist (Barnett & Hyde, 2001; Rankin, 1993), and that these synergies are distinct from incompatibilities or work-family conflicts (Grzywacz & Butler, 2005; Grzywacz & Marks, 2000a, 2000b; Kirchmeyer, 1992, 1993; Wayne, Musisca, & Fleeson, 2004).

Conflict and facilitation were shown, however, to be orthogonal rather than opposite constructs (Wayne, Musisca & Fleeson, 2004), consistent with Grzywacz and Marks' (2000) finding, which showed that work to family facilitation and family to work facilitation are distinct attributes and independent. Conceptually, conflict and spillover may be distinct from balance in that it is possible for individual who experiences work-family conflict to also experience work-family balance because he is capable of managing such conflicts. Thus, the negative and positive aspects of work-family spillover can be viewed as independent constructs rather than opposite ends of a single continuum.

One implication of the orthogonal nature of conflict and enrichment is that their origins are distinct, and they may have different antecedents. On the other hand, Grzywacz (2002) and Frone (2003) have both commented that work-family conflict and work-family facilitation may offset each other rather than have nothing to do with, and Frone's discussion of work-family balance clearly illustrates that balance is more than simply a lack of conflict between the two domains. Besides, studies to date have showed that enrichment makes separate contributions to predicted work

and non-work outcomes, over and above the effects of conflict (Ayree et al., 2005; Grzywacz & Butler, 2005; Van Steenbergen et al., 2007; Allis & O'Driscoll, 2008). To promote better balance, it is important for individuals and organizations to develop mechanisms which encourage and support the enhancement of both work and family life.

2.2.4 Comparisons with Other Related Concepts

Work-family enrichment is notably different from other constructs in the literature because it represents the positive side of the work-family interface. Greenhaus and Powell (2006) recently reviewed and clarified these concepts suggesting that many researchers have used them interchangeably to describe the positive connections between work and family. A close scrutiny of these terms reveals considerable content overlap, although subtle differences remain (Grzywacz, 2002). In an effort to synchronize this research, they suggested that work-family enrichment could best capture the mechanism that had often been discussed and examined.

An explanation of their distinctions is important to ensure that we are capturing the intended construct of enrichment in our measure (Carlson et al, 2006). Enhancement represents the acquisition of resources and experiences that are beneficial for individuals in facing life challenges (Sieber, 1974). Thus, whereas enhancement focuses on benefits gained by individuals and the possibility that these benefits may have salient effects on activities across life domains, enrichment focuses on enhanced role performance in one domain as a function of resources gained from another.

Positive spillover (Crouter, 1984) refers to experiences in one domain such as moods, skills, values, and behaviors being transferred to another domain in ways that make the two domains similar (Edwards & Rothbard, 2000). Thus, enrichment builds on the more basic notion of positive spillover (Carlson et al, 2006). The subtle, yet important, distinction between the two constructs is that experiences in one domain can be transferred (i.e., spillover) yet not improve the quality of life or individual performance in the other role. As Powell and Greenhaus (2004) noted, in order for enrichment to occur, resources must not only be transferred to another role but successfully applied in ways that result in improved performance or affect for the individual.

The final construct, facilitation (Grzywacz, 2002), is defined as when engagement in a domain yields gains that enhance functioning of another life domain (Wayne et al., 2004). The key distinction between enrichment and facilitation is the level of analysis: enrichment focuses on improvement in individual role performance or quality of life whereas facilitation focuses on improvements in system functioning (Wayne et al., 2004). It is possible that enrichment occurs which does not necessarily translate into improved system functioning. For example, when an individual experiences positive affect from home that enhances his performance or affect at work (enrichment), the improved functioning of the individual may or may not impact the larger work system such as improved functioning of the workgroup or improved supervisor relations (facilitation). These conceptual distinctions among enrichment, enhancement, positive spillover, and facilitation are important to consider when developing a measure of each construct.

2.3 Work Support

Richter and Hacker (1998) regarded resources as health-protecting factors and distinguished them in two categories, namely, external resources (organizational and social) and internal resources (cognitive features and action patterns). In my study, I will focus on external resources, especially in job context. Job resources refer to those physical, psychological, social, or organizational aspects of job that may be helpful in achieving work goals, reduce job demands at the associated physiological and psychological cost, or stimulate personal growth and development (Demerouti & Bakker, 2001).

Job resources may be located at the level of the organization at large (e.g. pay, career opportunities, family-friendly policies, job security), the interpersonal and social relations (e.g. supervisor and co-worker support, team climate), the organization of work (e.g. role clarity), and at the level of the task (e.g. skill variety, task identity, task significance, autonomy, performance feedback) (Bakker & Demerouti, 2007; Lu et al., 2009). In the former case, job resources fulfill basic human needs (Deci & Ryan, 1985), such as the needs for autonomy (DeCharms, 1968), competence (White, 1959), and relatedness (Baumeister & Leary, 1995). For instance, proper feedback fosters learning, thereby increasing job competence, whereas decision latitude and social support satisfy the need for autonomy and the need to belong, respectively. Among those levels of job resource, the interpersonal and social relations are what I discussed in this study.

Social support is conceptualized as the structure of relationships as well as the flow of resources provided by relationships (Greenhaus & Parasuraman, 1994). It has been studied extensively in the literatures on stress and social networks (Hall & Wellman, 1985; Viswesvaran et al., 1999), which can be either emotional or

instrumental (Adams, King, & King, 1996; King, Mattimore, King, & Adams, 1995). Individuals may have an on-the-job social support network as well as a personal or non-work based network of supportive relationships. Most studies distinguish the domain of work-based social support from personal (non-work) social support, as relationships in one domain can attenuate negative consequences or accentuate positive consequences from the other domain (Carlson & Perrewé, 1999; Greenhaus & Beutell, 1985; Greenhaus & Parasuraman, 1994). In general, however, the impact of work-based supportive relationships has been separated from the impact of personal supportive relationships; the first have been linked to work outcomes and the latter to family outcomes (Marcinkus, Whelan-Berry & Gordon, 2007).

Because this study focused on the work context, therefore work support was extracted from the overall social support. Employees differentiate support from the organization and the support they receive from their immediate work group or supervisor (Allen, 2001; Jahn, Thompson & Kopelman, 2003; Self, Holt, & Schaninger, 2005). Supervisor support, co-workers support and organizational support were focused in this study, which are all grouped under the umbrella term of “work support”. Furthermore, work support was also viewed as one of the main issues of work family culture (Dikkers et al., 2007; Dikkers et al., 2004). They defined work support as the extent to which the organization, direct supervisors and colleagues are perceived to be supportive of the integration of employees’ work and private lives and the utilization of work family arrangements.

2.4 Work Well-being

Warr (1987) categorized those concepts such as job satisfaction, organizational

commitment, job-related tension, job-related depression, job-related burnout, and morale as job-related well-being. He also measure places different feelings on two principal axes in 1992: (1) anxiety-contentment; and (2) depression-enthusiasm. These two axes correspond with positive and negative well-being. Given the thrust of the present research, in particular our primary interest in enrichment between work and family domains and again the calling for positive psychology, in this study we focused solely on positive well-being.

Well-being is a broad concept that includes a variety of affects and aspects of satisfaction and mental health (Sonnentag, 2001). Many Chinese studies have taken job satisfaction and psychological health to be indicators of positive work well-being (Siu et al., 2005; Siu, Spector & Cooper, 2006; Siu, Lu, & Spector, 2007).

Although well-being and work-life balance are not conceptually or empirically identical, they may overlap and operate concurrently. Facilitation has been shown to have a positive relationship with positive well-being and has previously been identified as an integral part of work-life balance (Allis & O'Driscoll, 2008), with increasing levels of facilitation improving balance (Frone, 2003; Grzywacz & Bass, 2003; Keene & Quadagno, 2004). Consistent with Frone (2003), who suggested that work-life balance is a combination of low conflict and high facilitation, an increase in positive well-being levels may also indicate greater facilitation of work-life balance.

2.5 Work Demand

Work demands refer to those physical, psychological, social, or organizational

aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and/or psychological costs.

Examples are a high work pressure, an unfavorable physical environment, and emotionally demanding interactions with clients. Although job demands are not necessarily negative, they may turn into job stressors when meeting those demands requires high effort from which the employee has not adequately recovered (Meijman & Mulder, 1998).

Most of those scales measuring demand have been based on these conceptualizations and generally capture excessive demand levels, which are often referred to as role overload (Carlson & Kacmar, 2000). Role overload is generally defined as having too much work to do, which can result in negative affective reactions by individuals experiencing these demand pressures (Boyar et al. 2007). They focused on the negative components of demand and, thus, captured one end of the demand spectrum.

However, narrow conceptualizations of demand ignore the more common scenario that exists in many organizations where experience high levels of demand that range from positive to negative experiences (Boyar et al. 2007). Not surprisingly, some individuals identify with demands created from their work or family domains as integral parts of their personal identity. To these individuals, work or family demands maybe positive in nature and reflect a belief that these roles imply or require these demands.

Perceived demand is one judgment that goes beyond role overload. Demand is a perceptual construct that accounts for an individual's overall view of his or her role responsibilities. This includes pressures that originate from within the individual (e.g., the desire or motivation to accomplish specified work or personal goals) or from the environment (e.g., assigned level of role responsibility). Additionally, an individual may feel positive, negative, or neutral about his or her perceived demand level. So we accept the definition by Boyar et al. (2007) about work demand that: A global perception of the level and intensity of responsibility with the work domain.

2.6 Summary

In this chapter, I mainly introduced the concepts, basic theories and research background for the key variables in this study: work family enrichment, work support, work well-being, job satisfaction and work demand, which support the hypothesis that they are somehow related each other. Although there are many other factors to influence the outcomes (like family support, family to work enrichment), this study just aimed to concentrate on some variables in workplace and narrow down the topic to a motivational path among work-related concepts.

CHAPTER 3 THEORETICAL FRAMEWORK AND HYPOTHESIS

3.1 Relationship between Work Support and Work Well-being

Job resources may instigate a motivational process leading to positive organizational outcomes (Demerouti et al., 2001; Salanova et al., 2005; Taris & Feij, 2004). This agrees with Hackman and Oldham (1980) job characteristics theory that emphasizes the motivational potential of job resources at the task level, including autonomy, feedback, and task significance. In addition, this agrees on a more general level with conservation of resources (COR) theory (Hobfoll, 2001) that states that the prime human motivation is directed towards the maintenance and accumulation of resources.

As the core component of job resource, work support may play either an intrinsic or extrinsic motivational role because it foster employees' growth, learning, development and also be instrumental in achieving work goals. The accumulation of social resources at work is associated with positive feelings about one's career, as is the degree of flexibility and support in the workplace (Friedman & Greenhaus, 2000). Allen (2001) and Behson (2002) indicates that a supportive work family culture (support from organization, direct supervisors and colleagues) simply could make the organization a more pleasant place to work which can affect employees' well-being positively and can be interpreted by employees as that the organization takes care of the well-being of its employees.

Empirically, some research suggests that social support in the workplace, such as the support of supervisors and coworkers, has a positive impact on work outcomes,

such as job satisfaction (Allen, 2001; Goff et al., 1990), help relieve occupational stress and reduce turnover, support career advancement in managerial roles (Kram, 1985) and create feelings of inclusion in professional roles that indicate career accomplishment.

Firstly, supportive colleagues increase the likelihood of being successful in achieving one's work goals (Bakker & Demerouti, 2008). Kram and Isabella (1985) found that peer relationships at work vary from those who exchange information about work and the organization to those who provide confirmation and emotional support. Ducharme and Martin (2000) found evidence that the social support of peers enhances the job satisfaction of all workers. Instrumental support from colleagues can help to get the work done in time, and may therefore alleviate the impact of work overload on strain (Van der Doef & Maes, 1999).

Secondly, a high quality relationship with one's supervisor may alleviate the influence of job demands (e.g. work overload, emotional and physical demands) on job strain, since leaders' appreciation and support puts demands in another perspective. Leaders' appreciation and support may also aid the worker in coping with the job demands, facilitate performance, and act as a protector against ill health (Vaananen et al., 2003). Supervisor support in work-family issues reflects employee's perception of whether the immediate supervisor is sensitive to his/her non-work related matters. Immediate supervisor can reduce the extent to which employee's work role interferes with his/her family role by accommodating employee's family obligations (Lapierre & Allen, 2006) such as letting an employee leave office early to take care of a sick child or to work part time. Goff et al. (1990) found that supervisory support in an organization providing daycare was associated

with lower degrees of work-family conflict and absenteeism for parents with children under the age of five. Allen (2001) found that supervisory support had both direct and indirect effects on employee job attitudes, and because supervisors administer organizational family-supportive benefits, their willingness to allow employees to take advantage of these benefits influenced job attitudes as well. In the research conducted by Aryee et al. in 2005, employees who perceive their supervisors as supportive of work-family matters are found to report higher job satisfaction and commitment.

Finally, Friedman and Greenhaus (2000) argued that a supportive environment creates resources base for employees, such as time, flexibility, and advice, as well as psychological resources such as self-acceptance, which supposedly develop positive affect towards work. In a survey of a variety of occupations, employees who perceived their organizations as less family-supportive experienced more work-family conflict, less job satisfaction, less organizational commitment, and greater turnover intentions than those who perceived their organizations as more family-supportive (Allen, 2001). Premeaux et al. (2007) also found support for the positive association between work family culture and attitudes towards the organization, such as job satisfaction and organizational commitment. Another recent study replicates this finding in a sample of older women. Although they hypothesized indirect effects of work family on outcomes, they found also some direct linkages, such as with job satisfaction, organizational commitment and career satisfaction (Gordon et al., 2007). A study of Mauno et al. (2005a) found a negative association between the perception of the family supportiveness of an organization's culture and the level of psychological stress.

Research findings (Anderson et al., 2002; Behson, 2005; Thompson & Prottas, 2005) suggest that informal aspects of the work environment such as supervisor and co-worker support explain greater share of the variance associated with employee outcomes than do formal benefits and policies, and unwritten expectations guiding behavior are often more powerful than are written ones (Thompson, Beauvais, & Lyness, 1999), the underlying norms pertaining to balancing work and family will most likely influence the degree to which employees feel truly supported and experience positive affect at work to benefit their family lives. It is also supported by many researches that there is no significant relationship between perceived work-life benefits and policies (WLBP) and job outcomes (Allen, 2001; Wayne et al., 2006; Baral & Bhargava, 2010). Recent research also indicate that the mere presence of work family arrangements is not enough to facilitate a work family balance because few employees actually seem to use such arrangements (Kinnunen et al., 2005).

Taken together, existing research suggests that a supportive organizational environment and supportive relationships at work may have a significant association with positive work outcomes for employees, especially job satisfaction, and feeling supportive in workplace explains greater variance associated with employee outcomes than do formal benefits and policies. Thus, I formulated the following hypothesis:

H1. Work support will be best characterized by three general dimensions: “supervisor support”, “co-worker support” and “organizational support”.

H2a. Work support will be positively related to job satisfaction.

H2b. Work support will be positively related to psychological health.

3.2 Relationship between Work Support and Work to Family Enrichment

Having multiple roles can be beneficial and enhance one's ability to perform in a given domain because of the satisfaction gained from a challenging work environment and additional resources available (Hackman & Oldham, 1980; Marks & MacDermid, 1996; Sieber, 1974). Individuals with multiple roles may have support from multiple constituents. For example, individuals at work may receive support from top-management, supervisors, and coworkers. Resources available in the environment are critical to the occurrence of enrichment (Wayne, Randel & Stevens, 2006).

In the management literature, social support has been primarily addressed in terms of mentoring. Mentoring relationships provide social support in the form of both career development and psychosocial assistance (Kram, 1985), paralleling Lin's (1986) instrumental and expressive support dimensions derived from a review of the stress.

Similarly, work-based support provides both instrumental (which focuses on career achievement) and expressive support (which emphasizes psychosocial support) on employees' work and family life as evidenced from a qualitative data analyses (Marcinkus, Whelan-Berry & Gordon, 2007). Instrumental support from the work domain, especially supervisors and coworkers, helps employees when it facilitates flexible scheduling and fosters the security that someone will cover for them if they need to miss work for family obligations or emergencies. Expressive support from

the organization, supervisors, and coworkers is important when it is supportive of family and demonstrates an understanding of when the women need to juggle demands from the work and home domains. Similarly, organizations can encourage networks of support in which organizational policies and management training help identify the array of sources and types possible. Results suggest that the sources of support are important and may reinforce each other to facilitate work-family balance.

Also, empirical research findings (Beutell & Wittig-Berman, 2008; Wayne et al., 2006) point towards the plausible positive relationship between family-friendly organizational culture and work-to-family enrichment. Supervisor support and coworkers support also crucial for work-family enrichment (Beutell & Wittig-Berman, 2008; Wadsworth & Owens, 2007; Aryee et al., 2005; Thompson & Prottas, 2005; Baral & Bhargava, 2010) since supportive supervisors and coworkers can alleviate most of the work related tension and strain (Beehr et al., 2000), which may potentially provide the energy and psychological resource base such as confidence (Marks, 1977) to participate in family related activities and enhance satisfaction and performance in the family domain., suggesting the occurrence of work to family enrichment. Taken together, it was hypothesized that:

H3. Work support and work to family enrichment will be positively related.

3.3 Relationship between Work to Family Enrichment and Work Well-being

Following enhancement theory, being engaged in multiple roles is generally thought to promote well-being and is synergistic for an individual (Ruderman et al., 2002). Satisfactory role engagement between domains is expected to be associated

positively with individuals' well-being because it can reduce inter-domain conflict and stress, both of which detract from well-being (Greenhaus et al., 2003). Conflict and stress should be minimal in the presence of facilitation, resulting in higher well-being levels. These cross-domain effects are supported by Ford et al. (2007) in their meta-analysis, which reported that reduced stressors and sources of support that are specific to one domain were positively related to satisfaction in another domain.

Additionally, individuals who experience work-family enrichment (both work to family enrichment and family to work enrichment) benefit from the work-family interface and may be better able to maximize multiple roles and demanding work/family environments. Successfully maintaining such environments should result in higher satisfaction levels. When the investment of time and energy in one domain is attributed as providing affect that profits him or her in another domain (e.g., WFE), the domain seen as providing the benefit (e.g., work) is likely viewed as desirable and satisfying (Wayne, Randel & Stevens, 2006). According to social exchange theory (Blau, 1964), when employees perceive that their organization provides something beneficial to them or their families, they likely reciprocate by demonstrating attitudes and behaviors consistent with the perceived benefit they have received.

Practically, research has consistently demonstrated that role accumulation can have beneficial effects on physical and psychological well-being (Barnett & Hyde, 2001), especially when the roles are of high quality (Perry-Jenkins, Repetti, & Crouter, 2000). In addition, satisfaction with work and satisfaction with family have been found to have additive effects on an individual's happiness, life satisfaction, and perceived quality of life (Rice, Frone, & McFarlin, 1992; Rice, McFarlin, Hunt,

& Near, 1985). Such research suggests that individuals who participate in and are satisfied with-work and family roles experience greater well-being than those who participate in only one of the roles or who are dissatisfied with one or more of their roles.

Several studies have found relationships between work-family facilitation (work-to-family and family-to-work) and individual health (mental, emotional, and physical). Most of the findings suggest facilitation contributes to increased physical and mental health. Specifically, individuals who experience enrichment between work and family report better mental and physical health (Hammer et al., 2005). By extension, individuals experiencing enrichment also may experience positive attitudes and behavioral intentions at work. Grzywacz and Bass (2003) found that work-family facilitation was associated with lower risk of mental illness, depression, and problem drinking. In fact, each unit increase in family-to-work facilitation was associated with a 15 percent decrease of reported depression and a 38 percent decrease in reported problem drinking. Grzywacz (2000) also found that positive spillover was related to lower levels of problem drinking and was associated with better self-reported mental health. Hanson et al. (2006) and Barnett and Baruch (1986), who also found positive health behaviors (lower mental illness, depression, and problem drinking; higher overall mental and physical health) are associated with simultaneous involvement in work and family roles.

Furthermore, studies on work-family interface also has provided some evidence on the association between the positive aspect of work-family interface and some positive outcomes, such as physical health, mental health and well-being (Frone, 2003; Grzywacz ,2002; Grzywacz & Bass, 2003; Grzywacz, 2000;), as well as

greater family and organizational satisfaction and effort (Kirchmeyer, 1992a, 1992b; Tompson & Werner, 1997; Wayne, Musisca, & Fleeson, 2004; Ayree, Srinivas & Tan, 2005).

Additionally, work and family variables are important to most individuals and should account for some variance in explaining levels of well-being. Based on the theoretical and empirical supports above, we can suppose that individuals who perceive high levels of work-family enrichment should experience more positive outcomes. Thus, the following hypotheses were formulated:

H4a. Work to family enrichment will be positively related to job satisfaction.

H4b. Work to family enrichment will be positively related to psychological health.

3.4 The Mediating Role of Work-Family Enrichment

Participating in both work and family roles is not mutually exclusive and can be beneficial because strong commitments in both domains may exist and having multiple roles may increase available social support (Barnett & Hyde, 2001). That is, work-family enrichment can produce a synergistic effect by gathering those supports from multiple contexts (Voydanoff, 2005). On the other hand, some studies on organizations have equated support to work-family practices and viewed it as part of “family friendliness” (Jahn, Thompson & Kopelman, 2003), which pointed to work-family enrichment again.

Based on job demands and resources framework (Voydanoff, 2004; Friedman &

Greenhaus, 2000), it is expected that the nature of job and support system in the work domain may be viewed as organizational resources which plausibly increase the efficiency and functioning of an employee in his/her family domain (Wayne et al., 2006). It is likely that individuals will attribute their increased efficiency and performance to the domain (e.g. work) that provides such support and hence will feel more satisfied with and commitment towards that domain (e.g. work). It points to the possibility that the effect of organizational resources, like work support, through perceived work-family enrichment will spill over to different domains of life such as job and will exacerbate employee attitudes and behaviors at work. In other words, it is reasonable to believe that the influences of work and family interventions on job attitudes and behaviors might arise from effective functioning in the work and family domains (Baral & Bhargava, 2010).

Kinnunen et al. (2005) mention in this respect that “we do not know how the positive effects of a supportive work family culture (support from support from organization, direct supervisors and colleagues, named as work support in this study) are translated into an individual’s well-being. For example: it is possible that perceived work family conflict functions as a mediator in the relationship between a supportive work family culture and individual or organizational well-being” (Kinnunen et al., 2005, p. 114). The logic for this mechanism is that when employees perceive the organization as being supportive of work family issues they will probably not have much problems in balancing the demands of work and family which in turn is related to enhanced feelings of well-being. So does the potential mediating role of work family enrichment on the motivational process from work support to work well-being.

Other than those theoretical support for the potential mediation effects of work to family enrichment on the relationship between work support and work well-being, there are also some empirical evidences relative to this hypothesis. In a survey of a variety of occupations, employees who perceived their organizations as less family-supportive experienced more work-family conflict, less job satisfaction, less organizational commitment, and greater turnover intentions than those who perceived their organizations as more family-supportive (Allen, 2001). Individuals feel an increased sense of commitment to their organization when organizational involvement is seen as enriching other life domains, such as family. Research on federal employees suggests that family-friendly policies at work may decrease work-family conflict, improving work-family balance and in turn job satisfaction (Saltzstein et al., 2001). Work-based social support has been positively related to job satisfaction directly and through work-family conflict as a mediating variable (Carlson & Perrewe, 1999). Dikkers et al. (2005) found support for the mediating role of work-nonwork interference in the relation between work family culture and fatigue, meaning that the more unfavorable employees perceived the work-nonwork culture, the more they experienced time and strain-based work-nonwork interference which in turn was associated with feelings of fatigue. Another study among Dutch employees showed that work-family interference partially mediated the association between a supportive culture and job satisfaction (Peeters et al., 2003). Finally, a study by Mauno et al. (2005) within five different Finish organizations revealed that a supportive work family culture was related both directly and indirectly, through reduced work family conflict, to the positive well-being of employees.

However, there are scanty empirical research conducted on the associations

among work support, work to family enrichment and work well-being, especially the possible mediation effect of work to family enrichment. The empirical evidence obtained on the potential mediating role of work-family enrichment in the link between work support and work well-being has mostly been indirect. First, it has been found that supportive organizational culture (Wayne et al., 2006; Gordon et al., 2007) and supervisor support (Aryee et al., 2005) are positively related to some measures of work-to-family enrichment. Second, there is evidence to show that work-family enrichment is linked to various positive indicators of job outcomes (Wayne et al., 2004; 2006; Aryee et al., 2005; Balmforth & Gardner, 2006), like job satisfaction and psychological health. These evidences, together with aforementioned support for the direct relationships between work support and work well-being, point towards the possibility of mediation.

A research on midlife working women by Marcinkus, Whelan-Berry and Gordon indicated that work-based social support (supports from the organization at large, immediate supervisors and coworkers) is positively associated with global work-family balance, the work outcomes of job satisfaction, organizational commitment, and career accomplishment, as well as a weak partial mediation of general work-family balance on the relationship between social support (work-based and personal) and work outcomes. The weakness of the partial mediation suggests that the mechanism of influence between social support and work outcomes is more direct. In a most recent research in India (Baral & Bhargava, 2010), examine the role of work-family enrichment in the relationships between organizational interventions for work-life balance (job characteristics, work-life benefits and policies, supervisor support and work-family culture) and job outcomes (job satisfaction, affective

commitment and organizational citizenship behavior) and supported the mediating effect of work-to-family enrichment. A mediation analyses by Allis and O' Driscoll (2007) indicated that high psychological involvement (in family and personal activities) was associated with increased level of facilitation, which in turn enhanced well-being. Taking together, the following hypotheses were formulated:

H5a. Work to family enrichment will be a mediator between work support and job satisfaction.

H5b. Work to family enrichment will be a mediator between work support and psychological health.

3.5 The Moderating Role of Work Demand

A moderator effect is obtained when the relationship between the predictor and criterion variables varies for different levels of some third variable, referred to as the 'moderator' variable.

The final proposition of the JD-R model is that job resources particularly influence motivation or work engagement when job demands are high. According to conservation of resources (COR) theory (Hobfoll, 2001), people seek to obtain, retain, and protect that which they value, e.g. material, social, personal, or energetic resources. The theory proposes that stress experienced by individuals can be understood in relation to potential or actual loss of resources. Hobfoll (2002) has additionally argued that resource gain, in turn and in itself has only a modest effect, but instead acquires its saliency in the context of resource loss. This implies that job

resources gain their motivational potential particularly when employees are confronted with high job demands.

One previous study outside the framework of the JD-R model has supported the hypothesis that resources gain their salience in the context of high demands/threats. Billings et al. (2000) found that men who were care giving for AIDS patients and used social support coping maintained their positive emotional states under conditions of stress, and consequently experienced less physical symptoms, thus supporting the importance of resource gain in the context of loss. In a sample of Finnish dentists employed in the public sector, it was hypothesized that job resources (e.g. variability in the required professional skills, peer contacts) are most beneficial in maintaining work engagement under conditions of high job demands (e.g. workload, unfavorable physical environment) (Hakanen et al., 2005). In addition, Bakker et al. (2006) found that job resources particularly influence work engagement when teachers are confronted with high levels of pupil misconduct. Thus, it has reasons to suppose in this study that work demand may buffer the impact of work support on job satisfaction. Taking together, the following hypotheses were formulated:

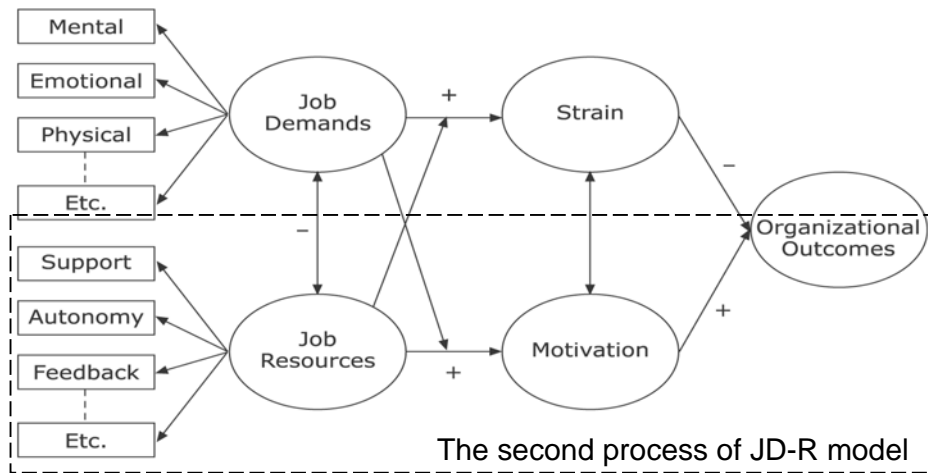
H6b. Work demand will be a moderator between work support and job satisfaction.

H6b. Work demand will be a moderator between work support and psychological health.

3.6 Summary

Figure 1

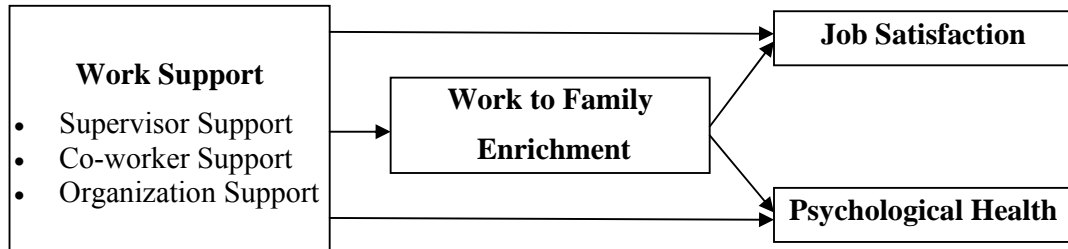
The Job Demands – Resources Model



Two different underlying psychological processes play a role in the development of job strain and motivation in the JD-R model (see Figure 1). In the first, health impairment process, poorly designed jobs or chronic job demands (e.g. work overload, emotional demands) exhaust employees' mental and physical resources and may therefore lead to the depletion of energy (i.e. a state of exhaustion) and to health problems (Demerouti et al., 2001; Bakker & Demerouti, 2007). The second process proposed by the JD-R model is motivational in nature, whereby it is assumed that job resources have motivational potential and lead to high work engagement, low cynicism, and excellent performance. In addition to the main effects of job demands and resources, the JD-R model proposes that the interaction between job demands and job resources is important for the development of job strain and motivation as well.

Figure 2

The Proposed Theoretical Model of the Study



The present study aims to examine the enrichment between domains instead of the inter-domain conflict in Chinese context. Following the Job Demands – Resources model (Bakker & Demerouti, 2007), it is hypothesized that job resources would exert motivational potential and would lead to positive organizational outcomes. Work and family enrichment is considered in this study to capture the nature of the motivational role and mediating the effect of work support on work well-being (job satisfaction and psychological health); and the moderating effect of work demand between work support and work well-being will be examined as well (see Figure 2). By elucidating an empirical investigation of work-family enrichment from a demand-resource perspective in a considerable sample in China, the current study offers a significant contribution to the validation of Western theories.

CHAPTER 4 **METHODOLOGY**

4.1 Participants

Data for the study were collected through self-administered survey using a structured questionnaire from 978 employees in Hong Kong and Hangzhou. The participants were drawn by a purposive sampling method from a diverse array of occupational groups such as high technology companies, hospitals, schools, factories and government through a designated person in a chosen organization / company from March to July in 2009.

The participants were 978 employees (40.2% are men, $n = 393$; and 58.7% are women, $n = 574$) in service industries in Hong Kong ($n = 692$, 70.8%) and Hangzhou, a city in PR China ($n = 286$, 29.2%). These two cities were chosen to represent two societies of different pace of life with Hong Kong a fast-paced high stress city (Siu et al., 2002), whereas Hangzhou a relaxed and happy city (Feng, 2010). The results obtained will demonstrate evidence of convergent validity.

The mean age of participants was 33.64 years old ($SD = 10.37$), with an average working experience of 7.41 years ($SD = 8.12$). 52.7% of the respondents ($n = 515$) were single or never married, 44.7% ($n = 437$) were married or cohabitating and 2.6% ($n = 25$) were divorced or separated. Concerning education level, 37.4% of the respondents finished secondary education, 5.1% ($n = 50$) had some vocational / diploma certificates, 51.2% ($n = 501$) had a university or college degree, and 6.2% ($n = 61$) had postgraduate degree. Additionally, 77.2% ($n = 337$) of those married

participants reported that their spouse have full-time job, 6.5% (n = 29) have part-time job and 16.2% (n = 71) have no job.

Table1

Demographic Characteristics of the Sample (N=978)

Location	Gender	Age	Tenure	Marital status	Education
HongKong:	Female:	Range:	Range:	Married:	University degree:
70.8% (692)	58.7% (574)	16-69 years	0.5-50 years	44.7% (437)	51.2% (501)
Hangzhou:	Male:	M: 33.6 years	M: 7.4 years	Single/Divorced:	Post-graduate:
29.2% (286)	40.2% (393)	SD: 10.4	SD: 8.1	55.3% (540)	6.2% (61)

4.2 Procedures

The participants' gender, age, tenure, occupation, position, marital status were asked in the questionnaire. English items were translated into Chinese (Hong Kong version and PR China version) by back-translation method by four independent persons including my supervisor, one teaching staff in industrial-organizational psychology, and two final year undergraduates majored in translation.

Those who voluntarily agreed to participate in the survey were distributed the survey booklet containing a cover letter explaining the purpose of the study, instructions for completing the questionnaire, the study measures, and the demographic details. Participants were assured of their anonymity and confidentiality

of their responses.

4.3 Measurements

4.3.1 Work Support

A concise scale of work support, comprising supervisor support, co-worker support, organization support, was developed for this study by adapting existing scales. This new scale consisted of four items taken from the *work-home culture scale* (Thompson, Beauvais, & Lyness, 1999; Dikkers et al., 2007) to measure organization support. Sample item included “Managers in this organization are generally considerate towards the private life of employees”. Participants rated their experiences on a 5-point Likert scale (1 = totally disagree, 5 = totally agree). Supervisor support and co-worker support were measured by the scales developed by O’Driscoll, Brough, and Kalliath (2004). Since this study focused on the psychosocial path in workplace rather than the instrumental path, we eliminated the items of “instrumental support” which asked how often the participants had received practical assistance from their supervisor and colleagues, and left the more related items about helpful information or advice, sympathetic understanding and concern, clear and helpful feedback. A 6-point Likert scale was used (1 = never, 6 = all the time). The alpha coefficients for organization support, supervisor support and co-worker support were .77, .89 and .89, respectively. Higher scores indicated that the participants perceived higher supports from others. In order to examine the psychometric properties, both explanatory factor analysis and confirmatory factor analysis were conducted. Results would be presented in the subsequent section.

4.3.2 Work to Family Enrichment

Work to family enrichment was measured by the scale developed and validated by Carlson, Kacmar, Wayne and Grzywacz, (2006). The original scale consisted of 18 items and it measured the work to family direction and family to work enrichment. In the work to family enrichment subscale, nine items were used to measure three dimensions, namely development, affect, and capital. Sample item included “My involvement in my work helps me to understand different viewpoints and this helps me to be a better family member”. Similarly, the family to work enrichment subscale also measured three facets, including development, affect, and efficiency (3 items each facet). Those items were developed to capture the true essence of the definition of enrichment by incorporating the transfer of resource gains into the other domain in ways that enhance functioning for the individual, which has not been included by previous measures (Carlson et al., 2006). Respondents indicated their level of agreement to each statement on a five-point scale ranging from “strongly disagree” (1) to “strongly agree” (5). The alpha coefficients for the nine work items ($\alpha = .91$), nine family items ($\alpha = .91$) and full-scale (all 18 items, $\alpha = .91$) were high. Higher scores indicated that the participants perceived higher enrichment.

4.3.3 Job Satisfaction

Job satisfaction was assessed with the 3-item Cammann, Fichman, Jenkins, and Klesh (1979) job satisfaction subscale from the Michigan Organizational Assessment Questionnaire. The Chinese translated items were used in Siu’s et al. studies (Siu et al., 2005; Siu, Lu, & Spector, 2007) and found reliable. One item out of the total three is negatively worded, as “In general I don’t like my job”; while the other two

positively worded items are “All in all, I am satisfied with my job” and “In general, I like working here” respectively. Participants responded on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). The scale is resulted in score from 3 to 15. The alpha coefficient for job satisfaction was .74, with higher scores indicated higher levels of job satisfaction.

4.3.4 Psychological Health

Psychological health was measured by the 8-item General Health Questionnaire (Kalliath, Driscoll & Brough, 2004), which was developed from GHQ-12 (Banks et al., 1980). Respondents were asked to evaluate their psychological well-being over the previous three months. The scale included four positively worded items (e.g. “Have you recently felt capable of making decisions about things”), which composing the dimension named “Social Dysfunction”; and 4 negatively worded items (e.g. “Felt you couldn’t overcome your difficulties”), which composing the dimension named “Anxiety / Depression”. Items were measured with a four-point Likert scale (1 = much better than usual, 2 = little better than usual, 3 = no better than usual, 4 = worse than usual), so that lower scores indicated better psychological health. The scale showed a good reliability ($\alpha = .90$).

4.3.5 Work Demand

I adapted the Work Family Demands scale designed by Boyar, Carr, Mosley and Carson (2007). The scale consists of nine items. An example item is “My job requires all of my attention.” Respondents used a 5-point scale (1 = strongly disagree

and 5 = strongly agree) to indicate their agreement with each item. The Cronbach α of this scale was .88.

4.3.6 Demographics

Gender, age, hours worked and marital status were used as control variables as each has been demonstrated to be related to work-family outcomes (e.g. Frone et al., 1992; Major et al., 2002). In the present study, items were included asking gender (1 = men, 2 = women), age, tenure, education level, position, marital status (1 = Single / never married, 2 = Married / cohabitating, 3 = Divorced / separated), whether or not the spouse/partner was working, whether or not living with family, spouse or children, type of occupational group belonging to.

4.4 Analyses

Exploratory factor analysis (EFA) and Confirmatory Factor Analysis (CFA) were used in this study to test hypothesis 1 (work support will be best characterized by three general dimensions: “supervisor support”, “co-worker support” and “organizational support”).

The responses to the items were factor analyzed with a principal component EFA applying a promax rotation. Multiple criteria for determining the number of factors to retain were used (Ford, MacCallum, & Tait, 1986; Kim & Mueller, 1978; Stevens, 1992) including eigenvalues greater than 1.0 and variance explained of greater than 60%. Furthermore, only items that loaded at .5 or higher on the intended factor and less than .3 on any other factor were retained. Finally, those items those

were highly redundant in terms of wording with other items were removed to reduce the likelihood of within-factor correlated measurement error (Bagozzi & Yi, 1988; Netemeyer, Boles, & McMurrian, 1996).

Confirmatory factor analysis was used to compare the goodness of fit of various factor models (CFA; Jořreskog & Sořrbom, 1998). Model comparisons were analyzed with AMOS Version 17.0. The fit of these four factor models was compared in terms of their Chi-square (χ^2) value. As it is well known that this test is susceptible to sample size, such that in large samples even minor misspecifications may lead to rejection of models (e.g., Bentler & Bonett, 1980; Byrne, 2001; Hu & Bentler, 1998; Marsh, Balla, & McDonald, 1988), we also employed a range of other fit indexes to assess model fit. These were the standard root mean square residual (SRMR) the Non-Normed Fit Index (NNFI), the Comparative Fit Index (CFI), and the Root Mean Square Error of Approximation (RMSEA). Values of .90 and over (for NNFI, and CFI) or .08 and under (for SRMR and RMSEA) signify an acceptable fit (Byrne, 2001).

Structural equation modeling (SEM) allowed us to examine prospective models, in which work to family enrichment served as a mediating role between work support and work well-being. Structural models were analyzed with AMOS Version 17.0. Maximum likelihood methods were used to analyze covariance matrices. Measurement models were specified with latent variables with their corresponding indicators, as described in the Measures section. Fit indices are reported and compared against commonly used criteria as I have mentioned above. A multiple group analysis was used to examine whether the data in two cities could be combined in the proposed model.

In addition, Sobel's (1982) test was used to determine the significance of the mediation (McKinnon et al., 2002) with the help of the online calculator (Preacher & Leonardelli, 2001).

The principal method for analyzing the moderating effect was moderator regression analysis (Aiken & West, 1991). Job satisfaction was the dependent variable, the following were entered into the hierarchical regression: On step 1, control variables, including gender, age, marital status, educational level, tenure, were entered into the equation; On step 2, work support (IV) was entered into the equation; On step 3, work demand as the moderator was entered into the equation; On step 4, the interaction term (Work support \times Work demand) was added to the regression equation. This procedure was done repeatedly to test the moderating effect of work demand between work support and psychological health. In addition, Clegg and Wall (1990) argue that moderator regression analysis may fail to report significant interactions when these are actually present. Hence they suggest that it is best to fix the significance level at 0.10 rather than at the usual 0.05 such as has been done by Batlis (1980) and Sonnetag et al. (1994). All variables were centered before analysis.

CHAPTER 5 RESULTS

5.1 Validation of Work Support Scale

An exploratory factor analysis (EFA) utilizing a principal component analysis method with a promax rotation was applied to all 10 items to determine which was performing the best. It resulted in three factors composed of 3, 3 and 4 items for co-worker support (CS), organization support (OS) and supervisor support (SS) respectively. The eigenvalues for the three factors were 4.6, 1.8 and 1.0, and together they explained 73.2% of the variance (see Table 1). Results indicated that all 10 items loaded above .71 on the intended factor with no cross loadings greater than .15. The standardized factor loadings for each of the 10 items are shown in Table 1.

Confirmatory factor analysis (CFA) of the three factors was conducted to provide additional support to the factor structure of the scale. Results clearly suggested that the three-factor model (M4) fitted best to the empirical data with quite well fit indices (see Table 2). In addition – as expected – this model fits significantly better than the alternative one-factor model (M1): $\Delta df = 3, \Delta \chi^2 = 1627.114, p < .001$. The correlations between the three latent factors were: $r(\text{SS, CS}) = 0.58, r(\text{SS, OS}) = 0.43, r(\text{CS, OS}) = 0.28$. Particularly, the latter correlation between SS and CS, SS and OS are relatively high, so that I also fitted a two-factor model (M2) in which SS and CS were collapsed into one factor and another two-factor model (M3) in which SS and OS were collapsed into one factor. It appears that, formally speaking, the fit of this model is inferior to that of the three-factor model ($\Delta df = 2, \Delta \chi^2 = 831.986, p < .001; \Delta df = 2, \Delta \chi^2 = 767.382, p < .001$). Also, the remaining fit indices of the three-factor model are slightly better than that of those two-factor models (see Table

2). Hence, it is concluded that the hypothesized three-factor model of work support with SS, CS and OS as separate but correlated factors fits quite well to the data.

Table 2

Standardized factor loadings for 10 items (N=978)

	Co-worker support	Organization support	Supervisor support
Item 1	.890		
Item 2	.918		
Item 3	.879		
Item 4		.768	
Item 5		.832	
Item 6		.773	
Item 7		.709	
Item 8			.868
Item 9			.897
Item 10			.914
Eigenvalue	4.6	1.8	1.0
% of variance	46.207	17.715	9.268

Table 3*Estimate of fit indices for competing models of work support (N=978)*

Model	Chi-square	DF	P	SRMR	NNFI	CFI	RMSEA
One-factor Model (M1)	1799.462	35	.000	.130	.566	.227	.211
Two-factor Model (M2)	1004.334	34	.000	.070	.754	.814	.171
Two-factor Model (M3)	939.730	34	.000	.107	.771	.827	.165
three-factor Model (M4)	172.348	32	.000	.023	.962	.973	.067
χ^2 difference							
(M1-M4)	1627.114	3	.000				
(M2-M4)	831.986	2	.000				
(M3-M4)	767.382	2	.000				

Notes: SRMR = standard root mean square residual; NNFI = non-normed fit index;

CFI = comparative fit index, RMSEA = root mean square error of approximation.

5.2 Correlational Analyses

I first computed bivariate correlations to examine the associations among the main variables in this study. Table 3 shows that work support was positively correlated to job satisfaction ($r = .34, p < .001$), but showed no significant correlation with GHQ score ($r = -.02, p > .05$). Hence, hypothesis 1 was partially supported. Further, work support was positively correlated with work to family enrichment

Table 4 *Descriptive Statistics, Correlations, and Reliabilities for Analysis Variables (N=978)*

	Mean	SD	1	2	3	4	5	6	7	8
1. Age	33.64	9.91	—							
2. Marital status	1.50	.54	.59***	—						
3. Tenure	7.41	7.88	.59***	.40***	—					
4. Work support	3.24	.71	-.12***	-.14***	-.12***	(.87)				
5. Work to family enrichment	3.40	.70	.08*	.08*	.03	.41***	(.91)			
6. Psychological health ¹	3.62	1.40	-.02	.05	.09**	-.02	-.07*	(.90)		
7. Job satisfaction	3.43	.73	.13***	.08*	.05	.34***	.40***	-.11***	(.74)	
8. Work Demand	3.47	.74	.09**	.05	.08**	.10**	.13***	.06***	.06*	(.88)

Notes: * $p < .05$, ** $p < .01$, *** $p < 0.001$, Cronbach's alpha reliabilities are in parentheses on the diagonal where appropriate;

Gender: 1= Male; 2= Female; Marital status: 1= single or never married; 2= married or cohabitating; 3= divorced or separated.

¹ Lower score indicated better psychological health.

($r = .40, p < .001$). Therefore, hypothesis 2 was fully supported. I also found that work to family enrichment was positively associated with job satisfaction and negatively associated with GHQ score; the correlation coefficients were .40 and -.07, respectively ($p < .001$ and $p < .05$ respectively). Therefore hypotheses 3a and 3b were fully supported. On the other hand, work demand showed significant associations with work support ($r = .10, p < .01$), work to family enrichment ($r = .13, p < .001$) and job satisfaction ($r = .06, p < .05$), but no significant associations with psychological health ($r = .06, p > .05$).

Table 5 *Factor correlations of the latent variables (N=978)*

	Mean	SD	1	2	3	4	5	6
Work support								
1. Supervisor support	3.29	1.04	—					
2. Co-worker support	3.59	.98	.58***	—				
3. Organization support	2.96	.73	.43***	.28***	—			
Work to family enrichment								
4. Developmental resources	3.43	.77				—		
5. Positive affect	3.27	.90				.53***	—	
6. Psychological capital	3.50	.81				.58***	.62***	—

Notes: * $p < .05$, ** $p < .01$, *** $p < 0.001$

In the process of structural equation modeling, I used the total 31 items as the observed indicators. As for the work support concept, I used the three-factor high-order model (see Section 5.1): supervisor support, co-worker support and organization support; as for the work to family enrichment concept, I also used the three-factor high-order model. Developmental resources, positive affect and psychological capital served as the three dimensions, each dimension had three items as their indicators respectively (Carlson et al., 2006). Based on the need of SEM, a correlation table showing the factor correlations of the latent variables was provided here (Table 4).

5.3 Mediation Model Testing

Alternative structural models were tested against each other to test hypotheses 4a and 4b. Specifically, the hypothesized partial mediation model (M5) was compared to a competing full mediation model (M6) in which all path coefficients from work support to job satisfaction and psychological health were constrained to zero, and to a competing direct model (M7) in which all path coefficients to and from work to family satisfaction were constrained to zero (see Table 4). The fit statistics for the three models are displayed in Table 4. The goodness of fit indices indicated that the proposed model (M5) had a substantially and significantly smaller chi-square than the null model. Also, M5 produced a significantly better fit to the data compared to M6 ($\Delta df = 2, \Delta \chi^2 = 28.568, p < .001$) and M7 ($\Delta df = 3, \Delta \chi^2 = 243.625, p < .001$).

However, in M5, the direct path from work support to psychological health showed weak and insignificant. Hence, I created M8 where the path from work support to psychological health was deleted. That is, work to family enrichment

partially mediated the relationship between work support and job satisfaction while work to family enrichment fully mediated the relationship between work support and psychological health.

Table 6

Model Fit Summary and Nested Model Comparison (N=978)

Model	Chi-square	DF	P	SRMR	NNFI	CFI	RMSEA
Partial mediation model (M5)	1304.507	395	.000	.055	.94	.95	.049
Full mediation model (M6)	1333.075	397	.000	.058	.94	.94	.049
Direct model (M7)	1548.132	398	.000	.122	.93	.93	.054
Partial mediation model (M8)	1304.764	396	.000	.055	.94	.95	.049
χ^2 difference							
(M6-M 5)	28.568	2	.000				
(M7-M5)	243.625	3	.000				
(M8-M5)	0.257	1	1.285				

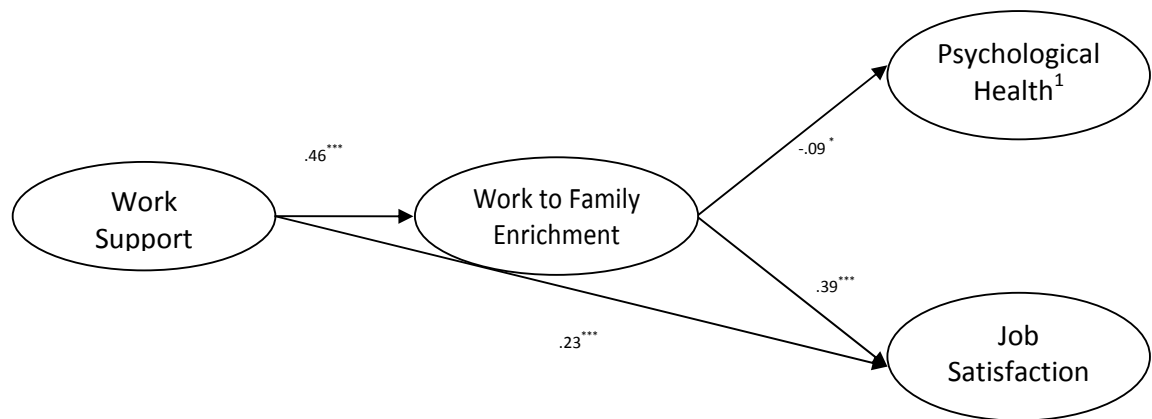
Notes: SRMR = standard root mean square residual; NNFI = non-normed fit index; CFI = comparative fit index, RMSEA = root mean square error of approximation.

Since M5 did not produce a significantly better fit to the data compared to M8 ($\Delta df = 1, \Delta \chi^2 = 0.257, p > .05$), I accept M8 which had greater degree of freedom.

The absolute values of NNFI and CFI were well above the .90; and those for SRMR and RMSEA were equal to or below 0.05 for M8. Therefore, it is concluded that M8 provided the most parsimonious fit to the data (Hau et al., 2004).

Figure 3

Path Diagram and Standardized Estimates (N=978)



Note: * $p < .05$, *** $p < .001$.

¹ Lower scores indicate better psychological health.

The paths and parameter estimates for M5 are shown in Figure 2, which suggested that work to family enrichment had the greatest impact on job satisfaction and psychological health than work support and it was also an important mediating factor between work support and job satisfaction, psychological health. In order to further confirm the mediation role of work to family enrichment, two Sobel tests were used to assess the significance of each indirect effect (MacKinnon et al., 2002; Sobel, 1982). The results obtained from the Sobel tests indicated that the indirect effects of work support through work to family enrichment on job satisfaction ($z = 5.85, p < .001$) and psychological health ($z = -2.39, p < .05$) were all in the

anticipated direction and were statistically significant. As the direct effect of work support on psychological health was not significant, hence work to family enrichment fully mediated the relationship between work support and psychological health. Therefore hypothesis 4a was partially supported and hypothesis 4b was fully supported.

To examine whether the findings based on the full sample were invariant across location, a series of within- and between-group models was specified. The results of these analyses are provided in Table 5. Specifically, concerning location, an examination of the within-group fit indices (Table 5, lines 1 and 2) revealed that the model fit both Hong Kong and Hangzhou data sets well. The chi-square values for the unconstrained and constrained simultaneous between-group analyses are presented on lines 3 and 4 respectively. The between-group chi-square difference test ($\Delta df = 5$, $\Delta \chi^2 = 3.643$, $p > .05$) indicated that there were not significant gender differences in the parameter estimates for the hypothesized relationships. Therefore it was justified to combine the samples from the two places in the study.

Table 7 *Goodness-of-Fit Information for Within- and Between-Group Comparisons on location (N=978)*

Group	Chi-square	DF	P	SRMR	NNFI	CFI	RMSEA
Hong Kong (within-group, n = 692)	1127.617	396	.000	0.53	0.92	0.93	0.052
Hangzhou (within-group, n = 286)	800.969	396	.000	0.73	0.91	0.92	0.060
Unconstrained between-group model	1929.075	140	.000	0.53	0.92	0.93	0.038
Constrained between-group model	1932.718	135	.000	0.53	0.92	0.93	0.038
χ^2 difference (constrained- unconstrained)	5	3.643	.602				

Notes: Unconstrained between-group model means all of the parameter estimates were freely estimated within location groups.

Constrained between-group model means the hypothesized relationships were constrained to be invariant across location groups.

SRMR = standard root mean square residual; NNFI = non-normed fit index; CFI = comparative fit index, RMSEA = root mean square error of approximation.

5.4 Moderating Effect Testing

In order to test the moderator effects of work demand in the work support - job satisfaction relationship and work support – psychological health relationship, two hierarchical regression procedures (Cohen & Cohen, 1983) were used to demonstrate the statistical significance and form of the main and interaction terms.

After putting job satisfaction as dependent variables and centering the proposed independent variable (work support) and moderator (work demand), the following were entered in a hierarchical regression by controlling the effects of demographic factors: Step 1: gender, age, marital status, tenure, location; Step 2: work support; Step 3: work demand; Step 4: work support \times work demand. A similar procedure was repeated using work demand as moderator in the relationship between work support and psychological health.

Table 8***Regression of Work Support and Work Demand on Job Satisfaction***

Steps		R^2	ΔR^2	β
1		.02	.02***	
	Gender			.04
	Age			.13**
	Marital status			.06
	Tenure			-.01
	Location ¹			.09**
2		.15	.13***	
	Work support			.36***
3		.15	.01	
	Work demand			.01
4		.16	.01*	
	Work support \times Work demand			.06*

Note. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. N=978

Location: 1 = Hangzhou; 2= Hong Kong

Table 7***Regression of Work Support and Job Demand on Psychological Health***

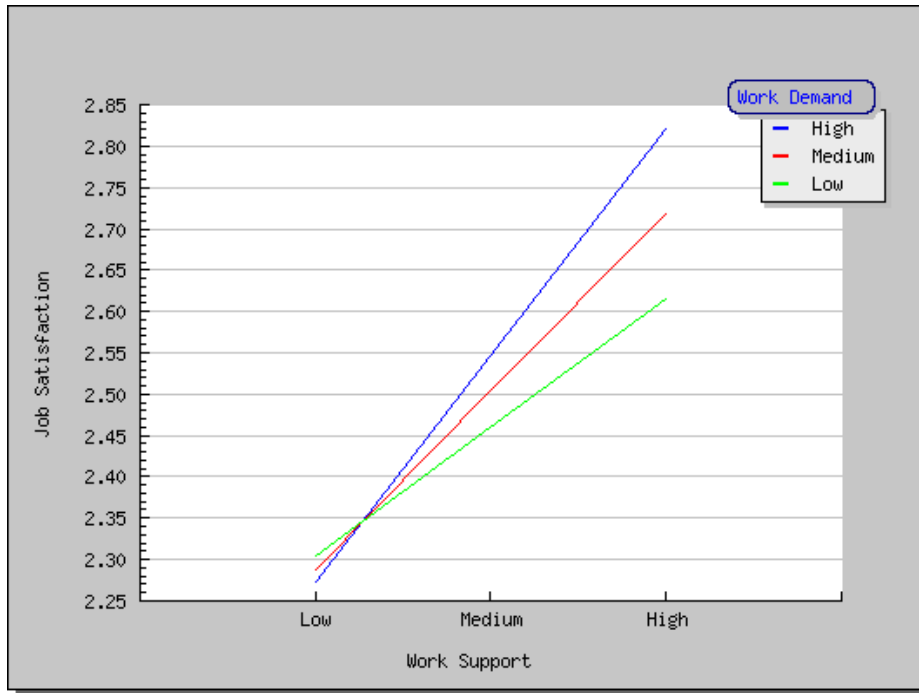
Steps		R^2	ΔR^2	β
1		.43	.43 ^{***}	
	Gender			.03
	Age			.02
	Marital status			-.04
	Tenure			.03
	Location			-.67 ^{***}
2		.43	.00	
	Work support			-.07 ^{**}
3		.45	.22 ^{***}	
	Work demand			.15 ^{***}
4		.45	.00	
	Work support \times Work demand			.04 [*]

Note. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. N=978

Location: 1 = Hangzhou; 2= Hong Kong

Figure 4

Moderating Effect of Work Support on Job Satisfaction by Work Demand



The result of the two hierarchical regressions about work demand as moderators between work support and job satisfaction, work support and psychological health are showed in Table 5 and Table 6 respectively, where the estimated regression coefficients of work support \times work demand are both significant ($\beta = .06, p \leq .05$; $\beta = .04, p \leq .05$). However, ΔR^2 in Table 6 was almost null and non-significant when I put work demand into the hierarchical regression. Therefore, the significant coefficient β is only considered to show a statistical meaning rather than a moderating effect.

Following the widely used approach designed by Aiken and West (1991), Figure 5 display the moderating effects of work demand in the relationship between work support and job satisfaction as well as psychological health, which illustrate that those employees will get high job satisfaction when they feel both high level of work support as well as high level of work demand.

CHAPTER 6 DISCUSSION AND CONCLUSION

6.1 Summary of findings

One of the purposes of the present study was to integrate work to family enrichment into the work resource-demand area, to develop a model to empirically test how work to family enrichment influence the association between work support (supervisor support, co-worker support, and organization support) and work well-being (job satisfaction and psychological health) and test the moderating effect of work demand on the relationship between work support and work well-being. The other purpose of the study was to develop and validate a concise work support measure.

The findings of this study in general support the hypotheses deriving partially from the model of job resource proposed by Greenhaus and Powell (2006) and the JD-R model (Bakker & Demerouti, 2007). It may provide insight into the underlying mechanism or process from work support through work to family enrichment to work well-being.

Voydanoff (2004a) suggested expanding the demand-resource model when assessing the work-family interface, since facilitation may be more attributable to environmental factors such as demand and resources. Also as found in previous studies, workers reported higher levels of job satisfaction when they received more support from supervisor, co-workers and organization (e.g., Demerouti et al., 2001; Ducharme & Martin, 2000). This finding fits our basic assumption based on the JD-R model that job resources have motivational potential and lead to positive outcomes.

Hence the results of the study suggest that work-family enrichment could be the motivation role in the Job Demands-Resources model. The current research findings have therefore contributed to the literature by formulating a model about work-family enrichment which extends research of work-family enrichment to Chinese societies.

Furthermore, the inclusion of work to family enrichment as a mediator extends prior research adopting the JD-R model, and allows for a more detailed assessment of the effects of job resources on outcomes. To reiterate, our findings have advanced research in JD-R model by adding work-family enrichment in addition to work engagement as a mediator. Results in the present study also suggest that work well-being (job satisfaction and psychological health) is another outcome, other than just organizational outcomes as depicted in the JD-R model. In other words, consistent with the JD-R model, job resources may not directly lead to positive work well-being if they play neither an intrinsic nor extrinsic motivational role to foster employees' growth, learning and development, nor be instrumental in achieving work-related outcomes directly. The work-family enrichment well captures the nature of an intrinsic motivational role, thus it also explains variance in job satisfaction and psychological health in addition to what work support does. Analyses examining the generalizability of the current model yielded no significant differences in the two cities in China in the overall fit of the model or in the magnitude or direction of the hypothesized relationships. This offers further support for the convergent validity of our research findings. This study therefore has theoretical contribution to organizational theory.

Additionally, the hypothesized moderating effect of work demand on the

relationship between work support and job satisfaction is supported, even though the effect is small. Although it was expected that work demand would moderate the relationship between work support and job satisfaction with higher work demand and work support leading to better work well-being, and the result turn out to be in line with my expectation as well as the demonstration in JD-R model, the weakness of the moderation suggests that the mechanism of influence between work support and work well-being is more direct.

The current study also provides validation evidence of a 10-item measure for work support comprising three facets: supervisor support, work support, and organization support. As mentioned earlier, this is one of the very few studies, specifically in Chinese contexts, which develops a relatively short and concise instrument to capture a holistic support in an organization. Hence, the scale has practical contribution to organizational research and human resource practices. The newly developed measure can be used for intervention studies and training in organizations. As the convergent validity of our findings has been demonstrated, the developed measure can be used in many other Chinese societies, say in Greater China.

6.2 Practical Implications

The practical implications of the findings of the study are that, CEOs or HR management should nourish positive and caring climate in the work place, to create a cohesive team spirit, so that staff could feel more co-workers' support, and provide more job resources in the workplace such as family-friendly policies, supervisor support and work autonomy.

Perhaps, organizations in Chinese societies should continue to offer supportive organizational policies and train managers and other employees to identify the array of sources and types possible and implement ways they can support women's efforts in balancing work and family (Siu & Phillips, 2007; Marcinkus, Whelan-Berry & Gordon, 2007).

Additionally, according to Hewitt's Attrition and Retention Asia Pacific Study (Hewitt Associates, 2006), the need for a balance between work and family has become an integral element of employee expectations from employers. Therefore, work-family enrichment appears to be an important construct that could have important implications for managers wanting to enhance the productivity of a complex demographic workplace. This has also encouraged organizations to introduce interventions to help employees manage the competing demands of work and family lives while being productive at the work place. Last but not the least, the developed concise measure of work support can be used for intervention study by human resource managers.

6.3 Limitations and Directions for Future Study

This study has several limitations and the results should be interpreted with caution. Firstly, parallel mediating factor has not been assessed, family-to-work enrichment may bridge up the relationship between family support and family satisfaction, similar with the process in work environment. The effect of gender and marriage status on those main variable and process should also be examined in future.

This study adopted a cross-sectional design which implies that no conclusions can be drawn regarding the causal direction of the relationships. Because the relationships among variables are associations, a longitudinal design is required to more accurately determine the direction of causality. Future research should focus on assessing the relationships over time, which would also offer the opportunity for obtaining insight into the dynamics of the work-family interface as it evolves and changes.

The study confirms the relationships of work support and work to family enrichment and work well-being for employees in Chinese societies. Most research, including the current study, uses perceptual measures to assess support. Although perceptions typically reflect the objective situation, the actual support employees receive from work context may vary somewhat from the perceived support they attribute to it. Future research might first compare the subjective and objective measures and then evaluate any differences in their relationship with work to family enrichment and work well-being. Perhaps future can use more objective measure other than self-report measures (e.g., Lu et al., 2009).

The results indicate that findings that emerge from the samples of the studies in the developed and affluent Western countries may not always be generalized to developing countries. Many cultural, regional and local factors have to be taken into consideration while generalizing the findings. However, the significant association between work-to-family enrichment and job outcomes is comparable to similar results found in studies conducted cross-culturally (Allis & O'Driscoll, 2008; Balmforth & Gardner, 2006; Aryee et al., 2005; Wayne et al., 2004, 2006; Tompson & Werner, 1997), which suggests commonalities on the benefits of work-family

enrichment among Chinese employees. It indicates that perception of work to family enrichment may reap benefits for individuals as well as organizations. The inability to generalize to a large population of Chinese employees is one of the limitations also. Future research should explore more in both Chinese and Western societies to reveal the mechanisms underlying the effects of job resources on organizational outcomes and to provide evidence of convergent validity.

Although multiple roles may be beneficial, there is a point where too many roles and too much demand can result in overload (Barnett & Hyde, 2001). Psychological measures exist to assess role conditions and some buffering variables have been assessed (e.g., social support) (Carlson & Perrewé, 1999). Researchers are beginning to explore questions of at what point multiple roles move from being resources to overload (see Hammer, Cullen, & Neal, 2005; Voydanoff, 2004a), but more testing is needed. While Voydanoff (2004a) found some evidence that demand was more strongly related to work-family conflict and work resources related to work-family enrichment, cross-over effects were found. Work-family conflict research often conceptualizes demand as negative and excessive, but demand involves a wide range of reactions that might include negative, neutral, or positive affective responses. Future research can address the impact of demand-resources along with both work-family conflict and work-family enrichment, but we may want to use broad measures of perceived work and family demand that capture a wider range of possible responses (e.g., Boyar, Carr, Mosley, & Carson, 2007).

6.4 Conclusion

Despite these limitations, the study provides an important contribution to the

work-family literature. To conclude, my study is the one of the very few that provides evidence linking the JD-R model and the work-family enrichment model (see Siu et al., In press), and using work well-being as an outcome. I found a moderating effect of work demand on the relationship between work support and job satisfaction, although the effect is small. Also I conclude that the theory of work-family enrichment developed within a Western context is also generalizable to Chinese samples.

While I examined the mediating effect of work to family enrichment, other antecedents and consequences still need to be considered. On the antecedent side of the equation, I believe that boundary characteristics, particularly selective boundary permeability, would be an important predictor of enrichment. A resource gain acquired from work, for example, cannot yield enhanced functioning in the family if it does not find a port of entry or an opportunity to be expressed within the family. Individuals in work or family systems that effectively monitor their boundaries and allow potentially beneficial elements to enter the system will experience greater enrichment. More broadly, resource-rich work and family environments such as those that provide for the acquisition of new skills, feedback, or emotional support allow for greater enrichment. Thus, core job characteristics and analogous measures in the family would be relevant predictors of enrichment. As the knowledge of this construct grows, it will be critical to further examine potential antecedents and consequences. Also, it could be interesting to investigate further on the moderated mediation and mediated moderation to get a more detailed assessment of those variables.

Appendix I

WORK-FAMILY BALANCE

(2009)

The aim of this survey is to find out which work and life demands influence health, work performance and family outcomes, as well as identify which work-life policies are of most value to employers and employees.

Remember that no personally identifiable information will be collected on the survey (other than general demographic and work role information). All participation is voluntary and entirely confidential.

In order to ensure that your responses can be matched over time, you will create a codeword to be included on each survey.

How to create your codeword

First 3 letters of your mother's maiden name, e.g. If your mother's maiden name was Solomon = **sol**

Date of your birth eg if you were born on the 17th = **17**; if you were born on the 4th = **04**

Two digits of the month of your birth eg If you were born in January = 01

Your code word would then be: sol/17/jan

Create your code word _____/_____/_____

First 3 letters of mothers maiden name/date of your birth/ month of your birth

What section/department do you work in? Please state: _____

What site/town/city do you normally work in?

1 Hangzhou 2 Hong Kong 6 Others (Please state) _____

Work Support

These questions ask about the support you receive from other people about work-related problems. Using the response scale below indicate how you were provided with the following support during the past 3 months?

1. *Never* 2. *Very Occasionally* 3. *Sometimes*
 4. *Often* 5. *Very often* 6. *All the time*

Please tick your response	Never All the time					
	1	2	3	4	5	6
How often did you get the following support from your supervisor ?						
1. helpful information or advice?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. sympathetic understanding and concern?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. clear and helpful feedback?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often did you get the following support from your colleagues ?						
4. helpful information or advice?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. sympathetic understanding and concern?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. clear and helpful feedback?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Organizational Culture

Use the response scale below to answer the question.

- 1 = *Totally disagree* 2 = *Disagree* 3 = *Neutral* 4 = *Agree* 5 = *Totally agree*

Please tick your response	Totally Disagree			Totally Agree	
	1	2	3	4	5
1. Managers in this organization are generally considerate towards the private life of employees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. In this organization, people are sympathetic towards care responsibilities of employees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. In this organization it is considered important that, beyond their work, employees have sufficient time left for their private life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. This organization is supportive of employees who want to switch to less demanding jobs for private reasons	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Work to Family Enrichment

These questions ask you to think about the positive side of balancing work and family commitments. Use the response scale below to answer the question.

1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree

Please tick your response	Strongly Disagree			Strongly Agree	
	1	2	3	4	5
<i>My involvement in my work:</i>					
1. Helps me to understand different viewpoints and this helps me to be a better family member	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Helps me to gain knowledge and this helps me to be a better family member	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Helps me acquire skills and this helps me to be a better family member	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Puts me in a good mood and this helps me to be a better family member	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Makes me feel happy and this helps me to be a better family member	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Makes me cheerful and this helps me to be a better family member	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Helps me feel personally fulfilled and this helps me to be a better family member	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Provides me with a sense of accomplishment and this helps me be a better family member	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Provides me with a sense of success and this helps me to be a better family member	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Work Demands

These questions evaluate the demands that your work make on you. Please use the response scale below to answer the questions.

1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree

Please tick your response	Strongly Disagree		Strongly Agree		
	1	2	3	4	5
1. My job requires all of my attention.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I feel like I have a lot of work demand.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I feel like I have a lot to do at work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. My work requires a lot from me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I am given a lot of work to do.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Job satisfaction

These questions ask satisfied you are with your current job. Use the response scale below to answer the question.

1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree

Please tick your response	Strongly Disagree		Strongly Agree		
	1	2	3	4	5
1. In general I don't like my job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. All in all I am satisfied with my job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. In general I like working here	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Health

These questions ask you about your mental health. Have you recently experienced the following during the past few weeks?

Please circle your response	Better than usual	Same as usual	Less than usual	Much less than usual
	1	2	3	4
1. Being losing confidence in yourself?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. felt capable of making decisions about things?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. been able to face up to your problems?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. felt that couldn't overcome your difficulties?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Been able to enjoy your normal day-to-day activities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Been feeling unhappy and depressed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Been feeling reasonably happy all things considered?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Been thinking of yourself as a worthless person?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Demographics

Please tick the most appropriate box or write your answer in the space provided.

1. Are you male or female?	<input type="checkbox"/> Male	<input type="checkbox"/> Female
2. How old are you?	Please state: _____ (years)	
3. What is your current marital status?	<input type="checkbox"/> 1=Single/never married <input type="checkbox"/> 2= Married/cohabitating	<input type="checkbox"/> 3=Divorced/separated
4. If married/cohabitating, does your spouse/partner work outside the home?	<input type="checkbox"/> Yes full-time <input type="checkbox"/> Yes part-time <input type="checkbox"/> No	
5. What is your highest grade or academic level completed?	<input type="checkbox"/> 1 Secondary education <input type="checkbox"/> 2 TAFE/Diploma	<input type="checkbox"/> 3 University/College degree <input type="checkbox"/> 4 Postgraduate degree
6. How long have you worked for this company?	Please state: _____ (years)	
7. What is your job role/title?	Please state: _____	

8. Please indicate what occupational group your job belongs to:

Managers	Professionals	Technicians and Associate Professionals	Clerical Support Workers	Service and Sales Workers	Skilled Agricultural, Forestry or Fishery Workers	Craft and related Trades Workers	Plant and Machine Operators and Assemblers	Manual Workers	Armed Forces
1	2	3	4	5	6	7	8	9	0
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Any comments you would like to make?

Thank you for taking the time to complete this questionnaire

工作与家庭的平衡调查

(2009)

本次调查的目的在于找出工作资源是如何对工作和家庭产生影响的，同时明确工作—生活策略无论是对雇主，还是雇员来说都是最有价值的。

请记住，我们在调查中将不会收集任何个人辨识信息（除了一般性的人口统计学变量和工作角色信息）。所有的参与者都是自愿的，其结果将完全保密。

为了确保能在日后的纵向研究中识别你所回答的问卷，我们将为你创造一个编号，署在每份调查问卷上。

如何创造你的编号

你母亲姓氏的头三个拼音字母，例如，如果你母亲 Zhang，那么头三个字母就是 **zha**。

你出生日期的两位数字，例如，如果你是在 17 号出生的，那么你的编号就是 **17**；

如果你是在 4 号出生的，你的编号就是 **04**。

你生日月份的两位数字。例如，如果你是一月出生的，那么你的编号是 **01**。

你的编码是：zha/17/01

创造属于你自己的编码 _____ / _____ / _____

母亲娘家姓的头三个字母/ 出生的日子 / 生日月份的头三个字母

请问您所在的工作单位是： _____

您通常的工作地点是： 1 杭州 2 香港 3 其他（请注明） _____

工作支持

下列问题询问了你在遇到与工作有关的问题时，所感受到的来自他人的支持。请用如下反应等级来表示在过去三个月中你所感受的支持频率。(1. 从不 2. 甚少 3. 有时 4. 经常 5. 非常频繁 6. 总是)

请你按照自己的选择在空格内打勾	从不						总是					
	1	2	3	4	5	6	1	2	3	4	5	6
你从 上级 那里获得如下支持的频繁程度如何？												
1. 有帮助的信息或建议？												
2. 善解人意和关心？												
3. 清晰而有帮助的反馈？												
你从 同事 那里获得如下支持的频繁程度如何？												
4. 有帮助的信息或建议？												
5. 善解人意和关心？												
6. 清晰而有帮助的反馈？												

组织文化 (1=完全不同意 2=不同意 3=没有同意也没有不同意 4=同意 5=完全同意)

你按照自己的选择在空格内打勾	完全不同意					完全同意				
	1	2	3	4	5	1	2	3	4	5
1. 你们组织的管理者们通常会考虑员工的个人生活										
2. 在你们组织中，人们理解员工所肩负照顾他人的责任										
3. 在你们组织中，大家认为工作之余，员工有充足的时间留给自己的私人生活是重要的										

4. 你们组织支持员工由于私人原因而要求调到压力比较小的工作岗位上					
-----------------------------------	--	--	--	--	--

工作家庭充实性

下列问题要求你思考一下平衡工作和家庭义务的积极方面。请用如下反应等级来回答问题。

1 = 非常不同意 2 = 不同意 3 = 没有同意也没有不同意 4 = 同意 5 = 非常同意

请你按照自己的选择在空格内打勾	非常不同意			非常同意	
	1	2	3	4	5
我对工作的投入:					
1. 帮助我理解了不同的观点, 这促使我成为更好的家庭成员					
2. 帮助我获得了知识, 这促使我成为更好的家庭成员					
3. 帮助我掌握了技能, 这促使我成为更好的家庭成员					
4. 使我心情好, 这促使我成为更好的家庭成员					
5. 使我感到快乐, 这促使我成为更好的家庭成员					
6. 使我开心, 这促使我成为更好的家庭成员					
7. 使我个人感到充实, 这促使我成为更好的家庭成员					
8. 为我提供了一种成就感, 这促使我成为更好的家庭成员					
9. 为我提供了一种成功感, 这促使我成为更好的家庭成员					

工作要求

如下问题评价了工作和家庭对你的要求，请用下面的反应等级来回答问题。

1 = 非常不同意 2 = 不同意 3 = 没有同意也没有不同意 4 = 同意 5 = 非常同意

请你按照自己的选择在空格内打勾	非常不同意			非常同意	
	1	2	3	4	5
1. 我的工作需要我全部的注意力					
2. 我觉得我有很多工作要求					
3. 我觉得在工作时我有很多事情要做					
4. 我的工作需要我付出很多					
5. 公司派给我很多工作					

工作满意度

这些问题询问了你对目前工作的满意程度，请用如下反应等级来回答问题。

1 = 非常不同意 2 = 不同意 3 = 没有同意也没有不同意 4 = 同意 5 = 非常同意

请你按照自己的选择在空格内打勾	非常不同意			非常同意	
	1	2	3	4	5
1. 一般来说，我不喜欢我的工作					
2. 总体来说，我对我的工作感到满意					
3. 一般来说，我喜欢在这里工作					

个人健康

如下问题询问了你的生理和心理健康状况，请选出你的答案，在空格内打勾。

在过去几个星期内你是否有过如下表现：

请你按照自己的选择在空格内打勾	比平时好一些 1	和平时一样 2	比平时差一些 3	比平时差很多 4
1. 对自己失去信心				
2. 觉得在处理事情时可以拿得定主意				
3. 能够勇敢面对问题				
4. 觉得无法克服困难				
5. 觉得日常生活有趣味				
6. 觉得不快乐或郁闷				
7. 大致上感到快乐				
8. 觉得自己没用				

人口统计学变量

请在适合您的空格上打勾，或者在空格处填写您的答案。

1. 性别 男 女	2. 年龄 请填写 _____ (岁)
3. 婚姻状况？	单身/未婚 结婚/同居 离婚/分居

4. 如果已婚/同居，您的配偶/伴侣是否有工作	<input type="checkbox"/> 有，全职 <input type="checkbox"/> 有，兼职 <input type="checkbox"/> 没有			
5. 你的最高学历是	高中	中专	大学/大专	研究生
6. 你在你公司工作了多久？ ____ (年)	7. 你的工作职位是？ 请填写： ____			

8. 你的工作性质属于（请在最适合您的空格上打勾）

管理 人员	教师	专业技术人员 /半专业人员	文员	服务和销 售人员	农/林/渔 行业工人	公务员	车间机器操作工 /流水线工人	手工 工人	军人
1	2	3	4	5	6	7	8	9	0

你还有什么需要补充的吗？

感谢你填完这份问卷。你们的每一个回答都是重要的，将被包含在本研究中。

REFERENCES

- Adams, G., King, L., & King, D. (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), 411-420.
- Aiken, L. S. & West, S. G. (1991). *Multiple Regression: Testing and Interpreting Interactions*. Newbury Park, CA: Sage.
- Allen, T. D. (2001). Family-supportive work environments: the role of organizational perceptions. *Journal of Vocational Behavior*, *58*, 414-435.
- Allen, T. D., Herst, D. E. L., Bruck, C. S., & Sutton, M. (2000). Consequences associated with work-to-family conflict: A review and agenda for future research. *Journal of Occupational Health Psychology*, *5*, 278-308.
- Allis, P., & O'Driscoll, M. (2008). Positive effects of non-work-to-work facilitation on well-being in work, family and personal domains. *Journal of Managerial Psychology*, *23*(3), 273-291.
- Anderson, S. E., Cooney, B. S., & Byerly, R. T. (2002). Formal organizational initiatives and informal workplace practices: Links to work-family conflict and job-related outcomes. *Journal of Management*, *28*, 787-810.
- Ayree, S., Srinivas, E., & Tan, H. H. (2005). Rhythms of life: antecedents and outcomes of work-family balance in employed parents, *Journal of Applied Psychology*, *90*(1), 132-146.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, *16*, 74-94.
- Baral, R., & Bhargava, S. (2010). Work-family enrichment as a mediator between organizational interventions for work-life balance and job outcomes. *Journal of Managerial Psychology*, *25*(3), 274-300.
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art, *Journal of Managerial Psychology*, *22*(3), 309-328.

- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement, *Career Development International*, 13(3), 209-223.
- Bakker, A.B., & Derks, D. (2010). Positive Occupational Health Psychology. In S. Leka & J. Houdmont (Eds.), *Occupational health psychology: A key text*. Oxford: Wiley-Blackwell.
- Bakker, A. B., & Schaufeli, W. B. (2008). Positive organizational behavior: engaged employees in flourishing organizations, *Journal of Organizational Behavior*, 29, 147-154.
- Balmforth, K., & Gardner, D. (2006). Conflict and facilitation between work and family: realizing the outcomes for organizations. *New Zealand Journal of Psychology*, 35(2), 69-76.
- Barnett, R. C., & Hyde, J. S. (2001). Women, men, work, and family. *American Psychologist*, 56, 781-796.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529.
- Beehr, T. A., Jex, S. M., Stacy, B. A., & Murray, M. A. (2000). Work stressors and co-worker support as predictors of individual strain and job performance. *Journal of Organizational Behaviour*, 21, 391-405.
- Behson, S. J. (2005). The relative contribution of formal and informal organizational work-family support. *Journal of Vocational Behaviour*, 66, 487-500.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88, 588-606.
- Beutell, N. J., & Wittig-Berman, U. (2008). Work-family conflict and work-family synergy for generation X, baby boomers, and matures: generational differences, predictors, and satisfaction outcomes. *Journal of Managerial Psychology*, 23(5), 507-523.

- Blau, P. M. (1964). *Exchange and Power in Social Life*. New York, NY: John Wiley & Sons.
- Bond, J. T., Galinsky, E., & Swanberg, J. E. (1998). *The 1997 national study of the changing workplace*. New York: Families and Work Institute.
- Boyar, S. L., Carr, J. C., Mosley, D. C., & Carson, C. M. (2007). The development and validation of scores on perceived work and family demand scales. *Educational and Psychological Measurement, 67*(1), 100-115.
- Bu, N., & McKeen, C. A. (2000). Work and family expectations of the future managers and professionals of Canada and China. *Journal of Managerial Psychology, 15*, 771–794.
- Bronfenbrenner, U. (1989). Ecological systems theory. *Annals of Child Development, 6*, 187-249.
- Brough, P. & O’Driscoll, M. P. (2005). Work-family conflict and stress. In A-S. Antoniou and C.L. Cooper (Eds.), *Research companion to organizational health psychology*. (pp. 346-365). Cheltenham, UK: Edward Elgar.
- Burke, R. J., & Greenglass, E. (1987). Work and family. In C. L. Cooper & I. Robertson (Eds.), *Occupational stress and organizational effectiveness* (pp. 273-320). New York: Praeger.
- Byrne, B. M. (2001). *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Carlson, D. S., & Kacmar, K. M. (2000). Work-family conflict in the organization: Do life role values makes a difference? *Journal of Management, 26*, 1031-1054.
- Carlson, D. S., & 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), 513-540.

- Carlson, D. S., Kacmar, K. M., Wayne, J. H., & Grzywacz, J. G. (2006). The effects of internal career orientation on multiple dimensions of work-family conflict. *Journal of Family and Economic Issues, 24*, 99-166.
- Cooper, C. L., & Nelson, D. L. (Eds.) (2006). *Positive Organizational Behavior: Accentuating the positive at work*. Thousand Oaks, CA: Sage.
- Cooper, C. L. (1998). The changing nature of work. *Community Work and Family, 1*(3), 313-317.
- Crouter, A. C. (1984). Spillover from family to work: The neglected side of the work-family interface. *Human Relations, 37*, 425-442.
- DeCharms, R. (1968), *Personal Causation*, Hillsdale, NJ: Lawrence Erlbaum Associates.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-determination in Human Behavior*. New York, NY: Plenum Press.
- Demerouti, E., & Bakker, A. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology, 86*(3), 499-512.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology, 86*, 499-512.
- Dijkers, J. S. E., Geurts, S. A. E., Dulk, L. D., Peper, B., Taris, T. W., & Kompier, M. A. J. (2007). Dimensions of work-home culture and their relations with the use of work-home arrangements and work-home interaction, *Work & Stress, 21*(2), 155-172.
- Dijkers, J. S. E., Geurts, S. A. E., Den Dulk, L., Peper, B., & Kompier, M. A. J. (2004). Relations among WH culture, the utilization of WH arrangements, and WH interference. *International Journal of Stress Management, 11*, 323-345.
- Doi, Y. (2005). An epidemiologic review on occupational sleep research among Japanese workers. *Industrial Health, 43*, 3-10.

- Ducharme, L. J., & Martin, J. K. (2000). Unrewarding work, coworker support, and job satisfaction: A test of the buffering hypothesis. *Work and Occupations*, 27(2), 223-243.
- Eby, L. T., Casper, W. J., Lockwood, A., Bordeaux, C., & Brinley, A. (2005). Work and family research in IO/OB: Content analysis and review of the literature (1980–2002). *Journal of Vocational Behaviour*, 66, 127–197.
- Eden, D. (2001). Vacations and other respites: Studying stress on and off the job. In C. L. Cooper & I. T. Robertson (Eds.), *International review of industrial and organizational psychology*. (pp. 121–146). Chichester, UK: Wiley.
- Edwards, J. R., & Rothbard, N. P. (2000). Mechanisms linking work and family: Clarifying the relationship between work and family constructs. *Academy of Management Review*, 25(1), 178-199.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71 (3), 500-507.
- Feng, S. (2010, Jan 6). Happiest city in China: Hangzhou. *China Real Time Report*. Retrieved from <http://www.chinarealtime.com>.
- Ford, J. K., MacCallum, R. C., & Tait, M. (1986). The application of exploratory factor analysis in applied psychology: A critical review and analysis. *Personnel Psychology*, 39, 291–314.
- Ford, M. T., Heinen, B. A. & Langkamer, K. L. (2007). Work and family satisfaction and conflict: a meta-analysis of cross domain relations. *Journal of Applied Psychology*, 92(1), 57-80.
- Friedman, S. D., & Greenhaus, J. H. (2000). *Work and family—allies or enemies? What happens when business professionals confront life choices*. New York: Oxford University Press.
- Frone, M. R., Russell, M., & Cooper, M. L. (1992). Antecedents and outcomes of work–family conflict: Testing a model of the work–family interface. *Journal of Applied Psychology*, 77, 65-78.

- Frone, M. R. (2003). Work-family balance. In J. C. Quick & L. E. Tetrick (Eds.), *Handbook of Occupational Health Psychology* (pp. 143-162). Washington, D.C.: American Psychological Association.
- Frone, M. R., Yardley, J. K., & Markel, K. S. (1997). Developing and testing an integrative model of the work-family interface. *Journal of Vocational Behavior, 50*, 145-167.
- Glass, J., & Finley, A. (2002). Coverage and effectiveness of family-responsive workplace policies. *Human Resource Management Review, 12*, 313-337.
- Goff, S. J., Mount, M. K., & Jamison, R. L. (1990). Employer supported child care, work/family conflict, and absenteeism: A field study. *Personnel Psychology, 43*, 793-809.
- Goode, W. J. (1960). A theory of role strain. *American Sociological Review, 25*, 483-496.
- Gordon, J., Beatty, J., & Whelan-Berry, K. (2002). The midlife transition of professional women with children. *Women in Management Review, 17*(7), 328-341.
- Gordon, J. R., Whelan-Berry, K., & Hamilton, E. A. (2007). The relationship among work-family conflict and enhancement, organizational work-family culture, and work outcomes for older working women. *Journal of Occupational Health Psychology, 12*(4), 350-364.
- Greenhaus, J. H., Collins, K. M., & Shaw, J. D. (2003). The relation between work-family balance and quality of life. *Journal of Vocational Behavior, 63*(3), 510-531.
- Greenhaus, J. H., & Beutell, N. (1985). Sources of conflict between work and family roles. *Academy of Management Review, 10*, 76-88.
- Greenhaus, J. H., Callanan, G. A., & Godshalk, V. M. (2000). *Career management*. Fort Worth: The Dryden Press.

- Greenhaus, J. H., & Parasuraman, S. (1994). Work-family conflict, social support and well-being. In Davidson, M. & Burke, R. (Eds), *Women in Management: Current Research Issues* (pp. 213-223). Paul Chapman, London,
- Greenhaus, J. H., & Parasuraman, S. (1999). Research on work, family, and gender: Current status and future directions. In G. N. Powell (Ed.), *Handbook of gender and work* (pp. 391-412). Thousand Oaks, CA, US: Sage.
- Greenhaus, J. H., & Powell, G. N. (2006). When work and family are allies: A theory of work-family enrichment. *Academy of Management Review*, 31(1), 72-92.
- Grzywacz, J. G. (2000). Work-family spillover and health during midlife: Is managing conflict everything? *American Journal of Health Promotion*, 14, 236-243.
- Grzywacz, J. G. (2002). Toward a theory of work-family facilitation. Paper presentation, 34th *Annual theory construction and research methodology workshop* (November). Houston, TX.
- Grzywacz, J. G., & Bass, B. L. (2003). Work, family and mental health: Testing different models of work-family fit. *Journal of Marriage and Family*, 65(1), 248-261.
- Grzywacz, J. G., & Marks, N. F. (2000). Reconceptualizing 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, 111-126.
- Grzywacz, J. G., & Butler, A. B. (2005). The impact of job characteristics on work-to-family facilitation: testing a theory and distinguishing a construct, *Journal of Occupational Health Psychology*, 10(2), 97-109.
- Grzywacz, J. G., Carlson, D. S., Kacmar, K. M., & Wayne, J. H. (2007). A multi-level perspective on the synergies between work and family. *Journal of Occupational and Organizational Psychology*, 80, 559-574
- Hackman, J. R., & Oldham, G. R. (1980). *Work redesign*. Reading, MA: Addison-Wesley.

- Hakanen, J. J., Bakker, A. B. & Demerouti, E. (2005). How dentists cope with their job demands and stay engaged: the moderating role of job resources. *European Journal of Oral Sciences*, *113*, 479-487.
- Halbesleben, J. R. B. & Buckley, M. R. (2004). Burnout in organizational life. *Journal of Management*, *30*, 859-879.
- Hall, D. T., & Richter, J. (1988). Balancing work life and home life: what can organizations do to help? *Academy of Management Executive*, *11*(3), 213-223.
- Hall, A., & Wellman, B. (1985). Social networks and social support. In S. Cohen & S. L. Syme (Eds), *Social Support and Health* (pp. 23-41). Harcourt Brace Jovanovich, Boston, MA.
- Hammer, L. B. (2003). Work–family enrichment: An expansion of the work–family paradigm. In L. B. Hammer (Chair) Symposium. 18th *Annual society for industrial and organizational psychology conference* (April). Orlando, FL.
- Hammer, L. B., Neal, M. B., Newsom, J. T., Brockwood, K. J., & Colton, C. L. (2005). A longitudinal study of the effects of dual-earner couples' utilization of family-friendly workplace supports on work and family outcomes. *Journal of Applied Psychology*, *90*, 799–810.
- Hammer, L. B., Cullen, J. C., Neal, M. B., Sinclair, R. R., & Shafiro, M. V. (2005). The longitudinal effects of work-family conflict and positive spillover on depressive symptoms among dual-earner couples. *Journal of Occupational Health Psychology*, *10*(2), 138-154.
- Hanson, G. C., Hammer, L. B., & Colton, C. L. (2006), Development and validation of a multidimensional scale of perceived work-family positive spillover, *Journal of Occupational Health Psychology*, *11*(3), 249-265.
- Haworth, J. T. (1997), *Work, Leisure and Well-being*, Routledge, London.
- Hewitt's Attrition and Retention Asia Pacific Study (2006), Hewitt's Attrition and Retention Asia Pacific Study, available at:
www.hewittassociates.com/Lib/assets/AP/en-AP/pdfs/attrition_retention_2006.pdf (accessed 8 March 2008).

- Hill, E. J., Ferris, M., & 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, 220-241.
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: advancing conservation of resources theory. *Applied Psychology: An International Review*, 50, 337-370.
- Hu, L. T., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological Methods*, 3, 424-453.
- Jahn, E., Thompson, C. & Kopelman, R. (2003). Rationale and construct validity evidence for a measure of perceived organizational family support (POFS): because purported practices may not reflect reality. *Community, Work, and Family*, 6(2), 123-140.
- Jöreskog, K. G., & Sörbom, D. (1998). *LISREL 8: User's reference guide*. Chicago: Scientific Software International.
- Kahn, R. L., Wolfe, D. M., Quinn, R., Snoek, J. D., & Rosenthal, R. A. (1964). *Organizational stress*. New York: Wiley.
- Kalliath T. J., O'Driscoll M. P. & Brough P. (2004). A confirmatory factor analysis of the General Health Questionnaire-12. *Stress and Health*, 20, 11-20.
- Kanter, R. M. (1977). *Work and family in the United States: A critical review and agenda for research and policy*. New York: Russell Sage Foundation.
- Keene, J. R., & Quadagno, J. (2004). Predictors of perceived work-family balance: gender difference or gender similarity? *Sociological Perspectives*, 47(1), 1-23.
- Kim, J. O., & Mueller, C. W. (1978). *Factor analysis: Statistical methods and practical issues*. New Park, CA: Sage.

- King, L. A., Mattimore, L. K., King, D. W., & Adams, G. A. (1995). Family support inventory for workers: A new measure of perceived social support from family members. *Journal of Organizational Behavior, 16*, 235–258.
- Kinnunen, U., Mauno, S., Geurts, S., & Dikkers, J. (2005). Workfamily culture in organizations: Theoretical and empirical approaches. In S. A. Y. Poelmans (Ed.), *Work and family: An international perspective* (pp. 87120). Mahwah: Lawrence Erlbaum.
- Kirchmeyer, C. (1992a). Nonwork participation and work attitudes: A test of scarcity versus expansion models of personal resources. *Human Relations, 45*(8), 775–796.
- Kirchmeyer, C. (1992b). Perceptions of nonwork-to-work spillover: Challenging the common view of conflict-ridden domain relationships. *Basic and Applied Social Psychology, 13*(2), 231-249.
- Kirchmeyer, C. (1993). Nonwork-to-work spillover: a more balanced view of the experiences and coping of professional women and men. *Sex Roles, 28*, 531–552.
- Kossek, E. E., Colquitt, J. A., & Noe, R. A. (2001). Caregiving decisions, well-being, and performance: The effects of place and provider as a function of dependent type and work–family climates. *Academy of Management Journal, 44*, 29–44.
- Kossek, E. E., & Ozeki, C. (1998). Work–family conflict, policies, and the job-life satisfaction relationship: A review and directions for organizational behavior human resources research. *Journal of Applied Psychology, 83*, 139–149.
- Kram, K. (1985), *Mentoring at Work: Developmental Relationships in Organizational Life*, Scott, Foresman, Glenview, IL.
- Lambert, S. J. (1990). Processes of linking work and family: A critical review and research agenda. *Human Relations, 43*, 239–257.
- Lapierre, L. M., & Allen, T. D. (2006). Work-supportive family, family-supportive supervision, use of organizational benefits and problem-focused coping:

implications for work-family conflict and employee well-being. *Journal of Occupational Health Psychology*, 11(2), 169-181.

Liu, J. Y., Siu, O. L., & Shi, K. (2010). Transformational Leadership and Employee Well-Being: The Mediating Role of Trust in the Leader and Self-Efficacy. *Applied Psychology: An International Review*, 59 (3), 454-479.

Lu, J. F., Siu, O. L., Spector, P., & Shi, K. (2009). Antecedents and Outcomes of a Four-Fold Taxonomy of Work-Family Balance in Chinese Employed Parents. *Journal of Occupational Health Psychology*. 14(2), 182-192.

Luthans, F. (2002). Positive organizational behavior: developing and managing psychological strengths, *Academy of Management Executive*, 16, 57-72.

Lyness, K., Thompson, C., Francesco, A. & Judiesch, M. (1999). Work and pregnancy: individual and organizational factors influencing organizational commitment timing of maternity leave and return to work. *Sex Roles*, 41, 485-508.

MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7, 83-104.

Major, V. S., Klein, K. J., & Ehrhart, M. G. (2002). Work time, work interference with family, and psychological distress. *Journal of Applied Psychology*, 87(3), 427-436.

Marcinkus, W. C., Whelan-Berry, K. S., & Gordon, J. R. (2007). The relationship of social support to the work-family balance and work outcomes of midlife women, *Women in Management Review*, 22(2), 86-111.

Marks, S. (1977). Multiple roles and role strain: Some notes on human energy, time and commitment. *American Sociological Review*, 42, 921-936.

Marks, S. R., & MacDermid, S. M. (1996). Multiple roles and the self: A theory of role balance. *Journal of Marriage & the Family*, 58, 417-432.

- Marsh, H.W., Balla, J. R., & McDonald, R. P. (1988). Goodness-of-fit indexes in confirmatory factor analysis: The effect of sample size. *Psychological Bulletin*, *103*, 391-410.
- Mauno, S., Kinnunen, U., & Ruokolainen, M. (2006). Exploring work- and organization-based resources as moderators between work-family conflict, well-being and job attitudes. *Work & Stress*, *20*(3), 210-233.
- Meijman, T. F., & Mulder, G. (1998). Psychological aspects of workload. In P. J. Drenth, H. Thierry, and C. J. Wolff, (Eds), *Handbook of Work and Organizational Psychology* (pp. 5-33), Erlbaum, Hove.
- McKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S.G., & Sheets, V. (2002). A comparison of models to test mediation and other intervening variable effects. *Psychological Methods*, *7*, 83-104.
- Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied Psychology*, *81*, 400-410.
- O'Driscoll, M. P. (1996). The interface between job and off-job roles: Enhancement and conflict. In C. L. Cooper, & I. T. Robertson (Eds). *International Review of Industrial and Organizational Psychology*. (pp. 279-306). Chichester: Wiley.
- O' Reilly, C.A., Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: a profile comparison approach to assessing person-organization fit. *Academy of Management Journal*, *34*, 487-516.
- Perry-Jenkins, M., Repetti, R. L., & Crouter, A. C. (2000). Work and family in the 1990s. *Journal of Marriage and the Family*. *62*(4), 981-998.
- Peeters, M. C. W., Montgomery, A., & Schaufeli, W. B. (2003). The role of family supportive organizational perceptions in three Dutch organizations. Paper presented at the 11th *European Congress of Work and Organizational Psychology*, Lisbon, Portugal.

- Perrewe, P. L., Hochwarter, W. A., & Kiewitz, C. (1999). Value attainment: An explanation of the negative effects of work–family conflict on job and life satisfaction. *Journal of Occupational Health Psychology, 4*, 318–326.
- Pettit, J. W., Kline, J. P., Gencoz, T., Gencoz, F., & Joiner, T. E., Jr. (2001). Are happy people healthier? The specific role of positive affect in predicting self-reported health symptoms. *Journal of Research in Personality, 35*, 521–536.
- Pleck, J. H. (1985). *Working wives/working husbands*. Beverly Hills, CA: Sage.
- Precher, K. J., & Leonardelli, G. J. (2001). *Calculation of the Sobel test: an interactive calculation tool for mediation tests*. available at: www.people.ku.edu/~preacher/sobel/sobel.htm
- Powell, G. N., & Greenhaus, J. H. (2006). Managing incidents of work-family conflict: A decision-making perspective. *Human Relations, 59*(9), 1179-1212.
- Rankin, E. A. (1993). Stresses and rewards experienced by employed mothers. *Health Care for Women International, 14*, 527–537.
- Rice, R. W., Frone, M. R., & McFarlin, D. B. (1992). Work–nonwork conflict and the perceived quality of life. *Journal of Organizational Behavior, 13*, 155–168.
- Rice, R. W., McFarlin, D. B., Hunt, R. G., & Near, J. P. (1985). Organizational work and the perceived quality of life: Toward a conceptual model. *Academy of Management Review, 10*, 296–310.
- Rothbard, N. P. (2001). Enriching or depleting? The dynamics of engagement in work and family roles. *Administrative Science Quarterly, 46*(4), 655-685.
- Rotondo, D. M., & Kincaid, J. F. (2008). Conflict, facilitation, and individual coping styles across the work and family domains. *Journal of Managerial Psychology, 23*(5), 484-506.
- Ruderman, M. N., Ohlott, P. J., Panzer, K., & King, S. N. (2002). Benefits of multiple roles for managerial women. *Academy of Management Journal, 45*(2), 369-386.

- Salanova, M., Agut, S., & Peiro', J. M. (2005). Linking organizational resources and work engagement to employee performance and customer loyalty: the mediation of service climate. *Journal of Applied Psychology, 90*, 1217-1227.
- Saltzstein, A. L., Ting, Y., & Saltzstein, G. H. (2001). Work–family balance and job satisfaction: the impact of family-friendly policies on attitudes of federal government employees. *Public Administration Review, 61*, 452–467.
- Seibert, S. E., Kraimer, M. L., & Liden, R. C. (2001). A social capital theory of career success. *Academy of Management Journal, 44*, 219–237.
- Self, D. R., Holt, D. T., & Schaninger, W. S. (2005). Work-group and organizational support: a test of distinct dimensions. *Journal of Occupational & Organizational Psychology, 78*(1), 133-140.
- Seligman, M., & Csikszentmihalyi, M. (2000). Positive Psychology: An introduction. *American Psychologist, 55*, 5–14.
- Shaffer, M. A., & Harrison, D. A. (1998). Expatriates' psychological withdrawal from international assignments: Work, nonwork, and family influences. *Personnel Psychology, 51*(1), 87-118.
- Sheldon, K. M., & King, L. (2001). Why positive psychology is necessary. *American Psychologist, 56*, 216–217.
- Shenkar, O., & Ronen, S. (1987). Structure and importance of work goals among managers in the People's Republic of China. *Academy of Management Journal, 30*, 564–576.
- Sieber, S. (1974). Toward a theory of role accumulation. *American Sociological Review, 39*, 567-578.
- Siu, O. L., Lu, C. Q., & Spector, P. E. (2007). Employees' well-being in Greater China: The direct and moderating effects of general self-efficacy. *Applied Psychology: An International Review, 56*, 288-301.
- Siu, O. L., Lu, J. F., Brough, P., Bakker, A., Lu C. Q., et al. (In press). Role Resources and Work-family Enrichment: The Role of Work Engagement. *Journal of Vocational Behavior*.

- Siu, O. L., & Phillips, D. R. (2007). Research on Family-friendly Employment Policies and Practices (FEPPs)-Executive Summary. *Equal Opportunity Commission and Women's Commission*, Hong Kong SARG.
- Siu, O. L., Spector, P. E., & Cooper, C. L. (2006). A three-phase study to develop and validate Chinese coping strategies scales. *Personality and Individual Differences*, *41*, 537–548.
- Siu, O. L., Spector, P. E., Cooper, C. L., & Lu, C. Q. (2005). Work stress, self-efficacy, Chinese work values and work well-being in Hong Kong and Beijing. *International Journal of Stress Management*, *12*, 274–288.
- Siu, O. L., Spector, P. E., Cooper, C. L., Lu, L., & Yu, S. F. (2002). Managerial Stress in Greater China: The Direct and Moderator Effects of Coping Strategies and Work Locus of Control. *Applied Psychology: An International Review*, *51*(4), 608-632.
- Snyder, C. R., & Lopez, S. (Eds.). (2002). *Handbook of positive psychology*. New York: Oxford University Press.
- Sobel, M. E. (1982). Asymptotic intervals for indirect effects in structural equations models. In S. Leinhardt (Ed.), *Sociological methodology* (pp. 290–312). San Francisco: Jossey-Bass.
- Sonnentag, S. (2001). Work, recovery activities, and individual well-being: a diary study. *Journal of Occupational Health Psychology*, *6*(3), 196-210.
- Spector, P. E. et al. (2007), Cross-national differences in relationships of work demands, job satisfaction, and turnover intentions with work-family conflict. *Personnel Psychology*, *60*, 805-835.
- Taris, T. W., & Feij, J. A. (2004), Learning and strain among newcomers: a three-wave study on the effects of job demands and job control, *Journal of Psychology*, *138*, 543-563.
- Thompson, C. A., Beauvais, L. L., & Lyness, K. S. (1999). When work-family benefits are not enough: The influence of work-family culture on benefit utilization, organizational attachment, and work-family conflict. *Journal of Vocational Behavior*, *54*, 392-415.

- Thompson, C., & Prottas, D. (2005). Relationships among organizational family support, job autonomy, perceived control, and employee well-being. *Journal of Occupational Health Psychology, 10* (4), 100-118.
- Tompson, H., & Werner, J. (1997). The impact of role conflict/facilitation on core and discretionary behaviours: testing a mediated model. *Journal of Management, 23*(4), 583-601.
- US Census Bureau (2001). *Statistical abstract of the United States: 2001* (121st ed.). Washington, DC: US Census Bureau.
- Van der Doef, M. P., & Maes, S. (1999). The job demands-control (-support) model and psychological well-being: a review of 20 years of empirical research. *Work and Stress, 13*(2), 87-114.
- Van Steenbergen, E. F., Ellemers, N., & Mooijaart, A. (2007). How work and family can facilitate each other: distinct types of work-family facilitation and outcomes for women and men, *Journal of Occupational Health Psychology, 12*(3), 279-300.
- Vaanaänen, A., Toppinen-Tanner, S., Kalimo, R., Mutanen, P., Vahtera, J., & Peiro, J.M. (2003), "Job characteristics, physical and psychological symptoms, and social support as antecedents of sickness absence among men and women in the private industrial sector. *Social Science and Medicine, 57*, 807-824.
- Viswesvaran, C., Sanchez, J., & Fisher, J. (1999). The role of social support in the process of work stress: a meta-analysis, *Journal of Vocational Behavior, 54*, 314-334.
- Voydanoff, P. (2004). The Effects of Work Demands and Resources on Work-to-Family Conflict and Facilitation. *Journal of Marriage and Family, 66*(2), 398-412.
- Voydanoff, P. (2005). Consequences of boundary-spanning demands and resources for work-to-family conflict and perceived stress. *Journal of Occupational Health Psychology, 10*, 491-503.

- Wadsworth, L. L., & Owens, B. P. (2007). The effects of social support on work-family enhancement and work-family conflict in the public sector. *Public Administration Review*, 67(1), 75-87.
- Wayne, J. H., Randel, A. E., & Stevens, J. (2006). The role of identity and work-family support in work-family enrichment and its work-related consequences. *Journal of Vocational Behaviour*, 69(3), 445-461.
- Wayne, J., Grzywacz, J., Carlson, & D., Kacmar, M. (2004, April). Work-family enrichment: A theoretical elaboration of the construct. In L. Eby (Chair), Coming of age: The new era of work-family research. Symposium conducted at the 19th annual meeting of the society of industrial/organizational psychology, Chicago, IL.
- Wayne, J., Musisca, N., & 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, 108-130.
- Werbel, J., & Walter, M. H. (2002). Changing views of work and family roles: A symbiotic perspective. *Human Resource Management Review*, 12, 293-298.
- White, R. (1959). Motivation reconsidered: the concept of competence. *Psychological Review*, 66, 297-333.
- Witt, L. A., & Carlson, D. S. (2006). The work-family interface and job performance: moderating effects of conscientiousness and perceived organizational support. *Journal of Occupational Health Psychology*, 11(4), 343-357.
- Wright, T. A. (2003). Positive organizational behavior: An idea whose time has truly come. *Journal of Organizational Behavior*, 24, 62-65.
- Yang, N. (2005). Individualism-collectivism and work-family interfaces: A Sino-U.S. comparison. In Poelmans SAY (Ed.), *Work and family an international research perspective* (pp. 287-318). Mahwah, NJ: Erlbaum.
- Yang, N., Chen C. C., Choi, J., & Zou, 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, 113-123.

Zedeck, S., & Mosier, K. L. (1990). Work in the family and employing organization. *American Psychologist*, 45, 240–25.