WORK AND FAMILY INFLUENCES ON JOB SATISFACTION: INFORMATION TECHNOLOGY PROVIDERS IN MALAYSIA

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JULY 2014

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Information Technology Providers in Malaysia

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A research project submitted in partial fulfilment of the
requirement for the degree of

Master of Business Administration

Universiti Tunku Abdul Rahman

Faculty of Accountancy and Management

July 2014

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DECLARATION

I hereby declare that:

(1) This MKMA25106 Research Project is the end result of my own work and that due acknowledgement has been given in the references to all sources of information be they printed, electronic, or personal.

(2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutions of learning.

(3) The word count of this research report is 19,398.

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Date: 25th July 2014

ACKNOWLEDGEMENTS

I would like to take this opportunity to thank the following people in making this research project successful.

First and foremost, I would like to express my sincere appreciation to my supervisor for her continuous guidance and support. My mentor has also been my constant source of inspiration especially when I stumbled upon several blocks during the research period.

My deepest gratitude goes to the management of the organization who had continuously encouraged their employees to participate, and to their employees who had spared their time in partaking in the survey and making substantial contribution to this research. Special thanks go to my course mates who supported me and gave me encouragement during my challenging days.

To my dearest loving family – thank you for allowing me to pursue my academic dreams and lending a hand in the house chores while I complete my studies. Your boundless love and patience made it possible for me to take the next bold step in life.

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ABSTRACT

Employees around the world are working longer hours these days. As the working hours increase over the years, it becomes harder to balance a healthy work and family life. Women' participation in the labour market too has been steadily increasing and had indirectly created high numbers of singles and single parents, causing difficulties in managing work, family and lifestyle smoothly. This leads to conflict between work and family roles. On the positive side, spillover from the work handled can enrich employees, improve employee's life quality and benefit both employee and family. At work, employees are able to gain skills and help them make better decisions at home, especially in handling issues concerning children and elderly ones. Recognizing the changing composition of demographic, cross-cultural influence, workforce trends and shift in women's employment pattern, it puts organizations in crucial position to address the employees' work-family issues that would have adverse impact on the employees' job satisfaction, hence affecting job performance and impinging on the productivity of the organizations. Past empirical studies on work-family constructs and its influence on employees' job satisfaction were mostly obtained from samples using respondents from Western countries or countries of developed economies. Currently, the work-family interface researches using developing countries are under presented, especially involving Information Technology (IT) related industry.

The research objective of this study is to examine whether work-family enrichment, work-family positive spillover and work-family conflict influence employees' job satisfaction level among employees in the IT related industry. Spillover theory and role theory had been identified for this research. Probability sampling with single quantitative data collection method using questionnaire survey consisting of well-established multi-item scales with high Cronbach alpha coefficient was used for this study. Using the explanatory study, correlation between variables was established. Only two out of three hypotheses were supported, implying the job satisfaction in the IT related service industry was positively influenced by work-family enrichment whereas it was negatively related to work-family conflict. Surprisingly, the work-family positive spillover was found to have no significant impact on the job satisfaction. The results of this research will be useful for managers in organizations to have a deeper understanding of the work-family influences while enabling managers to develop and implement effective human resource policies and procedures to strive for sustainable competitive advantage above other organizations.

CHAPTER 1

INTRODUCTION

This chapter introduces the overall background of the work-family influence on job satisfaction in global aspect, the problem statement and research questions put forward. It also looks into the significance of this study for organizations.

1.1 Background of the Study

1.1.1 Trend of 21st Century: Rising Work Hours for Employees

Employees around the world are working longer hours these days. In the recent report on 23th May 2012 by BBC News, a compilation of working hours inclusive of overtime, was published by Organisation for Economic Co-operation and Development (OECD) on its 34 members. Most developed countries like United States, Great Britain and European countries clocked in an average annual hours of 1,500 hours whereas employees from Asian countries, especially developing countries like Bangladesh, Malaysia, Thailand and Sri Lanka tend to work long hours, i.e. more than 48 hours a week which roughly equates to 2,000 hours annually. As the working hours increase over the years, it becomes harder to balance a healthy work and family life, especially when both work demand and family obligations increase many folds. It was also highlighted by Fagan, Lyonette, Smith and Saldana-Tejeda (2011) during the International Labour Organization Tripartite Meeting of Experts on Working-Time Arrangements held in Geneva, that the excessive work hours more than 48 hours is an important predictor of work-life conflict which can lead to job and life dissatisfaction. They informed that work-life conflict is generally higher among managers and

professionals, especially those of dual-earner families. Here, dual-earner or dual-income is generally referred to members of family with two take-home pay or salaries usually earned by the father and mother of the family.

1.1.2   Women's Participation in Work Force and Family Role

According to the United Nations Statistics Division, women' participation in the labour market steadily increased since 1990 and had reached 52 percent globally in 2010. However, this figure varies between 30-50 percent among continents with just 40 percent participation representing Southern Asia. Generally, employment in services sectors (wholesale and retail trade; repair of motor vehicles; transportation and storage; accommodation and food service activities; information and communication; financial and insurance activities; real estate activities; professional, scientific and technical activities; administrative and support service activities; public administration and defence; compulsory social security; education; human health and social work activities; arts, entertainment and recreation) continue to rise for both men and women, though predominantly higher for women in developed countries. Despite these changes worldwide, women continue to bear most of the responsibilities for their family including caring for children, preparing meals and carrying out housework, hence working more hours per day (paid and non-paid) compared to men. According to the gender roles, women are primarily responsible for childcare and are often dictated by family members and relatives to place family needs above the needs of career. On the other hand, large number of men still mainly focuses on working and earning enough to achieve comfortable living for the family and has less responsibility towards house chores and upbringing of children directly, hence taking up the family responsibilities by being the breadwinner of the family. According to Greenhaus and Powell (2006), male and female entrepreneurs also pursue and experience different association between work and family. Perhaps, this explains why Mennino, Rubin and Brayfield (2005) discovered women experience higher work-family conflict compared to men and the existence of spouse and children tends to aggravate the conflict even more.

Casper, Harris, Taylor-Bianco and Wayne (2011) too highlighted that conflict between work and family roles had increased as the women's participation in workforce and the hours worked increased globally. As highlighted by Aminah (2007), the percentage of married working women had increased from 61.8% (1995) to 63.9% in 2005. The increased rate of female employees had also indirectly created high numbers of singles and single parents (Innstrand, Langballe, Espnes, Aasland & Falkum, 2010), thus such individuals face difficulties in managing work, family and lifestyle smoothly. Here in Malaysia, women make up only one third of the Malaysian labor force, yet their participation rate has been increasing from 37.2 percent in 1970 to 44.5 percent in 2000 and has steadily increased to 48.8 percent to 2012. This information was obtained from Economic Planning Unit, Malaysian Prime Minister's Department, 2012. This trend is likely to continue further as women in Malaysia has better educational and employment opportunities offered in the recent years.

1.1.3   Employees' Personal Traits Influencing Work Behavior

Ones' personal traits can also shape the behaviour towards his or her work, family and lifestyle. Individual's five factor model of personality such as extraversion, agreeableness, conscientiousness, neuroticism and openness to experiences is an antecedent of work-nonwork spillover (Michel, Clark & Jaramillo, 2011). This means that one's different behaviour patterns, perceptions about multiple roles and experience in dealing with multiple roles can influence the negative and positive form of work-nonwork spillover. For example, Carlson, Kacmar, Wayne and Grzywacz (2006) and Hanson, Hammer and Colton (2006) had discovered the positive side of work and managing family that spillover from the work handled, enriches employees hence benefiting both employee and his or her family. It helps to improve the quality of life the employee strives for. At work, employees are able to gain skills and refine their behaviours that help them in making better decisions at home, especially in handling issues concerning children or even elderly ones, having more patience and ability to multitask at ease. In contrast, a person with low conscientiousness or those with high neuroticism will display

anxiety, anger or moodiness that will create conflict upon having a bad day at work and this may spillover at home when dealing with or taking care of family.

1.1.4   Mixed Results by Past Studies

In the recent decades, researchers have been paying more attention towards the work-family literatures, especially on the work-family balance, work-family enhancement, work-family facilitation, work-family enrichment, work-family positive spillover and work-family conflict (Masuda, McNall, Tammy & Nicklin, 2012). Edward and Rothbard (2000) found work and non-work domains to be inherently intertwined. Nevertheless, past researchers had disputed some of the findings made by others on various work-family constructs which leaves several gaps in this research area. Eby, Casper, Lockwood, Bordeaux and Brinley (2005) felt that no content analyze of the existing literatures were made on work and family issues, but merely studies on specific relationships between limited work and family variables were conducted. In fact, Zhao, Qu and Ghiselli (2011) found mixed results in direction, linkages and strength of relationships among work-family conflict and job satisfaction. Similarly, Masuda et al. (2012) disputed Greenhaus et al. (2006) claim on work-family enrichment and work-family positive spillover being different from one another conceptually and operationally. Additionally, Masuda et al. (2012) found that the above work-family constructs were related constructs, though distinctive. This distinction helped researchers to reduce ambiguity and step forward in the work-family positive spillover theory.

While academic researchers debate on the contradicting evidences, Eby et al. (2005) acknowledged that organizations worldwide becoming more alert about work-family impact as more women continue to serve the workforce after marriage, hence increasing in dual-earner lifestyle where both partners work and share family responsibilities simultaneously and deal with job demand that limits family roles (Allen, Herst, Bruck & Sutton, 2000; Aminah, 2007). Mcelwain, Korabik and Rosin (2005) also highlighted the increased problem society face in managing work and family responsibilities due to the change of men and women's role both in work and home. For example, both husband and wife go to work in

the morning and upon returning from a tiring day at work, either or both partners may be too exhausted to proceed with errands and may even strain their relationship, leading to arguments or even divorce in some extreme cases. This was different in the earlier days whereby traditionally, almost all household chores will be handled by the wife while the husband goes out to work and earn money. According to Warner and Hausdorf (2009), both individuals and organizations will experience serious negative outcomes if individuals have high participation rate in both work and family role. For instance, an individual who is expected to work long hours to complete his or her task would feel the energy drained out and may not be able to contribute or fulfil duties for his or her family such as taking care of elderly parents, preparing meals or helping out with children's homework. Likewise, Aminah (2008) found that extensive, non-flexible work hours or job stress may cause distress in the family domain, withdrawal from family responsibilities and adversely affecting the employee's overall quality of life.

Recognizing the changing composition of demographic, cross-cultural influence and workforce trends in the recent decades including the shift in women's employment pattern, greater family involvement by men and its impact, it puts organizations in crucial position to address the employees' work-family issues that would have adverse impact on the employees' job satisfaction, hence affecting job performance and impinging on the productivity of the organizations.

1.1.5   Challenges Faced in Information Technology (IT) Industry

The risen global competition and the emphasis on customer service and technology advances had increased people's access to work force. However, it had contributed to stress to both employees and organizations (employers) in this extreme aggressive business world. This is supported by Huffman, Payne and Castro (2003) findings who found approximately 70 percent of workers were not satisfied with their work-family balance and nearly half of these people are seeking for new jobs to alleviate the problems faced in coping both work and personal life. Information Technology (IT) companies generally provide IT related services such as software development for customers and continuous technical

support upon product delivery. The staff members also need to handle face-to-face and voice-to-voice interactions with their customers. For some, this means they would need to manage cross-border challenges as the organizations have customers in various region of the world. The job is known to be hectic and tedious and often causing stress for staff in trying to meet the customers' expectations and provide quality service to customers. It is also susceptible to long working hours, irregular work hours and inflexible work schedules, excessive job demands, limited weekend time off and demanding customer behaviours. Karatepe and Baddar (2006) had also highlighted similar problems encountered in other service industries which eventually led to high levels of role stress and excessive turnover.

Employees from IT related service industry are also expected to cope with various customer complaints and required to resolve the problems fast to the satisfaction of their customers. With the global competitive environment, IT companies strive to retain its customers by continuously improving their business model, engaging in multiple services and acquiring accreditations from international standards to compete in the same playing field. To make this a reality, part of these organizations' objectives would be to ensure its employees are able to cope with the ever increasing work demand and the changes taking place. They also need to ensure their employees are satisfied and able to retain its most productive employees whom, in turn will play an important role in dealing with customer complaints effectively and delivering superior service quality to valuable customers. However, being satisfied with the time commitments for life and home activities need not necessarily mean that employees are satisfied with their jobs. They may still have strong turnover intentions when they are not able to balance between hefty workload and family responsibilities (Qu & Zhao, 2012). Often those employees who leave or consider leaving the present job would look for alternative job that can offer them an attractive package that allows them to lead a balance work and enjoy their life, simultaneously.

While some employees may consider leaving their present job due to dissatisfaction, many would rather struggle to cope with work and family obligations, all together. Over the years, with the intention to complete the tasks

on time and minimize the risks of project delay, staff members tend to work longer hours at office, spending lesser time with family and not attending to their family obligations, hence leading to poor family role performance. Even more, some resort to bringing back work to home to fulfil the work requirements and tight deadlines, therefore spending less quality time with family or even bringing their young children to office during weekends in order to complete pending works. This causes staff to sacrifice his/her family responsibilities and personal life to meet the objectives of the company he/she works for, not to mention the mood swings, mental exhaustion or tiredness experienced that affects the general happiness, health and well-being (Allen et al., 2000) and fulfilment of family duties, thus feeling dissatisfied with the job held. Juggling the responsibilities of work, housework, child care and/or elder-care can be strenuous and lead to work-family conflict. This is especially endured by those who care for both dependent children and aging parents which are referred to as the "sandwiched generation" (Hammer, Cullen, Neal, Sinclair & Shafiro, 2005). Negative experiences obtained from work also tend to carry over to the family domain easily causing strain to family relationships.

In the recent years, more organizations from the IT industry, especially in the developing countries are hiring employees from various countries around the world. These employees have different cross-cultural background that may influence their attitude towards the jobs they handle (Hostede, 1980). According to Hostede, countries worldwide can be characterized by four main cross-cultural dimensions, namely 1) individualism-collectivism, 2) uncertainty avoidance versus risk taking, 3) power distance, or the extent to which power is unequally distributed and 4) masculinity/femininity. For example, the people of United States tend to have high individualism, low power distance and low on uncertainty avoidance whereas Malaysians have high collectivism, medium in masculinity/femininity, extremely high on power distance and very low risk takers (high on uncertainty avoidance). Understanding these cross-cultural differences in employees' attitude towards job will help researchers to recognise and differentiate the work-family enrichment, work-family positive spillover and work-family conflict on job satisfaction of the employees clearly from various parts of the world.

1.2   Problem Statement

1.2.1   Limited Research in non-Western Region

Past researchers used work-family constructs such as work-family balance, work-family enhancement, work-family facilitation, work-family enrichment, work-family positive spillover and work-family conflict in relation to job satisfaction. However, these complex issues still lack of extensive research and had covered rather limited scope of research (Eby at al., 2005; Rotondo, Carlson & Kincaid, 2003; Wayne, Karatepe & Kilic, 2009; Randel & Stevens, 2006). This is further supported by Aryee, Fields and Luk (1999) who had emphasized the needs for more potential antecedents and consequences of work-family conflict studies in non-Western setting, especially for those with closely knitted cultural norms practiced in Asian or developing countries.

Drawing from the past empirical studies carried out on work-family constructs and its influence on employees' job satisfaction, it is observed that most researchers obtained results from samples using respondents from Western countries or countries of developed economies, especially from United States. This was also agreed by Karatepe et al. (2006). Slan-Jerusalim and Chen (2009) too had highlighted that most researches has been conducted primarily using North American populations. Aminah (1996) too felt that the effects of work-family conflict on women's satisfaction are important since more women in the non-Western countries had join work force. Currently, the work-family interface researches using developing countries are under presented (Namasivayam & Zhao, 2007; Karatepe et al., 2009). Despite research attempts made to explore the work-family constructs in some Asian countries, limited published studies were found (Kim & Ling, 2001; Lo, Wright & Wright, 2003).

1.2.2   Cultural Influence on Employees

According to Karatepe et al. (2009), work and family roles are closely related to the culture of a country and strongly felt that their findings on work-family

conflict differ from those studied in the Western or affluent countries due to different cultural settings. Meanwhile, Saari (2000) and Powell, Francesco and Ling (2009) unearthed that a particular country or culture is a strong predictor of an employee's attitude towards job satisfaction. Namasivayam et al. (2007) also felt that culture of one's country tend to influence the antecedent of job satisfaction.

Zooming down further, most work-family researches covered societies with Anglo culture whereas little research had examined using non-Anglo cultures (Casper et al., 2011). They had also highlighted the needs for firms to adapt to the cultures of the country in which they operate or hire, especially in the wake of global working environment. Closer to home, Noor (2002, 2006); Nasurdin and Hsia (2008) also stated the scarce studies of work-family conflict in Malaysian environment. To date, very limited studies on work-family construct in IT related industry literature have been carried out and tend to have inconsistent outcomes. Some results in the past were not consistent too, suggesting the importance to examine these work-family enrichment, work-family positive spillover and work-family conflict and not generalize to other cultures of the world. Hence, all more reasons to explore the work-family interface in Malaysia based on the needs and conditions highlighted above. Combining these two factors, there is a need to use samples from developing countries with different cultures to test the work-family enrichment, work-family positive spillover and work-family conflict on job satisfaction.

This research will be carried out to further validate work-family constructs and its influence on job satisfaction of employees in IT related industry in Malaysia which has a typical Asian work and family culture. This research will be an important contribution, especially to work-family constructs (work-family enrichment, work-family positive spillover and work-family conflict) and job satisfaction literature encompassing Asian country of developing economic in IT related industry.

1.3   Research Question and Research Objective

For the purpose of this research, the below research question is formulated to accomplish the desired objective:

Do work-family enrichment, work-family positive spillover and work-family conflict influence employees' job satisfaction level?

The research objective of this study is to examine whether work-family enrichment, work-family positive spillover and work-family conflict influence employees' job satisfaction level.

1.4   Significance of the Study

This research aims to investigate whether work-family enrichment, work-family positive spillover and work-family conflict influence the employees' job satisfaction and the extent of these dimensions affecting employees' job satisfaction. The results of this proposed research will be useful for managers in organizations to have a deeper understanding of the work-family influences and as well as improve and provide the appropriate atmosphere for working employees such as flexible work schedule, child-care, compressed working week and leave of absence. These would lead to better job satisfaction which would proceed to higher job performance (Sundstorm, Burt & Kamp, 1980; Christen, Iyer & Soberman, 2006), increased retention and organizational commitment (Hanson et al., 2006), reduced turnover intention (Boyar, Maertz, Pearson & Keough, 2003; Karatepe et al., 2006; Karatepe & Kilic, 2007) and improved productivity (Chen, Chang & Yeh, 2004) as well as providing significant contributions to the existing research knowledge base.

1.5   Operational Definition

Below are the operational definitions for each variable used in this study:

- **Work** - activities that are done in a formal organizational setting and get paid, excluding voluntary works, self-employment and work in the family as defined by Kuchinke, Cornachione, Oh and Kan (2010).

- **Family** - extended "family" tree to encompass facilities for child-care, elder-care and personal support policies as described by Greenberg and Baron (2008).

- **Work-family enrichment** - experience gained through one role extended over another role that would improve the quality of overall life as described by Greenhaus et al. (2006).

- **Work-family positive spillover** - transfer of positive valenced affect, skills, values and behaviours from one original domain to other domain as expressed by Edwards et al. (2000).

- **Work-family conflict**- inter-role conflict where general demands of time devoted to and strain created by the job, interferes with performing family-related responsibilities as defined by Netemeyer, Boles, and McMurrian (1996).

- **Job satisfaction** – covers all characteristics of job and work environment which employee find rewarding, fulfilling and satisfying as defined by Bhuian, Menguc and Borsboom (2005).

CHAPTER 2

LITERATURE REVIEW

This chapter contains definitions of the subject matter, reviews on journal articles and published works of work-family interface and job satisfaction, addressing gaps in existing literature, related theories and formulation of hypotheses.

2.1   An Overview on Previous Researches

2.1.1   Job Satisfaction among Employees Worldwide

The concept and assessment of employees' job satisfaction have long been extensively researched and continues to expand globally. It is one of the widely studied construct in organization behaviour (Grandey, Cordeiro & Crouter, 2005) as it plays important factor to an organization's success whereby it has correlations to organization's productivity, turnover and absenteeism (Gebremichael and Rao, 2013). They also highlighted that satisfied workers are more committed towards the organisation and less likely to leave the job. According to these researchers, job satisfaction is also the most critical factor in job retention for employees.

Job satisfaction is influenced by mental health (Roelen, Koopmans & Groothoff, 2008), job characteristics, rewards, relations with supervisors and co-workers, and fulfilment of higher order needs (Marzuki, Permadi & Sunaryo, 2012) and also working conditions and individual attributes (Bokemeier & Lacy, 2005). Job satisfaction is also inspired by employees' motivation and rewards (Khalid, Mat Salim, Loke & Khalid, 2011a). The study comparing both public and private water utility industry which was conducted in Malaysia indicated that the rewards

in a form of pay, autonomy and co-workers relationship motivates employees better (intrinsic and extrinsic needs), hence leading to higher job satisfaction. It can also be contributed by task variety, work conditions, workload and career perspectives (Roelen et al., 2008) and characteristics of an organization such as role ambiguity, workload and communication with supervisors and co-workers (Ma, Samuel & Alexander, 2003). For example, job satisfaction increases when employees have supportive management and supportive colleagues but the satisfaction decreases when job demand is higher (Cortese, Colombo & Ghislieri, 2010).

Antecedents like gender and age also predicts job satisfaction of employees (Khalid, Mat Salim, Loke & Khalid, 2011b). According to this study, female workers in Malaysia experience greater job satisfaction in reference to pay, benefits, rewards, co-workers and communications while older workers has increased job satisfaction in reference to pay, benefits, co-workers and nature of work. Job satisfaction is also an antecedent to employee engagement whereby employees perform well in their job when satisfied (Abraham, 2012) and also a strong predictor of job performance (Judge, Thoreson, Bono & Patton, 2001).

Though extensive research has been done for employees' job satisfaction as a whole, the study on relationships between work-family constructs and job satisfaction is rather limited even though work-family interface contributes to job satisfaction. Such studies are also much lacking in the Asian region and have been voiced out by several scholars.

2.1.2 Definition of Work, Family and Job Satisfaction

The research of work-family interface on job satisfaction is relatively new and had only started in the early 1990s. According to Eby et al. (2005), "work" is defined as work domain variables associated with paid employment without restricting to full-time employment whereas Kuchinke et al. (2010) had termed "work" as activities that are done in a formal organizational setting and get paid, excluding voluntary works, self-employment and work in the family.

The word "family" seemed to be more complex and carries several definitions. Eby et al. (2005) had cited Piotrkowski's classification of "family" as two or more individuals who have interdependent roles with shared goals. Innstrand et al. (2010) further elaborated this definition to include two-parent families, single parents, childless couples and singles. Greenberg et al. (2008) too had extended the "family" tree to encompass facilities for child-care, elder-care and personal support policies.

The definition of "job satisfaction" is more straightforward, unlike the word "family". Bhuian et al. (2005) had defined the "job satisfaction" to encompass all characteristics of job and work environment which employee find rewarding, fulfilling and satisfying. Zhao and Namasivayam (2012, p.1) identified "job satisfaction" as "individuals' affective and cognitive evaluations of their jobs". On the other hand, Judge and Ilies (2004) defined "job satisfaction" as attitude towards one's job. In fact, Roelen et al. (2008) fine-tuned it further as the positive emotional reactions and attitudes of employees toward their jobs.

Many researchers have commonly used the terms "work-family" and "family-work" in their studies. Dixon and Bruening (2005) disclosed that these work and family interactions are bi-directional. There are also evidences from Grzywacz and Marks (2000)'s research that the work-family positive spillover dimension is conceptually distinct from the family-work positive spillover dimension. The variables "work-family" or "work-to-family" refers to work influencing family whereas "family-work" or "family-to-work" brings to the meaning of family influencing work. Researches in the past had also used slightly different terminology for the work-family interfaces. For example, the phrase "work-interference with family" and "family-interference-with work" also brings to similar meanings, i.e. "work-family conflict" and "family-work conflict", respectively (Zhao et al., 2011). In fact, most researchers use the well-established Netemeyer's item-scale developed in 1996 for both situations but had constructed the questionnaires in reverse. For instance, "The demands of my work interfere with my home and family life" is used for work-family conflict whereas "The demands of my family or spouse interfere with work-related activities" is used for family-work conflict. Similarly, work-family enrichment contains scale such as

"Makes me feel happy and this helps me be a better family member" and family-work enrichment contains scale like "Makes me feel happy and this helps me be a better worker".

Though both work-family conflict and family-work conflict measures are highly correlated and conceptual distinction between them have been made earlier (Netemeyer et al., 1996), substantial number of researchers use the work-family direction (Masuda et al., 2012) due to its strong linkage to work outcomes (Wayne, Musisca & Fleeson, 2004; Wayne et al., 2006) and work demands are easily quantified compared to family demands (Gutek, Searle & Klepa, 1991). Boyar et al. (2003) too shared this sentiment as he found that the work domain tend to receive more attention of the researchers. This is perhaps indirectly related to the earlier mentioned job satisfaction in work whereby it is widely studied and had emerged as a key component to an organization's success. Masuda et al. (2012) also focused on job satisfaction as the work outcome because it is among the commonly studied variables in organizational behaviour literature and this variable will be used in this research. Not surprising, Casper et al. (2011) also found greater work-family interference (conflict) compared to family interfering with work among Brazilian professionals. Hence, for the purpose of this research, the work-family constructs for enrichment, positive spillover and conflict constructs will be used.

2.1.3   Work-Family Enrichment

2.1.3.1 Definition

Work-family enrichment is described by Greenhaus et al. (2006) as the experience gained through one role extended over another role that would improve individual performance and the quality of overall life. Simply said, work-family enrichment is how work and family benefit from each other. Through their theoretical model, they suggested that such enrichment is achieved when resources comprising of **skills and perspectives** (e.g. interpersonal skills, coping skills and respecting individual differences), **flexibility** (e.g. flexible work arrangement), **psychological and physical resources** (e.g. self-efficacy, being optimistic, hardiness), **social-**

capital resources (e.g. networking) and **material resources** (e.g. money or gifts) acquired from one role would either improve one's performance directly (instrument path) or indirectly influence one's positive affect (affective path). Here, they referred the instrument path as situations when an employee might have learnt some conflict skills at work that is found useful when handling conflicts occurring at home. The affective path is when an employee is in a happy mood goes back home happily to his/her family members, has a positive affect and enhances performance, such as the ability to respond to family members more positively and patiently. Here, the person has the general tendency to be energetic, enthusiastic and jubilant.

As conferred by Dixon et al. (2005), the work-family enrichment is also bi-directional whereby the work experience improves family life quality whereas family experience enriches work quality. Subsequently, a model on work-family enrichment developed by Greenhaus et al. (2006) was validated by Carlson et al. (2006) using multiple dimensions on bi-directional influence on both work and family. Unlike Greenhaus et al. (2006) who found work-family enrichment to be synonymous with work-family positive spillover, work-family facilitation and work-family enhancement, Carlson and his team claimed that the constructs of the work-family enrichment, work-family facilitation, work-family enhancement and work-family positive spillover are empirically different, even though these constructs overlap. Hanson et al. (2006) also had the same opinion on the overlaying distinct constructs. For example, work-family enrichment gains obtained from one domain to enrich another domain while work-family positive spillover not necessarily transfer the gains acquired into other domain and enhance the performances. In order to attain work-family enrichment, an individual need to apply the resources gained to other domain, and the skills developed at work results in higher quality at home whereas positive spillover only involves the transfer of resources gained from one domain to another domain. On the contrary, work-family facilitation occurs through personal gains and capital gains in a form of monetary, employment benefits and social interactions (Hanson, et al., 2006). They too concurred with Greenhaus et al. (2006) findings that the work-family enrichment is bi-directional.

2.1.3.2 Antecedents of Work-Family Enrichment

Carlson et al. (2006) found two factors that have been identified as the antecedents of enrichment; **individual** and **environmental** characteristics which contribute to gaining and transferring of the following resources across domains, i.e. developmental, capital, affective and efficiency. Additionally, Powell and Eddleston (2011) found women entrepreneurs had much higher affective work-family enrichment compared to men. It occurs when one transfers positive affect and emotion from work role to family role (Hanson et al, 2006). This was also agreed by Siu et al. (2010) who found employees who have higher engagement with their work, i.e. those employees who have strong identity towards work, carry out meaningful work and has more autonomy at work, tend to have greater work-family enrichment. On the other hand, the instrumental work-family enrichment such as the behaviours and skills developed during work does not bring significant results in enhancing one's effectiveness and ability to act towards the demand from the other role.

Grzywacz and Marks (2000) discovered that certain support either from work or family generates positive affects in one domain which augments the quality of another domain. Noor (2002) suggested emotional family support reduced work stress. Using this as a basis, Wayne and his group found the employee's identity and informal support through emotional behaviour bring greater enrichment between work and family.

2.1.3.3 Outcome of Work-Family Enrichment

Wayne et al. (2004) discovered work-family enrichment predicted effort in the role and satisfaction with the role from which the individual had obtained the enrichment earlier. They also differentiated the work-family enrichment with the work-family facilitation whereby "enrichment" focuses on improving individual performance whereas "facilitation" involves improvement of system functioning. Likewise, they discovered that "enhancement" is different from enrichment as the former focuses on benefits gained by individual and the possibility of these

benefits having effects on activities across the individual's life domain such as work skills, positive behaviours or positive moods.

Using employees from insurance industry as respondents, Wayne et al. (2006) found that work-family enrichment predicted affective organizational commitment and led to positive consequences such as experiencing work-family enrichment that relate to positive work attitudes. This means employees would attribute good things arising from their work and this generates positive job attitudes but may not necessarily converting it into different work behaviours. According to Wayne et al. (2004), enrichment can still occur without translating to improved system functioning. For instance, an individual that may experience positive change from home and subsequently boost the individual's performance at work place, may not necessarily improve the overall functions of workgroup or build up supervisor-subordinate relationships.

2.1.3.4 Work-Family Enrichment and Job Satisfaction

Particularly, employees stating high levels of enrichment perceive improved functioning in one domain, resulting in enhanced satisfaction with another domain. For example, supportive work environment and good relationship with one's supervisor can lead to resources that benefit the individual in other domains. As a consequence of gaining work-family enrichment, an individual will attain positive attitudinal and behaviour reactions such as job, family and life satisfaction and also lowers the turnover intention (Carlson, Grzywacz and Zivnuska, 2009) and job satisfaction and effort (Wayne et al., 2004). Similarly, Michel and Clark (2009) found that individuals with high positive dispositional affect had higher levels of work-family enrichment and higher job satisfaction. However, this positive dispositional affect did not have indirect effects on job satisfaction and the work-family enrichment was not significantly related to the job satisfaction. This implied that one's work-family enrichment is by and large affected by his or her trait levels of positive disposition. In light of the above findings, the following hypothesis was formulated:

Hypothesis H1: There is a positive relationship between work-family enrichment and job satisfaction.

2.1.4 Work-Family Positive Spillover

2.1.4.1 Definition

Spillover is the transfer of characteristics from one domain to another, hence obtaining comparable between both domains (Hanson et al., 2006). It can also be described as the extent of participation of one domain impacting another domain (Grzywacz, Almeida & McDonald, 2002). Meanwhile, Hanson and his team considered the following; spillover can be either positive correlation (promoting better role performance) or negative correlation (interfering with role performance). These two spillovers are related, nevertheless are distinctive (Grzywacz et al., 2000).

Edwards et al. (2000) defined work-family positive spillover as transfer of positive valenced affect, skills, values and behaviours from one original domain to other domain, hence benefiting the receiving domain by increasing self-efficacy, motivation and positive interpersonal communications. For example, when a person does multitasking skill, he/she may transfer the gains at work and apply at home domain. The motivation gained while performing one role at work leads to getting recognition, praise or personal accomplishment and this may result in better performance at home and can elevate employee's mood. At the same time, the affect in one's role may stimulate one's general affect and thus motivate the affect in the second role.

This construct is different from the earlier mentioned work-family enrichment whereby experience gained from one domain is transferred for work-family positive spillover but it does not improve the quality of life of the individual (Carlson et al., 2006). In fact, they argued that positive spillover can occur without enrichment and not vice versa. They had found that spillover is actually the

antecedent of enrichment. Likewise, Masuda et al. (2012) unearthed the fact that spillover needs to take place first before enrichment can occur.

Powell and Greenhaus (2010) too agreed that the work-family positive spillover is different from work-family enrichment but used a different reason to explain. According to them, positive spillover can only occur when specific transfer of resources occurs that have positive effects on the other domain instead of broad set of resources. However, they examined a global work-to-family positive spillover unlike Hanson et al. (2006) who had distinguished these broad set of resources as separate affective and instrumental components. Affective positive spillover is experienced when the individual transfer positive affect such as good mood from one domain to another domain whereas instrumental positive spillover takes place when individual transfers values such as ethical behaviour or skills obtained from work domain to other domains in order to accomplished the desired goals. Hanson et al. (2006) also mentioned that earlier investigations indicated instrumental paths are most beneficial whereas affective path had shown inconsistent relationships with well-being.

Besides being different from work-family enrichment, Hanson et al. (2006) felt positive spillover is distinct from facilitation. While positive spillover involves transfer of personal gains, work-family facilitation occurs through capital gains such as employment benefits and social contacts from office environment. Work-family positive spillover is also different from the work-family conflict whereby one can experience equal high level of positive spillover and conflict simultaneously, high level on one construct and low level on another construct or low level on both constructs between work and family roles (Wayne et al., 2004; Greenhaus et al., 2006). Nevertheless, work-family positive spillover is also not the absence of work-family conflict as seen by Hanson et al. (2006).

According to Edward et al. (2000), there are two similar processes in order for the spillover to take place. In the first process, the values, skills or behaviours acquired from one role can inspire the individual personally and thus influence other roles. For instance, an employee is able to use the accounting skills gained from work and apply the similar financial management principles to manage

household expenses. On the other hand, the second process involves direct transfer of knowledge, skills or behaviours from work role to family role whereby it would be in the earlier stages of developing such skills or behaviour and/or if there are strong similarities between these two roles. A typical scenario is when an employee obeys office protocols and observes work ethics, he or she then applies these values while at home to lead ethical and courteous relationship among family members. Such spillover also takes into account the values such as autonomy applied in work environment and also the curiosity or kind consideration developed by an individual.

Positive spillover can also involve the transfer of excitement, enthusiasm and happiness obtained during work hours which are then transmitted over to employee's role toward his or her family. In fact, an employee with good interpersonal communication skills or has the ability to do multitasking is able to transfer these skills to another role in an effective manner.

2.1.4.2 Antecedents of Work-Family Positive Spillover

Powell et al. (2010) had discovered that work-to-family positive spillover was significantly higher for women due to their higher femininity roles and those who have children tend to experience higher level of work-to-family positive spillover. Similar finding of higher work-to-family positive spillover for women was discovered by Grzywacz et al. (2002). Nonetheless, Greenhaus et al. (2006) uncovered that sex differences in work-family positive spillover studies still have mixed results. This indifference is best explained by Powell et al. (2010) who discovered the study populations may have dampened the sex composition, socio-economic status and homogeneity of the study population and the gender-related factors such as status, power and authority that had affected individual's control over one's work environment had not been measured, hence led to inconsistent findings for the work-family positive spillover.

Grzywacz et al. (2002) also found employees of United States involved in service industry have more positive work-family positive spillover compared to technical

sales or administrative jobs. Irrespective of marital status, presence of children and hours worked per week, they also found the advancing age is associated with higher work-family positive spillover. In addition, Greenhaus et al. (2006) discovered managerial and professional jobholders who have a greater tendency to develop skills, have higher work-to-family positive spillover.

Apart from the commonly used work-family positive spillover, there are very few researchers who use the work-nonwork positive spillover. Nonetheless, the content literature is similar. One such researcher is Michel et al. (2011) who found extraversion, agreeableness, conscientiousness and openness to experience are related to work-nonwork positive spillover. Moreover, those who are active, bursting with energy, enthusiastic and assertive has the extraversion and openness to experiences type of personalities tend to be the stronger predictions of positive spillover. This means the higher energy level possessed by these extroverts allows them to accomplish more tasks within the same given time. They may also face lesser fatigue compared to introverts and perceive situations as less taxing (Wayne et al., 2004).

2.1.4.3 Outcome of Work-Family Positive Spillover

Prior empirical studies using longitudinal and cross-sectional for work-family positive spillover on depression involving dual-earner couples over one year period revealed lower levels of depression for spouses when one obtains high levels of positive spillover. Surprisingly, this finding was not significant for women. Even more shocking, the increase in work-family positive spillover for men was related to increase in depression (Hammer et al., 2005). Hanson et al. (2006) believes that work-family positive spillover could also buffer marital or family problem and further strengthen the social relationships. This was proven by Grzywacz et al. (2000) whereby higher positive spillover led to lower marital conflict, implying that marital relationships are enhanced when employees has increased work-family positive spillover. It also buffers negative events by having lesser drinking-problems, improving mental health, reinforcing social

relationships and also gaining intrinsic reward, namely higher self-esteem and extrinsic reward such as receiving praises.

2.1.4.4 Work-Family Positive Spillover and Job Satisfaction

Apart from previous researches that demonstrated the increased work-family positive spillover correlates to improved mental health, decreased drinking behaviour and enhanced well-being (Hanson et al., 2006), it is also related to greater job satisfaction (Edwards et al., 2000; Hanson et al., 2006; Grzywacz et al., 2002) decreased psychological distress and reduced turnover intention (Haar & Bardoel, 2008). Similarly, Wayne et al. (2004) and Wayne et al. (2006) found higher levels of work-family positive spillover is linked to positive work-related elements such as higher job satisfaction and organizational commitment, lower turnover intentions, higher job performance and effort. Hence, the transfer of positive affect, skills, values and behaviours from one original domain to other domain promotes better role performance, thus reducing task frustration and promotes feelings of having a job well done and higher role satisfaction (Hanson et al., 2006). At the same time, employees with better role performance also pave the way to lesser interpersonal conflict with their role partner and possess more social support to gain similar high role satisfaction (Hanson et al., 2006).

Judge et al. (2004) found individual's mood and job satisfaction are interrelated between work and family domain, i.e. satisfaction of one's job spillover onto one's mood at home when transfer of resources occurs. This is known as "mood spillover". Similarly, the positive mood formed at workplace spillover and creates positive mood at home. However, they found the effect of mood at work on job satisfaction waned out over long duration between measuring time. They also found that employees with higher job satisfaction tend to have more home positive affect after work. Similarly, Ilies, Wilson, and Wagner (2009) found that employees with high daily job satisfaction will experience higher positive affect and lower negative affect at home, especially for those employees who have higher work-family role integration. Lourel, Ford, Gamassou, Guéguen and Hartmann (2009) found significant job satisfaction among French employees

when they have positive work-to-home interferences (also known as work-family positive spillover).

While the research on outcome for work-family positive spillover is generally less studied in developed countries compared to work-family conflict (Haar et al., 2008), this relationship between work-family positive spillover and job satisfaction had received far lesser empirical attention in Malaysia. Based on the above literature gathered, the following hypothesis was generated:

Hypothesis H2: There is a positive relationship between work-family positive spillover and job satisfaction.

2.1.5   Work-Family Conflict

2.1.5.1 Definition

Netemeyer et al. (1996, p. 401) defined the work-family conflict as "a form of inter-role conflict in which the general demands of, time devoted to, and strain created by the job, interferes with performing family-related responsibilities''. These researchers agreed that the role demand in broad terms refers to the responsibilities, requirements, expectations, duties and commitments related to the assigned role. The definition was originally derived from Greenhaus and Beutell (1985) who outlined the three major sources of conflict, i.e. time-based conflict, strain-based conflict and behaviour-based conflict. For example, time-based conflict occurs when one has to work late hours or work during the weekend to finish a work assignment and not able to spend that time with family. Strained-based conflict arises when one is not able to focus on work knowing that his/her child is ill and requires care while behaviour-based conflict is an example of an employee who poses a high ranking position is expected to be aggressive at work but be loving with his/her spouse. According to them, negative work-family spillover is also frequently characterized as work-family conflict or work-family interference.

Kim et al. (2001) further simplified it by describing work-family conflict as influence of one's job satisfaction along with his/her marriage and overall life. This is true, for example when one returns home after an emotionally and physically exhausting work day, one is not able to perform or fulfil his/her role effectively, hence causing conflict and spill over from one domain to other, therefore expressing dissatisfaction of job. As compared to the above two work-family construct (enrichment and positive spillover), research on work-family conflict is plentiful and is one of the most common researches carried out by scholars to study the causes and impact of work-family on an employee.

Aminah (2008) also asserted that the research on work-family conflict had increased and this led to the development of theoretical models, empirical studies and organization-sponsored work-family initiatives. Generally, the study of work-family conflict have so far contained discovery of predictors of work-family conflict, the consequences of work-family conflict and the mediator linking the work and family domain.

Abd Razak, Yunus and Nasurdin (2011) had defined the work-family conflict construct as bi-directional (work interference with family and family interference with work) whereby both have its own unique antecedents. The content analysis carried out by Eby et al. (2005) for literature compiled between the period of 1980 to 2002 had classified the antecedents of work-family conflict into three categories, namely work domain, non-work domain, individual and demographic variables while the consequences of work-family conflict include physical and psychological health outcomes (e.g. depression), work consequences (e.g. job dissatisfaction, job burnout and turnover) and family consequences (e.g. life dissatisfaction).

2.1.5.2 Antecedents of Work-Family Conflict

Netemeyer et al. (1996) had raised their concerns on the likely increase in work-family conflict especially with the rise in single-parent families due to high rates of divorces, and in families with elder-care duties. They also highlighted the

higher work-family conflict among parents compared to non-parents. In the recent research, Innstrand et al. (2010) too found that the work-family conflict is more profound among dual-income parents and single parents compared to those of childless couples and singles. This is despite the fact that singles work more hours compared to dual-income parents. However, Aryee et al. (1999) findings differ from the earlier two researchers whereby married employees with or without children, apart from single parents tend to have higher work-family conflicts. While Powell et al. (2010) discovered similar findings of higher work-family conflict among employees with children, Karatepe et al. (2006)'s findings seems to differ because they obtained results showing employees with greater parental demand (more children) having less work-family conflict. Furthermore, Karatepe et al. (2007) discovered that the age, organizational tenure and marital status were significantly related to the work-family conflict whereby the older employees and those employees working for longer years had lower conflict between work and family commitments (Mennino et al., 2005). Nevertheless, in the recent research by Zhao et al. (2012), no significance of demographic characteristics on the work-family conflict was found.

In terms of work load and work expectations, Cooke and Rousseau (1984) found employees with higher work expectations and those who held greater number of family roles tends to have higher work-family conflict. Likewise, Abd Razak et al. (2011) discovered work overload to be significantly positive to work-family conflict. Nevertheless, this does not extend to job involvement of the employees. Generally, Michel et al. (2011) found extraversion, agreeableness, conscientiousness and neuroticism are related to negative work-nonwork spillover. Even more, those with neuroticism type personality such as employees who feel anxiety, insecure, tensed up, worrisome or defensive have stronger prediction on negative work-nonwork spillover (similar to work-family conflict) because they have poor emotional adjustment and tend to use ineffective coping strategies to cope with the demands. Noor (2003) also discovered that neuroticism and extraversion were associated differently in the work and family variables study which predicts the outcome. For example, neuroticism have direct positive outcome on distress symptoms whereas it has indirect influence on well-being through work-family conflict. On the other hand, the employees with extraversion

personality had direct consequences on job satisfaction. Nonetheless, Noor (2006) comprehended that the role of personality factors for women's well-being is far less recorded.

2.1.5.3 Outcome of Work-Family Conflict

Many scholars have documented and supported the work-family conflict experienced by working men and women and had proven that these conflicts led to adverse effect on these employees' well-being in both work and family domains (Aminah, 1996; Aryee et al. 1999; Thomas & Ganster, 1995). According to Aminah (2008), the predictors of work-family conflict could be job related (such as work time commitment, job involvement, job type, role overload and job flexibility), family-related (such as life-cycle stage, family involvement, number of children and child care arrangement) and individual-related (such as gender role orientation, perfectionism, life role values and locus of control).

Likewise, Dixon et al. (2005) developed an integrative analysis of the theoretical approaches to work-family conflict study. According to them, there are three factors, namely individual factors (personality, values, family structure and gender), organizational factors (job pressure, work hours, work scheduling and organizational culture) and socio-cultural factors (gender ideology and cultural norms and expectations) which predict work-family conflict. The consequences of these predictors are individual outcomes (stress, health, job satisfaction, life satisfaction, turnover and performance), organizational outcomes (performance, effectiveness, family-friendly culture, policies, and labour force composition) and socio-cultural outcomes (values, gender roles and cultural forms). For example, Allen et al. (2000) found that elevated work-family conflict due to the role pressures from the work and family demands is associated with poor organizational outcomes due to job performance and poor mental health whereas Goff, Mount and Jamison (1990) and Thomas et al. (1995) found the work-family conflict positively related to absenteeism. Goff et al. (1990) too found supervisory support able to reduce work-family conflict, however it had increased the number of absenteeism. It is possible that the employees take advantage if the supervisors

tend to be more empathetic and flexible. Meanwhile, Frone (2000) detected alcohol abuse by employees due to work-family conflict and found these individuals have 3.1 times more affective disorder than those who don't experience such struggle.

Aminah (2008) also found work-family conflict to be significant predictor of psychological distress which suggests that it affected the overall well-being of women. In addition, Mennino et al. (2005) found married women with children tend to have aggravated job-to-home negative spillover (work-family conflict). Yet, Karatepe et al. (2006) and Casper et al. (2011) found no significance in gender for work-family conflict. This was also echoed by Eby et al. (2005).

2.1.5.4 Work-Family Conflict and Job Satisfaction

Traditionally, women spend more time in family activities compared to men, regardless of the total time spend at work (Gutek et al., 1991). This was supported by the study on full time professionals in Canada by Mcelwain et al. (2005) which revealed that women experienced more work-interfering with family and job satisfaction compared to men, and continued to demonstrate the asymmetry between men and women's role both in work and family roles. This means the interference is caused by the strain produced by stressful work situations and this significantly decreases the quality of one's family life. It is also where the work-family related stress is dissipated. In fact, looking and experiencing the work and family domains as separate domains may not be highly stressful, but combining the work and family domains produces employee strain.

Many researchers such as Aryee et al. (1999) and Noor (2003) had found work-family conflict to be a mediator between work and family variables with well-being. As predicted by Noor (2002) of the effects of control on work-family conflict and well-being of employees being different for men and women, she had also found the effect of control on job satisfaction was mediated by work-family conflict while direct effect of control predicts distress symptoms. Using the Interaction Strain Scale, Noor (2002) found women who have high internal

control beliefs experience higher levels of job satisfaction and tend to be more susceptible to work-family conflict. She felt that society puts great importance on women's role on family matters and that many prone to feel guilty if they do not carry out their home-related responsibilities.

A more recent research had found evidence that employees with reduced work-family conflict tend to carry positive aspects from life satisfaction to job satisfaction (Qu et al., 2012). Karatepe et al. (2007) found that supervisor support alleviates hotel employees' conflict and increases their job satisfaction. Conscientiousness which covers attributes like orderliness, thoroughness, efficient, being responsible, dependable and achievement-oriented too is related to lesser conflict and conflict is negatively related to lower job satisfaction (Wayne et al., 2004). Likewise, Mennino et al. (2005) found employees who works in a supportive environment and are satisfied with their job tend to have reduced work-family conflict.

Recent empirical evidence by Zhao et al. (2011) revealed that work interfering (conflict) with family have significant negative association with individual's affective reaction (like or dislike of job) towards his/her job attitude while Namasivayam et al. (2007) found affective commitment to be more strongly related to job satisfaction compared to normative commitment, implying reduced conflicts and enhancing employees' attitude towards work. Allen et al. (2000) together with Aryee et al. (1999) and Karatepe et al. (2006) had found those employees who had performed ineffectively at work were dissatisfied with their jobs and had displayed low levels of affective commitment towards their organizations. However, this contradicts with Casper et al. (2011) findings that showed no significance between work-interfering with family and affective commitment. Karatepe et al. (2009) also found higher affective commitment towards organization for those employees with higher education but lower affective commitment among married employees. Overall, work-family conflict does have imperative consequences on the quality of work and family life (Mcelwain et al., 2005). Boyar et al. (2003) too found both work-family conflict influences withdrawal behaviour (lowering job evaluations) and leads to turnover intention. Previous research demonstrates work-family conflict is highly

correlated with flexibility in work time than flexibility in work location, especially when the family responsibility is high (Shockley & Allen, 2007).

Aminah (1996) found work-family conflict to be significantly related (negatively) towards job satisfaction and she had recognised the work-family conflict among working people in Malaysia and agreed on the importance of providing the family-friendly employment policies to overcome the conflict (Aminah, 2007). Slan-Jerusalim et al. (2009) stated that higher levels of work-family conflicts would aggravate employment-related problems such as job dissatisfaction, job turnover intention, work overload, work stress, and also problems in family performance. Likewise, Boyar et al. (2003) found work-role conflict and work-role overload significantly related to work-family conflict and this conflict is negatively related to job satisfaction and positively related to turnover intention.

Eby et al. (2005) also found that increased level of work-family conflicts causes organizational outcomes such as employees to be less satisfied with their jobs, causing job stress (Karatepe et al., 2006), affecting job performance (Karatepe et al., 2009), morale and as well as increased absenteeism (Goff et al., 1990) and turnover intention rates. Michel et al. (2009) found that individuals with highly negative dispositional affect have higher levels of work-family conflict and lower levels of job satisfaction. However, the negative dispositional affect did not have indirect effects on job satisfaction and the work-family conflict was not significantly related to the job satisfaction. This implied that one's work-family conflict is essentially affected by his or her trait levels of negative disposition affect. The earlier studies conducted by Bhuian et al. (2005) and Netemeyer et al. (1996) found work-family conflict and job stress lead to higher turnover intention.

Work-family conflict is commonly considered as the strongest influential of an employee's job satisfaction (Grandey et al., 2005). Though the work-family conflict relationship with job satisfaction is one of the most frequently researched outcomes, past researchers had produced some mixed results. It was noted that studies carried out had not always shown negative relationship patterns between work-family conflict and job satisfaction. Previous researches seem to show mixed relationship and outcomes (Zhao et al., 2012; Zhao et al., 2011). For

example, inconsistence results were found for the following researches: high significance for negative work-family conflict correlation with job satisfaction (Allen et al., 2000; Carr et al., 2008, Grandey et al., 2007; Karatepe et al., 2007); mere significantly negative work-family conflict correlation with job satisfaction among food service managers (Ghiselli, La Lopa & Bai, 2001) and hotelier in China (Zhao et al., 2012); work-family conflict positively associated with job satisfaction but with minor differences between men and women (Bedeian et al., 1988); no significant relationship between work-family conflict and job satisfaction (Aryee et al.,1999; Karatepe et al., 2006; Karatepe et al., 2009). They felt that the work and family are more cognitively distinct for Hong Kong employees that resulted in providing greater weight delegated for family roles among Chinese culture. Likewise, interviews carried out for female professionals in Hong Kong revealed their overall job satisfaction despite their intense family role and responsibility held (Lo et al., 2003).

Zhao et al. (2012) also found moderating role or rather self-regulation of high chronic promotion focus between relationships of work-interference with family and job satisfaction led to lower job satisfaction. The employees tend to pay more attention towards the effect on their work and their family roles. This means that the positive behavioural and cognitive strategies for those with chronic promotion focused individuals tend to take the work-family conflict experiences as opportunity to demonstrate their ability to cope and achieve career success. They tend to be sensitive towards end-states desirables, using eagerness strategies and have obvious emotional feeling signs such as disappointment or excitement. These inconclusive findings are believed to be partially attributed to the incomplete recordings of individual differences and employees' potential moderating roles when faced with conflict (Eby et al., 2005). Zhao et al. (2011) felt that the one plausible explanation for the above indifferences is due to the researchers' perspective of interpreting the results (outcome) and the antecedents used.

According to Iqbal, Iqbal, Ameer and Marium (2012) who had examined 30 articles comprising of both survey-based and case studies that were published between 2001 to 2011, the increased focus on work-family issues are due to the changes in demographic profile of workforce, especially of the role played by

women, dual-earner couples and single parents. They also highlighted that four such research conducted using Malaysian context. Nevertheless, researchers agreed that studies on work-family conflict within Asian region are far lesser than those carried out in United States and Europe (Iqbal et al., 2012; Abd Razak, Che Omar & Yunus, 2010; Abd Razak et al., 2011). In fact, previous studies in Malaysia concentrated on demonstrating the predictors of work-family conflict, but rarely covering on the consequence or impact of work-family conflict on the organizations.

From the above research findings, it has been suggested that work-family conflict should be negatively associated with job satisfaction. Thus, a negative correlation between work-family conflict and job satisfaction is predicted:

Hypothesis H3: There is a negative relationship between work-family conflict and job satisfaction.

2.2 Theories Relating to Work-Family and Job Satisfaction

Researchers have pursued to explain the various ways in which the work and family roles are interdependent. Several theories were developed by scholars for these work-family enrichment, work-family positive spillover and work-family conflict stated earlier. Two main theories were identified for this research proposal, namely spillover theory and role theory.

2.2.1 Spillover Theory

2.2.1.1 Definition

Spillover refers to the satisfaction in one area of life that may influence the satisfaction in another area of life. For example, the satisfaction/dissatisfaction of one's job would spillover/influence the other domains like family (Sirgy, Efraty, Siegel & Lee, 2001). There are two types of spillover; horizontal spillover is the influence of one domain onto another domain and vertical spillover which is the

spillover from superordinate domain (eg. overall life) to subordinate domain (eg. family) and vice versa.

2.2.1.2 Interrelating with Existing Spillover Theory

The work-family enrichment and work-family positive spillover was derived from the spillover theory whereby the satisfaction in one area of life may influence satisfaction in other parts of life (Masuda et al., 2012). For example, when employee is satisfied with his/her work, this may influence satisfaction in the family domain. However, it could also affect in a negative manner, i.e. work can also spillover into one's family life due to the needs to bring the work back home and the needs to complete it within the required deadline. This matched Edwards et al.'s (2000) discovery on the spillover theory of work-family conflict whereby employees tend to generate similarities between work and family domains.

2.2.2   Role Theory

2.2.2.1 Definition

Role is defined as parts played by individuals or typical behaviours that characterize a person in a social context (Greenberg et al., 2008). Role incumbent is referred to the person who holds the role while role expectation is the expected behaviour of the person who holds the role. In organizations, employees are assigned to conduct/play certain roles depending on the position held in the organization. At the same time, an individual may play one or multiple roles of parent, spouse and child at home environment. It is postulated that conflicts within multiple roles cause inter-role conflicts leading to undesirable state, i.e. individual having difficulty in succeeding at performing various roles successfully due to conflicting demands on time, lack of energy, absence of support and incompatible behaviours among roles held by the individual (Greenhaus et al., 1985). This notion is consistent with Edwards et al. (2000)'s discovery on several work to non-work conflict literature that relies on resource drain theory and scarcity hypothesis (finite amount of energy) which implies the increase in resources

(time, attention and/or energy) spent in one role will cause in a decrease in the other role. Carlson et al. (2009) used the role theory to explain the behaviour of a healthy and balanced individual who will avoid role strain by expanding the role identities instead of restricting the number of roles. This attitude allows individual to reduce strain because he/she need not worry about one role while performing the other role. Instead, the individual will engage in and enjoy whichever role performed, leading to less strain and more balance.

2.2.2.2 Interrelating with Existing Role Theory

According to Greeenhaus et al. (1985), work-family conflict is defined as existence of mutual incompatibilities of role pressures caused by work which interferences with the family roles. Researchers too had emphasized that the combination of work and family roles not only brings conflict but enrichment too whereby conditions and individual's experiences in one role can influence another role performances positively, depending on how the individual perceived the benefits (Greenhaus et al., 1985; Greenhaus et al., 2006).

According to Greenhaus et al. (2006), their conceptual framework is based on role enhancement theory whereby they found five types of resources that can be obtained in one role in order to improve the performance in another role, either by direct instrumental path or indirect affective path.

In fact, good experiences at work have positive impact on one's family life, at the same time being happy at home also makes individual to be more productive at work, hence making this a bi-directional influence (Greenhaus et al., 2006). Similarly, Carlson et al. (2006) described the bi-directional concept of work-family enrichment whereby the individual benefitted family roles from work roles through developmental resources, positive effect and psychosocial capital derived from work involvement. Likewise, Greenhaus et al. (1985) found bi-directional relationships in work-family conflict whereby the negative interference from work role impacting the family role while family-work conflict is the negative interference from family role impacting the work role.

2.3   Theoretical Framework

Based on the literature review conducted for the above research objective, a conceptual framework has been developed whereby the work-family enrichment, work-family positive spillover and work-family conflict are defined as independent variables whereas the job satisfaction is the dependent variable. The proposed research framework presents the relationship between these three factors of work-family constructs to job satisfaction of employees. Figure 1 illustrates the theoretical framework of three factors that influences the job satisfaction.

Figure 1: Theoretical Framework of Work-Family Enrichment, Work-Family Positive Spillover and Work-Family Conflict That Influences Job Satisfaction
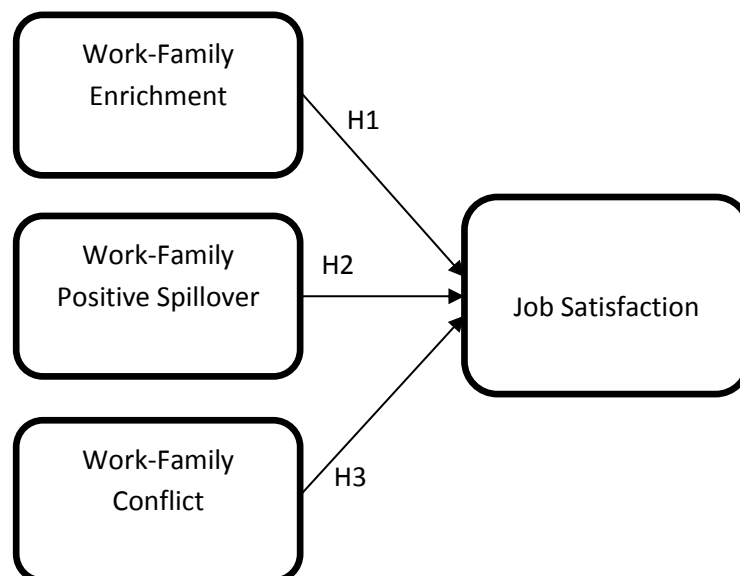
2.4 Hypotheses Development

The above three factors will be tested against the job satisfaction and hence, the following three hypotheses were formulated:

H1: There is a positive relationship between work-family enrichment and job satisfaction ($p<0.05$);

H2: There is a positive relationship between work-family positive spillover and job satisfaction ($p<0.05$);

H3: There is a negative relationship between work-family conflict and job satisfaction ($p<0.05$).

CHAPTER 3

RESEARCH METHODOLOGY

This chapter describes on the systematic and scientific approaches taken to solve the research problem. It focuses on the research design, target population for this study, sample size, sampling techniques and data collection used, and the statistical analysis technique employed. The pilot testing conducted and research ethics applied are also stated here.

3.1   Formulating Research Design

There are basically three types of research designs; exploratory study, descriptive study and explanatory study (Saunders, Lewis & Thornhill, 2007). Based on the research question set in Section 1.3, this research falls under the explanatory study category which is fundamentally establishes the correlation between variables. Here, the work-family enrichment, work-family positive spillover and work-family conflict were tested to examine its correlation with job satisfaction of the employees in IT related industry.

This type of explanatory study will help to establish the nature of relationship and answer the research question whether work-family enrichment, work-family positive spillover and work-family conflict influence employees' job satisfaction level, its direction of influence in terms of positive or negative relationships and also the strength of this relationship. This explanatory study can be carried out systematically by establishing the hypotheses and testing them.

3.2   Target Population and Sampling Frame

The target population for this research is the employees working in the IT software-based organizations in Malaysia. Based on the list of IT companies registered at Multimedia Super Corridor (MSC) under the "InfoTech" category, there are 1,667 nos. of registered companies. Out of these companies, only seven companies in Malaysia have obtained the highest accreditation in Capabilities Maturity Matrix Integrated (CMMI) Level 5 for Software Engineering. Narrowing down further, only one IT software company out of these seven corporations had attained ISO20 000 for IT service management and has almost 70 percent of its business outside Malaysia. Its total numbers of employees is 135, comprising a mix of local employees and expatriates working in Malaysia.

3.3   Sample Size

Typically, most statisticians stated that minimal sample size of 30 is needed to achieve normal distribution for the statistical analyses (Saunders et al., 2007). The sample size also depends on the level of precision, usually expressed in percentage ($\pm$ 5%), confidence level and degree of variability in the population (Israel, 2012). For the purpose of this research, Table 1 was referred to and used as a guide to determine the suitable numbers of respondent (sample size) to use. The sample size is based on 95% confidence level and p=0.5 maximum variability. With the population size of 135 employees from the selected IT software-based industry organization, a good sample size of 99 is needed in order to achieve the precision of $\pm$5%.

Table 1: Suitability of Sample Size Based on Size of Population

Size of Population	Sample Size for Precision at ±5%
100	81
125	96
150	110
175	122
200	134
225	144

Note. Extracted from Agricultural Education and Communication Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida publications in 2012 by Glenn D. Israel.

3.4   Sampling Technique

In general, the sampling procedure involves using a small group of employees from the whole population to make inference or generalization on the whole population. For this research, a very large sample of employees from all IT software-based industry in Malaysia would be ideal. However, this would consume tremendous amount of time and substantial amount of funding. Instead, the research hypotheses depicted in Section 2.4 were tested using an adequate sample of employees from IT software-based industry in Malaysia. Using the probability sampling technique, the research setting was narrowed down to one particular selected organization of IT software-based industry in Malaysia which had involved all its employees (the entire sample) with full-time jobs as the targeted respondents.

This study covered all employees inclusive of those single, married with or without children and not limited to any subgrouping. A total number of 135 numbers of employees are working in the selected firm. Questionnaires were distributed to all these employees comprising of executives, business analyst, engineers, accountants, senior management and many others.

3.5   Data Collection Methods

For the purpose of this research, a single quantitative data collection method was used as the most appropriate method to collect all relevant data for this study. Considering the limited time and resources available, primary data using questionnaire surveys were collected from the respondents via online using Google Drive. Google Drive is a service provided by Google to storage file, share file and enables synchronization with many other software programs. This electronic survey method is inexpensive and able to restore the data collected in the free cloud computing named Google Cloud Connect. This method is effective, as the questionnaires tend to be complete with no missing data due to the software programming that prevents respondents from accidentally or intentionally skipping any part of the questionnaire. Moreover, respondents feel at ease knowing that their identity are hidden and feel more comfortable to fill in the questionnaires with minimal or zero hesitation.

An official letter was sent to the management of the IT software company based in Malaysia to obtain consent for allowing its employees to participate in this survey. Upon acquiring the consent, the electronic questionnaire survey format via hyperlink was given to the Human Resources Department to be forwarded to all its employees. The employees were notified via email by the Human Resources Department and were encouraged to participate. The online questionnaire survey form had contained a brief description of the researcher, purpose of the survey, type of questions posed, expected duration taken to complete the survey, anticipated benefits derived from the results outcome and the strict voluntary participation approach method. Participants were also thanked for their contributions and were given the confidence that the information provided by them will be confidential and anonymous. As part of the instruction, employees were asked to select the most suitable answers perceived by clicking on the answer choices shown on their computer screens.

The data collection took approximately two months to complete (February to April 2013). Initially, there were only a few respondents replied, however with the

direct support of the top management of the selected IT software based company, almost 81% out of 135 employees cooperated to participate. According to Sekaran and Bougie (2010), a response rate of 30% is considered to be an acceptable range. Hence, the 81% response rate achieved for this researcher is considered relatively superior.

3.6   Research Instrument

3.6.1   Survey Questionnaire

Section A of the questionnaires covers the demographic profile of the respondent such as gender, age, nationality, race, marital status and number of children while covering certain aspects of work-related attributes such as educational level, job description and category, total working experience and average working hours in a day inclusive of after official working hours. This requires respondents to select the most appropriate/closest answer by clicking the appropriate "button" on the computer screen.

Three types of measurement scales, i.e. nominal scale, ordinal scale and ratio scale were used in the Section A of the questionnaire survey. The nominal scale is the simplest form of scales whereby the data is segmented into relevant categories whereas the ordinal scale is dedicated to data that can be characterised into groups with certain ranking order. In this research, the nominal scale is used for gender, nationality, race, marital status and job description and category; ordinal scale for educational level whereas ratio scale is used for age, number of children, years of service in the current company and average working hours.

Section B of the questionnaires covers the work-family enrichment, work-family positive spillover and work-family conflict constructs. Here, the other two types of measurement scales are being employed, i.e. interval scale and ratio scale. These measuring scales are both parametric which allow data to be analysed using more robust statistical tools. For this research, the work-family enrichment, work-family positive spillover and work-family conflict constructs were measured using

Likert scale. This is a form of interval scale which allows respondents to indicate how strongly they agree or disagree on a particular question or statement in the given topic. Commonly, a five-point Likert scale is widely used in research questionnaires. Typically, the respondents will be given the choice to select five options ranging from "strongly disagree", "disagree", "neither agree nor disagree", "agree" and "strongly agree". Each of these options will be assigned a certain numerical value which can be translated to measure the respondents' opinion on a particular subject matter.

Generally, the same order of response category was used to avoid confusing respondents; however some questions were negatively re-worded to test the respondents' concentration in reading, interpreting and answering the questions correctly. The negative re-worded sentences are elaborated in the following sections. Refer to Appendix A for the four-page questionnaires.

3.6.2   Scales for Work-Family Enrichment

Existing well-established multi-item scales were used to measure the constructs for this study. Carlson et al. (2006) nine-item scale was used to measure the work-family enrichment which had undergone rigorous scale development and validation. The Cronbach alpha coefficient, α obtained by several researchers was relatively high, i.e. 0.94 by Masuda et al. (2012), 0.94 by Carlson et al. (2009) and 0.94 by Michel et al. (2009). Refer to Appendix B for more samples of reliability value gained in other similar studies. This measure contains resource gain, type of benefit from one role and improvement in other role for the individual (Carlson et al., 2006), consistent with role theory defined by Greenhaus et al. (2006). The earlier versions of "enrichment" constructs used for "positive spillover", "facilitation" and "enhancement" found to be unsuitable. The respondents are given a five-point scale ranging from 1=Strongly Agree to 5=Strongly Disagree. Higher scores indicate higher enrichment. One of the items was reverse coded; "Puts me in a bad mood and this makes me be a worse family member".

3.6.3 Scales for Work-Family Positive Spillover

Consistent with Hanson et al. (2006) definition, the construct used contains items such as work-family affective spillover, work-family behaviour-based instrumental spillover and work-family value-based instrumental spillover that test the affect, skills behaviours or values which are transferred to the receiving role. Hence, the eleven-item scale was adopted from Hanson et al. (2006) to measure the work-family positive spillover construct and was also comprehensively validated. The work-family positive spillover scale had been widely used in the work-family positive spillover literature and had been reported to have high reliability of 0.92 obtained by Masuda et al. (2012). Refer to Appendix B for more samples of reliability value gained in other similar studies. Both constructs were built using the Greenhaus et al. (2006) conceptual framework which was based on role theory. Each of the positive spillover items used a five-point Likert scale ranging from 1=Strongly Agree to 5=Strongly Disagree, whereas 3=Neutral (neither agree nor disagree). Higher scores indicate higher positive spillover. One of the items was reverse coded; "Values developed at work make me a worse family member".

3.6.4 Scales for Work-Family Conflict

The five-item scale of Netemeyer et al. (1996) was used to access the work-family conflict which is multi-item and had showed sufficient levels of internal consistencies (average α=0.88). This well-established scale was used by many researchers who had obtained a relatively high reliability in the range of 0.84-0.92. Refer to Appendix B for more samples of reliability value gained in other similar studies. This work-family conflict items will assess the impact of job demand and strain from work on employees' role in their family. Using similar five-point scales, items with higher scoring means more conflict felt by employees.

For this research work, the respondents are asked how strongly he or she agrees or disagrees with each statement and they need to respond based on a five-point

rating scale (1= Strongly Agree, 2= Agree, 3= Neutral, 4=Disagree and 5= Strongly Disagree).

3.6.5   Scales for Job Satisfaction

Finally, five-item scale adopted from the works of Brayfield and Rothe (1951) were used to operationalize job satisfaction construct. It has a high reliability of 0.95. Refer to Appendix B for more samples of reliability value gained in other similar studies. Five-point Likert scale anchored with 1=Strongly Agree to 5=Strongly Disagree was used to gauge the level of job satisfaction. Items were scored as such that higher scores would mean feeling more job satisfaction. Two of the items were reverse coded; "Each day of work seems like it would never end" and "I consider my job rather unpleasant".

In addition, eleven items (for example gender, age, marital status, total work experience, level of education, etc.) were used as control variables. These variables were tested against each work-family construct as they may influence the hypothesized relationships.

3.6.6   Pilot Testing

A pilot test was conducted using a group of employees from a different organization. This is a data collection which was done in a small scale prior to the actual data gathering. It was carried out in order to ensure that the questions prepared were fully understood by the respondents and to make any necessary adjustments, if required. Thirty-two employees had participated in this survey. Participants were asked to highlight their level of agreement using a Likert-type scale ranging from 1 which is Strongly Agree to 5 which is Strongly Disagree.

Upon receiving participants' responses via hard copy, it was noted that there were some minor weaknesses in the questionnaire format. Some of the pilot group respondents were oblivious of Question no.6. Hence, some improvements were made by revising the presentation format and it was uploaded online in the Google

Drive which helped guide the participants step-by-step and also avoided the risk of any unanswered questions as the software prevents respondent from moving to the next question if the earlier question is not answered.

3.7 Data Analysis Techniques

3.7.1 Statistical Tools Selected

A commonly utilized Statistical software Package for Social Science, also widely known as SPSS was used in the study. Currently, the SPSS version 17.0 is available in the market and was applied in this research to obtain various forms of analyses. Two stages of statistical analysis were carried out, namely descriptive statistics and inferential statistics. First, descriptive statistics were performed which involved the sorting and grouping of demographic profile of the respondents, followed by measuring the central tendency (mean, median and mode), then measuring the dispersion such as standard deviation, skewness, kurtosis and range. If the measure of spread shows large differences among variable scores, hence the central tendency may not be able to represent the population well. The descriptive statistic was presented in both graphical and tabular form, depending on the suitability of the data.

Second, the inferential statistics were carried out to infer the general deduction of the population based on the obtained sample data. It is also known as hypothesis testing, whereby the hypotheses formulated in Section 2.4 were tested to interpret the findings for the entire population. The first step involved analysing the relationship between work-family enrichment, work-family positive spillover and work-family conflict against job satisfaction. The direction and significance of these bivariate relationships were checked using the Bivariate Pearson Correlation test. Any negative directional relationship can be identified by the (-ve) signage in front of the coefficient value obtained. On the other hand, the strength of the relationship can be determined by observing the (**) or (*) sign which indicates the correlation is significant at 0.01 level or the correlation is significant at 0.05 level, respectively. This test of significance will determine whether there is a

relationship between variables and the probability that the event had occurred by chance. Generally, a minimum of 95% significance level is used.

Next, reliability testing was carried out to quantify the degree of measurement error in a variable. This reliability value is measured by obtaining the Cronbach's alpha, α which is a number ranging from 0 to 1. Generally, high reliability value is desired which indicates that the measured error for the variables is low (Allison, 1999). The low reliability will be interpreted as the inconsistency in the measurement of variables that will influence the research project each time it is measured.

Subsequently, multiple regression analysis was conducted to explain the strength of the independent variables (work-family enrichment, work-family positive spillover and work-family conflict) on the dependent variable (job satisfaction) and whether these variables significantly predict the dependent variable. This multiple regression (bivariate regression analysis) was selected because it involved relationship of two or more independent variables. The general formula used in multiple regression is as shown below:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + \ldots b_n X_n$$

whereby Y= Dependent (Predicted) Variable, a= Constant value, the value of Y when the line cuts Y axis, all X value=0 and b= The slope, or change in Y for any corresponding change in one unit of X.

Finally, the F statistics was utilised to determine whether the overall regression model is statistically significant.

3.7.2   Running Statistical Procedures

The quantitative data collected from this study was analysed in a systematic way. First, data collected from all the respondents was compiled and recorded in a data matrix form. All demographical information gathered were measured based on categorical scale except for *Age* category whereas data from Section B were measured using interval scale. The data compiled from Section A was transformed

into numerical values. Before it was converted into specific numbers, a code was given to each variable and all cases were numbered accordingly. For example, under *Gender* category, it was coded as dichotomous variable whereby male was coded as 1 and female was coded as 2. Next, the *Average Work Hour* category up to 8 hours was coded as 1 and above 8 hours was coded as 2. As for the *Age* category and *Years in Service* category, respondents' information were regrouped in Table 2 as follows:

Table 2: Re-coding for Age and Years of Service Category

AGE CATEGORY	YEARS IN SERVICE CATEGORY	CODE
20 – 29	0.0 – 0.9	1
30 – 39	1.0 – 4.9	2
40 – 49	5.0 – 9.9	3
50 – 59	10.0 – 15.0	4

Similarly, the following four questions with reverse code were all re-coded:

WFE4 – Puts me in a bad mood and this makes me be a worse family member

WFPS9 – Values developed at work make me a worse family member

JS3 – Each day of work seems like it will never end

JS5 – I consider my job rather unpleasant

For example, if the respondent selected "Agree" for JS5, hence it would be recoded as "Disagree" for feeling job satisfied.

Once this task was completed, the data was cleaned up by conducting the frequency table test, hence allowing any missing data or inaccurately coded data to be detected. Based on the frequency test conducted, there was no missing data for all 4,510 data (41 columns X 110 rows). Upon data cleaning, various tests were conducted to obtain results. The normality assumption for all variables was assessed using histogram, Kolmogorov-Smirnov and Shapiro-Wilk with Lilliefors

significance level. This test for normally distribution determines the type of tests (parametric or non-parametric) to be used for further analyses. The histogram also produced additional statistics such as mean and standard deviation.

All demographic profiles containing categorical data (both nominal and ordinal level) such as *Age* category versus *Average Working Hours* and *Nationality* versus *Years of Service* was tested for significance difference and was checked for non-violation of the general assumption of Chi-square test.

Next, the three hypotheses were tested using the Bivariate Pearson Correlation test to make decisions on whether to reject the null hypotheses. This correlation test can examine the relationship between two variables such as work-family conflict and job satisfaction. Several assumptions were required in order to qualify for this test; only internal/ratio variables can be tested, there is a linear relationship between the two selected variables, no significant outliers and data is normally distributed. The correlation test produced a value between -1.0 to +1.0, whereby it indicated the direction and strength of the relationship, in addition to whether it had a significant difference in the relationship ($p<.05$).

Subsequently, Cronbach's alpha (α) was used to test the internal reliability or internal consistency of the multi-item scales with multiple questions for work-family enrichment, work-family positive spillover, work-family conflict and job satisfaction; for example, the instruments are considered of acceptable reliability if values are between 0.7 and 0.8 (Saunders et al. 2007).

Upon examining the psychometric properties of the variables, multiple regression was conducted to formulate the best prediction of the dependent variable against predictors (several independent variables). The dependent variable in this model is the job satisfaction whereas three variables were identified as the independent variables: work-family enrichment, work-family positive spillover and work-family conflict. This analysis is capable of measuring the level of influence of each independent variable on the employees' job satisfaction. All three independent variables used in this research are of continuous variables. Both standard and hierarchical multiple regression were used to examine the relationship between the sets of predictors and the dependant variable. The

method used was the "enter" type regression whereby all three continuous variables were added simultaneously to examine the relationships of these predictors on the dependent variable. However, before the multiple regressions were carried out, the following assumptions were checked and confirmed:

1. Ratio for n cases should be 20 times more than independent variable (IV) or a minimum of 5 times more than independent variables. In this case, n = 110 and IV = 3, hence ratio = 36 times. Thus, this criterion has been met.

2. Outliers to be removed to minimize impact or influence on regression - Boxplot method employed showed fewer outliers in this study. Thus, this criterion has been met.

3. Multicollinearity – high correlation among the independent variables and singularity – perfect correlation among the independent variables were tested using correlation matrix and found not on extreme conditions. Thus, this criterion has been met.

4. Normality, linearity, homoscedasticity and independence of residuals – differences between obtained and predicted job satisfaction variable scores is assumed to be normally distributed; residuals have linear relationship with predicted job satisfaction variable scores and the variance is the same for all predicted scores. Thus, this criterion has been met.

CHAPTER 4

RESEARCH RESULTS AND FINDINGS

This chapter details out the results obtained from the survey conducted using statistical tools. The respondents' demographic profile and work-family influence on job satisfaction correlation are described here. Reliability and validity were tested and multiple regression analysis carried out revealed the significance of the work-family interface towards job satisfaction.

4.1   Descriptive Analysis

Through online Google Drive facility, the questionnaire survey was uploaded in the system and a hyperlink was sent to the manager of the Human Resources Department from the selected organization. The hyperlink was then forwarded to all the 135 numbers of employees. From this total numbers of hyperlink forwarded, 110 numbers of forms were filled and returned online which contributed to 81 percentage response rate. The support of the company's management had no doubt contributed to the exceptionally high return rate. The online completed forms were then downloaded and computed in the SPSS database. Based on these computed data, the completed survey forms were filtered for any possibility of missing data. As mentioned in the earlier section, since the Google Drive software program can be programmed as such it prevents potential respondent from missing out on any required information, there were no missing data in this study conducted.

For ease of understanding large data obtained from this study, descriptive statistics is being presented in the following manner:

4.1.1 Demographic Profile of Respondents

There were 80 male (72.7%) and 30 female (27.3%) respondents who had participated in this research. Figure 2 illustrates the frequency of respondents based on gender.

Figure 2: Frequency Analysis Based on Gender
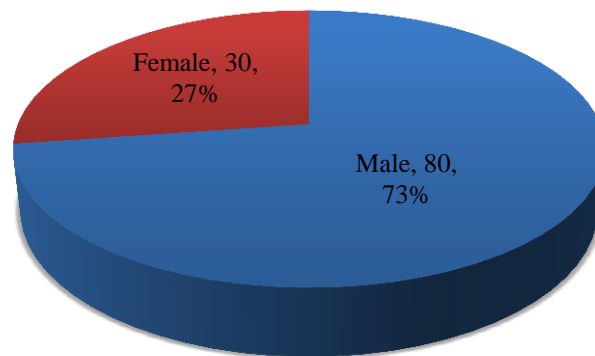
The majority of respondents' age fell between 20-29 years which quantifies nearly 60% of the total respondents while the respondents' mean age was 29.99 years (SD = 5.525). Figure 3 illustrates the frequency of respondents' age.

Figure 3: Frequency Analysis Based on Age
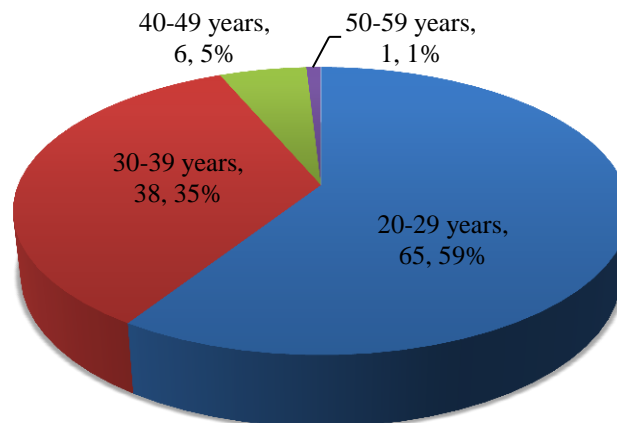
Out of 110 respondents, 50 employees (45.5%) were married and another 57 employees (51.8%) were found to be holding single status. The remainder 3 employees were divorced. Figure 4 depicts the marital status of the respondents.

Figure 4: Frequency Analysis Based on Marital Status
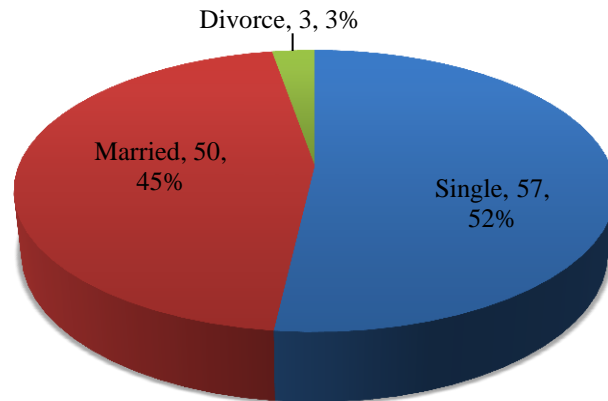
While the majority of the respondents who were married did not have any children (69%), 34 numbers of respondents reported having children between 1 and 3. Figure 5 below illustrates the number and percentage of children of the respondents.

Figure 5: Frequency Analysis Based on Number of Children
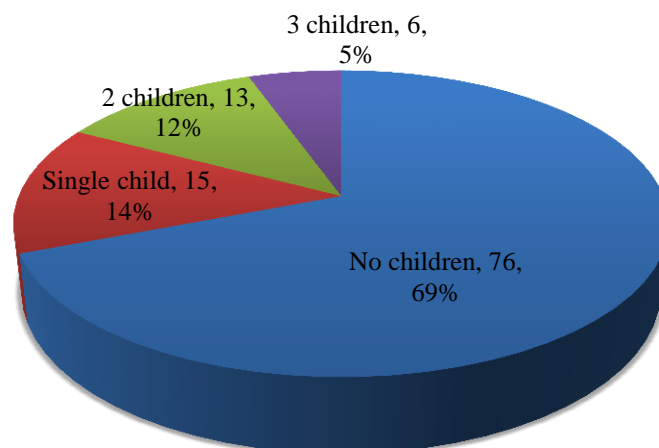
The overwhelming majority of the respondents (98 out of 110 employees) were highly educated and possess either a Degree (51%) or Masters' Degree (38%). It is most likely that the high ratio of educated respondents could be due to the necessity for the employer to hire highly learned employees in the IT literate industry. The remainder 12 respondents have obtained either a SPM, Certificate or Diploma as their highest education level. Figure 6 demonstrates the respondents' highest education level achieved.

Figure 6: Frequency Analysis Based on Highest Education Level
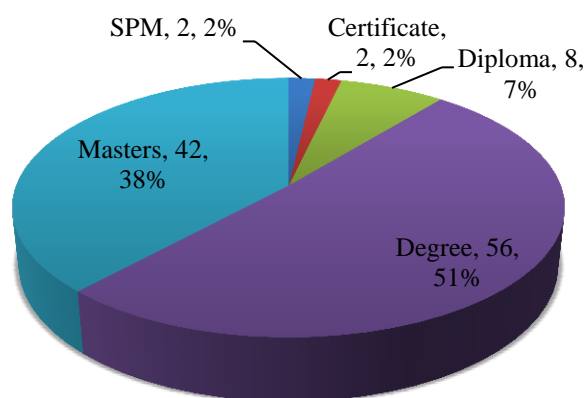
The employees who participated in this survey had various job functions and were documented in the questionnaire survey. The job functions were categorized in six groups, namely Senior Management (4.5%), Leading Team (17.3%), Sales and Marketing (2.7%), Software Development/R&D/Implementation (45.5%), Executive tasks (23.6%) and Others (6.4%) whereby approximately 65.5% of the respondents' business function involves technical work. Figure 7 illustrates the job functions in terms of technical and non-technical works and the various group tasks in the selected organization.

Figure 7: Frequency Analysis Based on Job Functions and Group Tasks
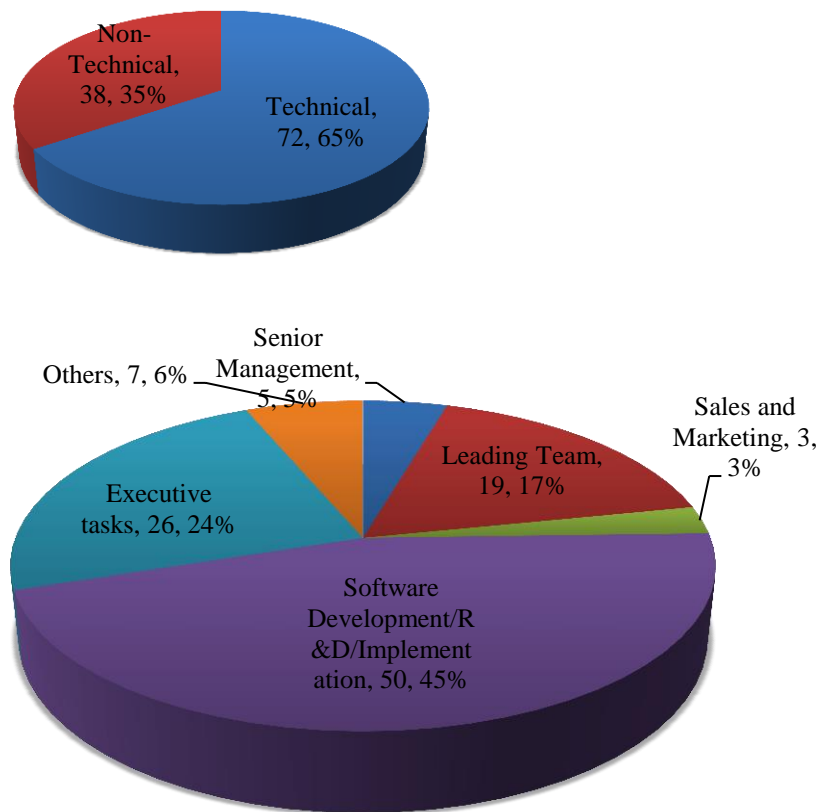
Almost 60% of the respondents have worked in this company between 1 to 5 years whereas another 13% have worked between 5 to 10 years and 17% have worked between 10 to 15 years. Only 12 respondents are relatively new to the company as they have less than 1 year of working experience. As for the total working hours per day, on an average day, respondents work 8.72 hours per day (SD = 1.146) and their mean full-time work experiences were about 4.40 years. Figure 8 highlights the total years of working experience.

Figure 8: Frequency Analysis Based Total Years of Work Experience
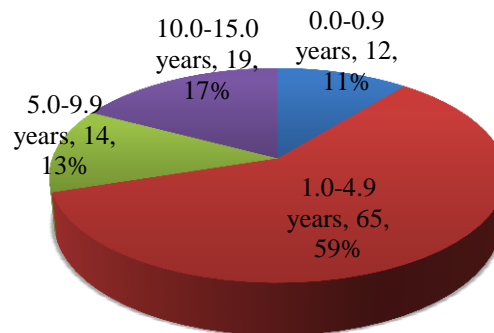
Detailed information such as frequency, percent and cumulative percent of the demographic profile of all respondents is made available in Appendix C.

4.1.2 Independent and Dependent Variables

The measurement of central tendency involves measuring the mean and mode for a group of variables gathered. Here, the measurement was made for work-family enrichment, work-family positive spillover, work-family conflict and job satisfaction variables. The measurement of the dispersion or spread was carried out to determine the standard deviation, skewness and kurtosis. Table 3 below represents the measurement of each variable under the specific group variables. The high mean scores for work-family enrichment denote high enrichment experienced by the respondents. The negative phrase "Puts me in a bad mood and this makes me be a worse family member" that had been cordially re-coded had obtained the highest mean score of 2.927 out of 5.000. This also indicated that the respondents had correctly read the questionnaire and selected the Likert scale that was parallel or in-line with the other answers given.

As for the work-family positive spillover, two items found to have obtained high mean scores, namely "Values developed at work make me a worse family member" and "I apply the principles of my workplace values in family situations" which yields mean scores of 2.809 and 2.818, respectively. Similar to the earlier

mentioned negative phrase in work-family enrichment, the pessimistic phrase in "Values developed at work make me a worse family member" had been re-coded.

There were three items under work-family conflict that had attained high mean scores, namely "My job produces strain that makes it difficult to fulfill family duties", "The amount of time my job takes up makes it difficult to fulfill family responsibilities" and "Things I want to do at home do not get done due to the demands my job puts on me". The mean scores are 2.718, 2.800 and 2.764, respectively.

Likewise, two items from job satisfaction variable had high mean scores, namely "Each day of work seems like it will never end" and "I consider my job rather unpleasant" whereby the mean scores are 3.209 and 2.818, respectively. Similarly, the standard deviation obtained for all thirty items were relatively close to the mean scores achieved.

Table 3: Measurement of Central Tendency and Spread

	Mean	Mode	Std. Deviation	Skewness	Kurtosis
Work-family Enrichment					
Understand different viewpoints	2.436	2	2	0.807	0.104
Gain knowledge	2.573	2	2	0.818	0.530
Acquire skills	2.427	2	2	0.807	0.668
Bad mood	2.927	3	2	1.038	0.198
Feel happy	2.509	2	2	0.821	0.224
Cheerful	2.564	2	2	0.807	0.216
Personally fulfilled	2.491	2	2	0.906	0.141
Sense of accomplishment	2.545	2	2	0.863	0.597
Sense of success	2.500	2	2	0.906	0.565
Work-family Positive Spillover					
Going well at work	2.045	2	2	0.747	0.869
Being in positive mood	1.936	2	2	0.770	0.971
Being happy at work	1.973	2	2	0.893	1.156
Having good day at work	2.000	2	2	0.846	0.834
Skills developed at work	2.400	2	2	1.024	0.640
Successfully performing tasks	2.355	2	2	0.904	0.672
Behaviours required by job	2.418	2	2	0.923	0.638
Carrying out family responsibilities	2.655	3	2	0.952	0.487
Values developed at work	2.809	3	3	1.018	0.234
Apply principles of workplace	2.818	3	2	1.051	0.325
Values learned through work	2.509	2	2	0.955	0.745
Work-family Conflict					
Demand of work	2.545	2.5	2	0.935	0.346
Job processes strain	2.718	3	3	0.987	0.071
Amount of time	2.800	3	3	0.946	0.016
Things do not get done	2.764	3	3	1.022	0.072
Make changes to plans	2.400	2	2	1.024	0.327
Job Satisfaction					
Fairly satisfied	2.464	2.5	3	0.895	0.189
Enthusiastic	2.400	2	2	0.859	0.273
Work will never end	3.209	3	4	0.987	0.091
Real enjoyment	2.527	3	3	0.875	0.501
Job unpleasant	2.818	3	3	0.900	0.139

In general, majority of the respondents felt that they have gained experience from their work which had enriched their quality of life, especially in the aspects of **understanding different viewpoints** (44%), **personal fulfilment** (41%) and having the **sense of success** (46%). Though these respondents also feel transfer of positive spillover from their work, they seem to have a neutral stand on matters of **carrying out family responsibilities** (36%) and **application of workplace values** in their family situations (33%). These respondents also felt that the **job strains** (36%), **amount of time spent** (34%) and **job demands** (34%) do not greatly influence the way they fulfil their family obligations and appears to be on the fence on matters of **job enjoyment** (43%) and **job unpleasantness** (41%). Refer to Appendix D for complete list of all thirty items for its frequency, percent and cumulative percent.

Pearson Chi Square test on the following categorical variables shown in Appendix E found to be futile as none of them showed any significance difference between these nominal and ordinal variables. Though some of the variables looked likely to be normally distributed based on the histogram obtained (Appendix F), however test of normality using Kolmogorov-Smirnov with Lilliefors significance level and Shapiro-Wilk test resulted $p < .05$, hence data is not normally distributed. Refer to Appendix G for complete list of the thirty items.

4.2   Inferential Analysis

This analysis involves studying the correlations between independent variables and dependent variables using the Bivariate Pearson correlation test. This test was conducted by averaging each of the work-family groups (enrichment, positive spillover, conflict) and job satisfaction.

4.2.1   Bivariate Pearson Correlation Test

The result obtained indicates that there is a significant positive relationship between work-family enrichment and job satisfaction ($r = .570$, $p < .01$). This implies that the more enrichment felt by the employees through his or her work transferred to family, the higher job satisfaction felt by the employee. Hence, the research Hypothesis 1 is accepted.

Next, correlation between work-family positive spillover and job satisfaction was tested and found to have similar significant positive relationship between work-family positive spillover and job satisfaction ($r = .432$, $p < .01$). This signifies that the more positive spillover the employees obtained from work to family matters, the more job satisfaction he or she will have. Hence, the research Hypothesis 2 is accepted.

Similarly, the third research hypothesis was tested for its acceptance. It was found that there is a significant negative relationship between work-family conflict and job satisfaction ($r = -.373$, $p < .01$). This means the more conflict caused by work is transferred to family matters, the less job satisfaction felt by the employees. Hence, the research Hypothesis 3 is accepted.

Based on the above three correlation test results, all three null hypotheses can be ignored. Refer to Table 4 for summary of correlation coefficient test results. Similar results were also obtained for individual work-family variables towards average job satisfaction. Appendix H contains the full details of Pearson correlation coefficient test results for each subscale versus job satisfaction. In general, there are significant relationships between each subscale with the job satisfaction. However, the coefficient values for all the subscales were found to be lower than 0.6.

Table 4: Summary of Pearson Correlation Coefficient

Variables	1	2	3	4
1. **Work-Family Enrichment**	-			
2. **Work-Family Positive Spillover**	.640**	-		
3. **Work-Family Conflict**	-.248**	-.127	-	
4. **Job Satisfaction**	.570**	.432**	-.373**	-

N = 110 **p < .01 (2-tailed)

4.2.2 Reliability Test

The Cronbach's alpha coefficient was used to evaluate the reliability of all four variables, namely work-family enrichment, work-family positive spillover, work-family conflict and job satisfaction. All three work-family enrichment score (.889), work-family positive spillover score (.876) and work-family conflict score (.917) were found to have high level of internal consistency and are acceptable for next analysis purpose. High coefficient denotes high reliability and thus, the questionnaire is reliable. However, the job satisfaction score had a low level consistency (.564). Sekaran (2005) stated that if Cronbach's alpha is less than .6, the instrument has low reliability whereas for alpha value within .7, the instrument is considered acceptable. Hence, this reliability scoring can be further improved if the "job unpleasant" variable is removed to increase the Cronbach's alpha value to .643. Refer to Table 5 below for the summary of reliability values obtained for each variable and Appendix I for detail computation of Reliability Statistics and Item-Total Statistics.

Based on the earlier research done by Ilies et al. (2009), the reliability achieved using the same Brayfield–Rothe Index was .86. It is possible that the two reverse questions may have affected the participants' response such as having difficulties in understanding the sentences or misreading the negatively worded items, and this error could have led to lower reliability of the score.

Table 5: Summary of Reliability Test

Variable	No. of Items/Subscale	Cronbach's Alpha
Work-family Enrichment	9	0.889
Work-family Positive Spillover	11	0.876
Work-family Conflict	5	0.917
Job Satisfaction	5	0.564

4.2.3 Multiple Regression

Though all three independent variables namely, work-family enrichment, work-family positive spillover and work-family conflict were statistically significant (p<.05) that were able to predict the outcome job satisfaction (based on the Bivariate Pearson Correlation test), these independent variables in total could only explain 39.2% of the variance in job satisfaction (R square). In other words, 60.8% is unexplained which means, there could be other contributing factors that may influence job satisfaction.

The results also had indicated that the work-family enrichment, work-family positive spillover and work-family conflict were statistically significant in predicting the job satisfaction, $F_{(3,106)} = 22.784$, p<.05, meaning that this regression model is a good fit of the data. Table 6 shows the model summary of the dependent variable (job satisfaction).

Table 6: Model Summary of the Job Satisfaction

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df 1	df 2	Sig. F Change
					Change Statistics				
1	.626[a]	.392	.375	.43182	.392	22.784	3	106	.000

a. Predictors: (Constant), AVGcon, AVGpos, AVGenr

b. Dependent Variable: AVGjob

In Table 7, all two independent variables work-family enrichment and work-family conflict ($p<.05$) had significantly influence the job satisfaction. However, the work-family positive spillover variable was not able to carry much weightage on job satisfaction. Based on the beta value obtained, the work-family enrichment has the highest beta value of 0.427 whereas the lowest beta value was recorded for work-family conflict ($\beta = 0.251$). The beta value for work-family positive spillover will not be considered here as the variable is not significant ($p=0.200$).

Table 7: Coefficient of Independent Variables

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	1.901	.253		7.519	.000
	AVGenr	.369	.087	.427	4.223	.000
	AVGpos	.113	.088	.127	1.290	.200
	AVGcon	-.161	.050	-.251	-3.211	.002

The unstandardized coefficient values in Table 7 denote the input of each variable on the job satisfaction. For instance, work-family enrichment (0.369) has positive relationship with job satisfaction while work-family conflict (-0.161) has negative relationship with job satisfaction. This can also be derived in an equation as shown below:

$$JS = 1.901 + 0.369WFE - 0.161WFC$$

whereby   JS = Job Satisfaction

WFE = Work-Family Enrichment

WFC = Work-Family Conflict

This translates to having approximately 2.7 times of work-family enrichment and reduction of 6.2 times in work-family conflict in order to achieve job satisfaction.

Hence the earlier model shown on Figure 1 in section 2.3 has now been remodel to reflect the independent variables that truly influence or have significant impact on job satisfaction. Refer to Figure 9.
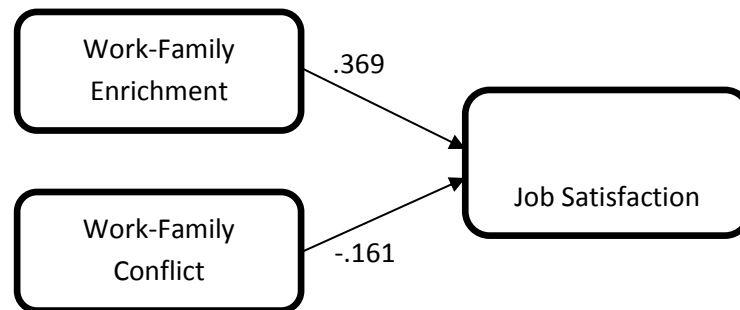
Therefore, only two hypotheses H1 and H3 were truly supported, implying that the job satisfactions in the IT related service industry greatly influenced by work-family enrichment and work-family conflict.

CHAPTER 5

RECOMMENDATION AND CONCLUSION

This final chapter summarizes the whole research which includes the discussion based on the research findings. Available work-family support with recommendations for organizations and the managerial implications were discussed. The limitations of the study were also acknowledged, followed by overall conclusion on the research and finally, the extant literature was also given.

5.1   Discussion

A theoretical framework was developed and tested to investigate the consequences work-family enrichment, work-family positive spillover and work-family conflict on job satisfaction. Only two out of three hypothesized linkages in the theoretical framework were supported by the test results. Work is most likely to influence family by ways of enrichment obtained from workplace which led to job satisfaction. On the other hand, employees experience negative impact/conflict gained from work spilling over to their family and caused lesser job satisfaction.

The work-family enrichment was found to have significant positive relationship with job satisfaction which was consistent with the previous findings by Carlson et al. (2009); Wayne et al. (2004) and Michel et al. (2009). The findings suggest that the acquired skills, the knowledge gained from workplace together with the sense of work accomplishments enrich the employees and led to job satisfaction. This supports the theoretical notion that the spillover theory spills over the enrichment attained from work in one area to family matters in another area that influences the satisfaction of the employees' job.

Unlike the previous researches conducted on work-family positive spillover on job satisfaction by Edwards et al. (2000) and Grzywacz et al. (2002), the findings from this study did not support the research hypothesis, which means it did not have significant relationship between work-family positive spillover and job satisfaction. This could be due to the fact that the employees took rather a neutral stand on "Carrying out my family responsibilities is made easier by using behaviors performed at work" and "I apply the principles of my workplace values in family situations". Employees from the IT related service industry may not be able to relate or associate the type of work carried out at work place to that of the task and duty performed at home and fulfilling family responsibilities. Hence, the work-family positive spillover theoretical notion whereby it supposed to corroborate with the spillover theory by influencing one domain (work) onto another domain (family) is not met in this study.

The finding is also contradicts with Carlson et al. (2006)'s discovery that the work-family positive spillover can still happen without the employees having to experience the work-family enrichment but not vice versa. In addition, Masuda et al. (2006) pointed out that the positive spillover must occur first prior to process of enrichment. In spite of these two notions, this research proved otherwise. One important factor was discovered, i.e. the work-family enrichment had occurred without the presence of work-family positive spillover.

The work-family conflict was negatively related to job satisfaction that echoed the study done earlier by Michel et al. (2009) and Noor (2002). Theoretically, the findings indicated that when one role (at work) interferes with the other role (at home), it results in poor role quality or performance. This implies that the IT employees in this sample who face heightened conflict between work and family had reduced job satisfaction. For example, their enthusiasm and real enjoyment were affected when they faced conflict leading to lower job satisfaction.

Upon comparing the findings against the earlier studies done using employees in the developed Western countries, similar results were obtained except for influence of work-family spillover on job satisfaction. For instance, the hypothesized relationships for work-family enrichment and work-family conflict

towards job satisfaction derive the same results from the previous studies conducted in United States by Wayne et al. (2006) for work-family enrichment versus job satisfaction and in Canada by Mcelwain et al. (2005) and in Brazil by Casper et al. (2011) for work-family conflict versus job satisfaction.

5.2 Work-family Support

Although most of the work-family models were developed based on the researches in the Western countries with different cultural and religious beliefs, similar impact of work and family roles were observed on these employees. The purpose of conducting this study was to develop and test a research model and investigate the outcomes of work-family enrichment, work-family positive spillover and work-family conflict on the job satisfaction using data from IT-based organization in Malaysia. The empirical evidence obtained from the research conducted using the IT-based organization enables the organization to develop and implement effective human resources or family-friendly policies for the employees and have a sustainable competitive advantage. This study is an important step in understanding the work-family relationships among Malaysian employees and how these affect the job satisfaction, including shedding some light on the theoretical and practical aspects of effective management by organizations.

Work-family support should be made available in all organizations to allow employees balance between work and family demands. According to Chawla and Sondhi (pp. 341, 2011), work life balance is the "…effective management and synchronization between remunerative work and the other roles and responsibilities that are important to people as individualized human beings and as a part of the society.". Past literature supported such needs which can lead to greater productivity, company loyalty and job satisfaction, thus creating a supportive atmosphere between employer and employee, hence steering towards being a good contributor to economy in general and also the organization concerned (Malik, Sakem & Ahmad, 2009).

Generally, job designs, friendly work policies and family support are important features that organizations should have in order to address conflict (Iqbal et al, 2012) and enrich its employees which will make the organization stay competitive. In fact, an employee would have better self-esteem and family-related resources such as time and flexibility when a family-supportive environment is made available (Greenhaus et al., 2006; Thomas et al., 1995). Moreover, employees are most likely to perceive the organization to be a family-friendly workplace if these policies are applied (Wayne et al., 2006). Researches carried out showed that family-friendly policies implemented such as supportive supervision and feeling satisfied with the child care management are correlated with positive outcomes including reduced work-family conflict (Goff et al., 1990; Mennino et al., 2005), positive work attitudes (Allen, 2001; Thomas et al., 1995) and beneficial to organization (Boyar et al., 2003) and increased level of job satisfaction (Scandura & Lankau, 1997; Jones & McKenna, 2002) and these relationships exist irrespective of demographic, work-family policies and general organization culture (Allen, 2001). Many policies which are designed to minimise impact of work on family life, commonly named "family-friendly benefits" includes flexible work schedule, child-care, compressed working week and leave of absence are being implemented by organizations to help accommodate the needs of today's diverse workforce comprising of dual-career couples, single working mothers with young children, etc. (Allen, 2001). In fact, Shockley et al. (2007) revealed that flexible work arrangements comprises of flexibility in time and flexibility in work location. However, this policy implementation does not guarantee actual application because not all company culture or managers are supportive towards these family benefits (Allen, 2001).

Mennino et al. (2005) also agreed with this drawback and considered that atmosphere of workplace is more vital than the mere availability of organization policies to diminish conflict. This sentiment was also shared by Saltzstein, Yuan and Saltzstein (2001) whereby they discovered that the lack of supportive environment may weaken the family-friendly programs and the impacts of policy utilization and perceived understanding of these support programs tend to differ significantly among subpopulation employee of employees. Indeed, Allen (2001) highlighted that organization will benefit by providing managerial support for

employees to enrich their work-family relationships. This was also echoed by Aminah (2007) who felt the needs for human resource department to acknowledge the importance of family-friend policies and to improve on the family-friendly policy practices.

Frone (2000) too had deliberated some strategies to promote work-family balance at both individual and organization level. Doing so, helps organizations to sustain competitive advantage and attract desired talent pool whereas employees are able to manage their multiple roles in leading a healthy and happy life. Nevertheless, it requires the organizations' positive norms and values that encourage its employees to use the available benefits provided. As for potential candidates of an organization, they would perceive flexible career path and policies as an attractive reason to work in that organization. Grandey, Cordeiro and Michael (2007) found that for those who work long hours, the work-family supportiveness have strong negative relationship with work-family conflict. In other words, when work-family supportive is given to employees' family, it buffers the effect against the work-family conflict, even though long working hours is spent at work. According to the edited version by Jones, Burke and Westman (2005), work-family best practices which contains three components: policies, services and benefits, are not just the ones provide by organizations but those that are actually used by employees.

Generally, work-family supports are offered by organizations to reduce the work-family conflict experienced by employees, which ultimately leads to less absenteeism (Goff et al., 1990), improved attitudes and behaviours on the job and at the same time, organizations will be able to improve their ability to recruit and retain their employees (Allen, 2001). Thomas et al. (1995) too have discovered family-supportive benefits and family-supportive supervisors to be able to reduce the work-family conflict among employees and further enhance their attitudes and behaviours towards their jobs. Baltes, Briggs, Huff, Wright and Neuman's (1999) meta-analysis had established the positive relationship of compressed work schedule to job satisfaction. In other words, organization can rearrange its work schedule to 4-days work with longer working hours instead of the traditional 5-days work of 8 working hours.

Zhao et al. (2012, p. 465) also suggest having "on-site nursery and child care or an elder-care program as part of organization's actions which will help individuals 'bring their family to work' and help them manage work-family conflict". They also highlighted the possibility of organizations designing jobs based on job characteristics such as skill variety, autonomy, task significance, task identity and feedback. In addition, re-employment scheme can be arranged for employees who need to leave workforce temporarily for child care reasons. Saltzstein et al. (2001) advised that top management and immediate supervisors of an organization must consistently give awareness of the existing program made available in one's organization, as well as allowing employees to utilize these programs.

Having associated with computer-based technology, IT-based organization can also offer telecommuting as one of the additional family-friendly policies to reduce the work-family conflict. Golden and Veiga (2005) have found telecommuters with lower task interdependency but higher task discretion experience greater levels of high job satisfaction. This can help alleviate work-family conflict and increase job satisfaction. Employees will be able to increase the ability to adjust work activities and meet demands of work and family responsibilities.

5.3   Managerial Implications

The findings in this study have important implications for practitioners. The results indicated that the work-family enrichment bring job satisfaction while the work-family conflict leads to reduced job satisfaction. This study will enable managers to develop and implement effective human resource policies and procedures to strive for sustainable competitive advantage above other organizations.

Organizations too can benefit by creating an environment that will allow employees to stay poise and be able to handle both work and family matters effectively. For example, career counselling can be offered to employees in order to help balance the various compelling demands of both work and family lives.

Based on the above findings, organizations should educate its employees on understanding the benefits they obtain from engaging in multiple roles in workplace and also to facilitate resources generated that can enrich their family domain. Managers can also conduct a time management training to help employees utilize their time more effectively and make more efforts in increasing the level of affective commitment among their employees. At the same time, all employees require to have a well-balanced work-family balance in order to reduce conflict and also enrich to non-work domains. This will indirectly help organizations to achieve higher productivity and valuable organizational outcomes and reconcile the demands of work and family life.

5.4   Limitations and Future Research

This research had a number of limitations and should be taken into consideration when interpreting the findings. This study used target samples from one particular organization in Malaysia that has its business associated with IT related industry, which means variables were measured using same source at same time. Hence, common method variance cannot be ruled out since the results obtained from the current study does not represent the entire population and may not be generalized to IT related industry worldwide and may bias the results obtained. Moreover, IT services offered by this organization vary from other IT service providers. Moreover, this research involved a relatively small sample size out of which 110 employees responded (responses rate = 81%). It is anticipated that a larger sample size will strengthen the explanatory study of the work-family enrichment, work-family positive spillover and work-family conflict models.

Based on the relatively low R square value obtained from the multiple regression test, the present model can be further improved by adding new explanatory variables in the future research. This will help to increase the power of the present model and thus able to describe complex relationships.

The above research was based on cross-sectional study to test the hypothesized work-family relationships to understand these relationships on job satisfaction

over time. This limits the ability to make causal inferences. It is suggested that future research to include longitudinal study to examine the impact of work-family enrichment, positive spillover and conflict against job satisfaction for those individuals over a longer duration and enabling researcher to make causal relationships as carried out previously by Hammer et al. (2005). It is also recommended to consider studying the family-to-work direction as stronger influence of family and higher collectivism is observed among Asians family members. In addition, similar studies to compare work-family relationships on job satisfaction experience at different levels of managerial positions would enlighten and expand the research further.

It is noted that most studies conducted both locally and globally focus only on obtaining samples from any one particular industry at a time. It is recommended that further research be done by comparing between various industries and whether these differences on the outcomes of work-family enrichment, work-family positive spillover and work-family conflict on the job satisfaction are significantly large. It is also anticipated that a qualitative method type of study be of an added advantage as the typical questionnaires may not be able to bring out in-depth emotional state of the employees on how they truly feel about the work and its effect on their family's duty and obligations that influence these employees' job satisfaction.

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APPENDICES

Appendix A: Survey Questionnaire Form

Section A: Demographic Information

INSTRUCTIONS: This survey requires respondent to answer his/her opinions on the influence of family factors on the works carried out and his/her level of job satisfaction. For Section A, respondent is required to fill in his/her demographic profile. Please answer all questions by ticking ✓ the appropriate box given and/or fill in the gap.

1) Gender: **2) Age:** _____

☐ Male   ☐ Female

3) Nationality:

☐ Malaysian   ☐ Non-Malaysian, please specify_____

4) If Malaysian, pl state race:

☐ Malay   ☐ Chinese   ☐ Indian   ☐ Others, please specify_____

5) Marital status:

☐ Single   ☐ Married   ☐ Divorced/Separated   **6) No. of children** _____

7) Highest level of education:

☐ A-Level

☐ Certificate

☐ Diploma

☐ Degree

☐ Masters   If others, please specify_____

8) Job Description:

☐ Senior Management

☐ Leading Teams

☐ Sales and Marketing

☐ Software Development/Research & Development/Implementation

☐ Executive tasks

☐ Others, please specify_____

9) Job Category:

☐ Technical   ☐ Non-Technical

10) Years of service in your present company (years): _____

11) No. of average hours worked/day (inclusive of after work hours):_____

Section B:

INSTRUCTIONS: This survey requires respondent to answer his/her opinions on the influence of family factors on the works carried out and his/her level of job satisfaction. Please answer all questions by circling only one desired number shown at the right-hand side column. If you are uncertain about any answer, please select the best possible answer.

I) Work-Family Enrichment

	My company:	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Helps me to understand different viewpoints and this helps me be a better family member	1	2	3	4	5
2	Helps me to gain knowledge and this helps me be a better family member	1	2	3	4	5
3	Helps me acquire skills and this helps me be a better family member	1	2	3	4	5
4	Puts me in a bad mood and this makes me be a worse family member	1	2	3	4	5
5	Makes me feel happy and this helps me be a better family member	1	2	3	4	5
6	Makes me cheerful and this helps me be a better family member	1	2	3	4	5
7	Helps me feel personally fulfilled and this helps me be a better family member	1	2	3	4	5
8	Provides me with a sense of accomplishment and this helps me be a better family member	1	2	3	4	5
9	Provides me with a sense of success and this helps me be a better family member	1	2	3	4	5

Section B:

INSTRUCTIONS: This survey requires respondent to answer his/her opinions on the influence of family factors on the works carried out and his/her level of job satisfaction. Please answer all questions by circling only one desired number shown at the right-hand side column. If you are uncertain about any answer, please select the best possible answer.

II) Work-Family Positive Spill Over

		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	When things are going well at work, my outlook regarding family life is improved	1	2	3	4	5
2	Being in a positive mood at work helps me to be in a positive mood at home	1	2	3	4	5
3	Being happy at work improves my spirits at home	1	2	3	4	5
4	Having a good day at work allows me to be optimistic with my family	1	2	3	4	5
5	Skills developed at work help me in my family life	1	2	3	4	5
6	Successfully performing tasks at work helps me to more effectively accomplish family tasks	1	2	3	4	5
7	Behaviors required by my job lead to behaviors that assist me in my family life	1	2	3	4	5
8	Carrying out my family responsibilities is made easier by using behaviors performed at work	1	2	3	4	5
9	Values developed at work make me a worse family member	1	2	3	4	5
10	I apply the principles of my workplace values in family situations	1	2	3	4	5
11	Values that I learn through my work experiences assist me in fulfilling my family responsibilities	1	2	3	4	5

Section B:

INSTRUCTIONS: This survey requires respondent to answer his/her opinions on the influence of family factors on the works carried out and his/her level of job satisfaction. Please answer all questions by circling only one desired number shown at the right-hand side column. If you are uncertain about any answer, please select the best possible answer.

III) Work-Family Conflict

		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	The demands of my work interfere with my home and family life	1	2	3	4	5
2	My job produces strain that makes it difficult to fulfill family duties	1	2	3	4	5
3	The amount of time my job takes up makes it difficult to fulfill family responsibilities	1	2	3	4	5
4	Things I want to do at home do not get done due to the demands my job puts on me	1	2	3	4	5
5	Due to work-related duties, I have to make changes to my plans for family activities	1	2	3	4	5

IV) Job Satisfaction

		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	I feel fairly satisfied with my present job	1	2	3	4	5
2	Most days I am enthusiastic about my work	1	2	3	4	5
3	Each day of work seems like it will never end	1	2	3	4	5
4	I find real enjoyment in my work	1	2	3	4	5
5	I consider my job rather unpleasant	1	2	3	4	5

□□□□□ **End of Questionnaire** □□□□□

Your response will be treated in the strictest confidentiality. Your cooperation is greatly appreciated.
Thank You.

Appendix B: Type of Instrument Measures Utilized and Reliability, α Obtained by Past Researchers

Construct	Measure Scale Developed by	Target Sample	Item-Scale	Questionnaire Availability	Article Cited	Article Title	Reliability, α
Life Satisfaction	Diener and Fujita(1995)	Hotel sales managers in China	3	Yes	Hailin Qu, Xinyuan (Roy) Zhao	Employees' work–family conflict moderating life and job satisfaction	0.78
Life Satisfaction	Diener and Fujita (1995)	Hotel sales managers in China	3	Yes	Xinyuan (Roy) Zhao, Hailin Qu and Richard Ghiselli	Examining the relationship of work–family conflict to job and life satisfaction: A case of hotel sales managers	0.78
Life Satisfaction	Diener, Emmons, Larsen and Griffin (1985)	Managers in US, Canada, Australia, Finland, New Zealand	5	No	Laurent Lapierre, Paul E. Spector, Tammy D. Allen, Steven Poelmans, Cary L. Cooper, Michael P. O'Driscoll, Juan I. Sanchez, Paula Brough and Ulla Kinnunen	Family-supportive organization perceptions, multiple dimensions of work–family conflict, and employee satisfaction: A test of model across five samples	0.88
Life Satisfaction	Iris and Barrett (1972)	Frontline hotel employees in Jordan	6	No	Osman M. Karatepe and Lulu Baddar	An empirical study of the selected consequences of frontline employees' work–family conflict and family–work conflict	0.86
Life Satisfaction	Iris and Barrett (1972)	Sales persons in New Zealand	6	Yes	Shahid Bhuian, Bulent Menguc and Rene Borsboom	Stressors and job outcomes in sales: a triphasic model versus a linear-quadratic-interactive model	0.75
Life Satisfaction	Cooke and Rousseau (1984)	Professionals in Canada	??	No	Allyson K McElwain, Karen Korabik and Hazel M Rosin	An Examination of Gender Differences in Work-Family Conflict	0.77

Life Satisfaction	Quinn & Staines (1979)	Various employees in US	15	No	Netemeyer, Boles and McMurrian (1996)	Development and Validation of Work-Family Conflict and Family-Work Conflict Scales	0.87
Job Satisfaction	**Brayfield and Rothe (1951) - modified**	**University employees in US**	**5**	**No**	**Timothy A. Judge and Remus Ilies**	**Affect and Job Satisfaction: A Study of Their Relationship at Work and at Home**	**0.95**
Job Satisfaction	Brayfield–Rothe Index (Brayfield & Rothe, 1951)	University employees in US	5	Yes	Remus Ilies, Kelly Schwind Wilson and David T. Wagner	The spillover of daily job satisfaction onto Employees' family lives: the facilitating Role of work-family integration	0.86
Job Satisfaction	Churchill, Ford and Walker (1974)	Sales persons in New Zealand	8	Yes	Shahid Bhuian, Bulent Menguc and Rene Borsboom	Stressors and job outcomes in sales: a triphasic model versus a linear-quadratic-interactive model	0.73
Job Diagnostic Survey	Hackman and Oldham (1975)	International employees via online	2	No	Jesse S. Michel and Malissa A. Clark	Has it been affect all along? A test of work-to-family and family-to-work models of conflict, enrichment, and satisfaction	0.75
Global Job Satisfaction	Hackman and Oldham (1975)	Supermarket store managers in US	3	Yes	Markus Christen, Ganesh Iyer, & David Soberman	Job Satisfaction, Job Performance, and Effort: A Reexamination Using Agency Theory	0.88
Job Satisfaction	Hackman and Oldham (1975)	Groceries store staff in US	5	No	Leslie B. Hammer, Ellen Ernst Kossek, Nanette L. Yragui, Todd E. Bodner and Ginger C. Hanson	Development and Validation of a Multidimensional Measure of Family Supportive Supervisor Behaviors (FSSB)	0.80
Job Satisfaction	Cammann, Fichman, Jenkins, & Klesh (1979)	Managers in US, Canada, Australia,	3	No	Laurent Lapierre, Paul E. Spector, Tammy D. Allen, Steven Poelmans, Cary L. Cooper, Michael P.	Family-supportive organization perceptions, multiple dimensions of work–family conflict, and employee	0.86

		Finland, New Zealand			O'Driscoll, Juan I. Sanchez, Paula Brough and Ulla Kinnunen	satisfaction: A test of model across five samples	
Job Satisfaction	Cammann, Fichman, Jenkins, & Klesh (1979)	Various employees in US	5	No	Dawn S. Carlson, K. Michele Kacmar, Julie Holliday Wayne and Joseph G. Grzywacz	Measuring the positive side of the work–family interface: Development and validation of a work–family enrichment scale	0.89
Job Satisfaction	Cammann, Fichman, Jenkins, & Klesh (1979)	Employees recruited from Study Response Service	3	No	Dawn S. Carlson, Joseph G. Grzywacz and Suzanne Zivnuska	Is work–family balance more than conflict and enrichment?	0.93
Overall Job Satisfaction from Michigan Organizational Assessment Questionnaire	Cammann, Fichman, Jenkins, & Klesh, (1979)	Professionals from telecommunication company in USA	3	No	Timothy D. Golden and John F. Veiga	The Impact of Extent of Telecommuting on Job Satisfaction: Resolving Inconsistent Findings	0.85
Overall Job Satisfaction	Cammann, Fichman, Jenkins, & Klesh (1979)	Employees from technology firm, utility company, and members of women's professional business association in US	3	No	Tammy Allen	Family-Supportive Work Environments: The Role of Organizational Perceptions	0.88
Job Satisfaction	Cammann, Fichman, Jenkins, & Klesh, 1979	Working couples via online in US	3	No	Merideth Ferguson, Dawn Carlson, Suzanne Zivnuska and Dwayne	Support at work and home: The path to satisfaction through balance	0.88

					Whitten		
Job Satisfaction	Cammann, Fichman, Jenkins, & Klesh (1983)	Hotel employees in India	4	No	Karthik Namasivayam and Xinyuan Zhao	An investigation of the moderating effects of organizational commitment on the relationships between work–family conflict and job satisfaction among hospitality employees in India	0.83
Job Descriptive Index	Smith, Kendall and Hulin (1969)	R&D personnel from high-tech industry in Taiwan	6	Yes	Tser-Yieth Chen, Pao-Long Chang and Ching-Wen Yeh	An investigation of career development programs, job satisfaction, professional development and productivity: the case of Taiwan	0.92
Job Opinion Questionnaire	Campell, Converse and Rodgers (1976)	Hotel employees in China	9	No	Xinyuan (Roy) Zhao Karthik Namasivayam	The relationship of chronic regulatory focus to work–family conflict and job satisfaction	0.80
Job Satisfaction	Quinn and Staines (1979)	Professionals in Canada	5	No	Allyson K McElwain, Karen Korabik and Hazel M Rosin	An Examination of Gender Differences in Work-Family Conflict	0.81
Global Job Satisfaction	Warr, Cook and Wall (1979)	Doctors in Pakistan	14	Yes	Muhammad Irnran Malik, Farida Sakem and Mehbooh Ahmad	Work-Life Balance and Job Satisfaction Among Doctors in Pakistan	0.91
Job Satisfaction	Price & Mueller (1986); Staines & Pleck (1984)	Various employees in US	5	No	Netemeyer, Boles and McMurrian (1996)	Development and Validation of Work-Family Conflict and Family-Work Conflict Scales	0.94
Job Satisfaction	Hartline and Ferrell (1996)	Hotel employees in Northern Cyprus	8	No	Osman Karatepe and Hasan Kilic	Relationships of supervisor support and conflicts in the work–family interface with the selected job outcomes of frontline employees	0.90
Job Satisfaction	Spector, Cooper,	Employees	3	No	Aline D. Masuda, Laurel A.	Examining the constructs of work-to-family enrichment and	0.93

	Poelmans, Allen, O`Driscoll, Sanchez (2004)	from Study Response via email			McNall, Tammy D. Allen and Jessica M. Nicklin	positive spillover	
Work-Family Conflict	Grandey, Cordeiro and Crouter (2005)	Hotel employees in China	11	No	Xinyuan (Roy) Zhao Karthik Namasivayam	The relationship of chronic regulatory focus to work–family conflict and job Satisfaction	0.76
Work-Family Conflict	Grandey, Cordeiro and Crouter (2005)	Hotel sales managers in China	7	No	Xinyuan (Roy) Zhao, Hailin Qu andRichard Ghiselli	Examining the relationship of work–family conflict to job and life satisfaction: A case of hotel sales managers	0.84
Work-Family Conflict	Grandey, Cordeiro and Crouter (2005)	Hotel sales managers in China	3	No	Hailin Qu, Xinyuan (Roy) Zhao	Employees' work–family conflict moderating life and job satisfaction	0.84
Work-Family Conflict	Carlson, Kacmar and Williams (2000)	Working women from various industries in USA	9	No	Kristen M. Shockley and Tammy D. Allen	When flexibility helps: Another look at the availability of flexible work arrangements and work–family conflict	0.89
Work-family conflict	Carlson, Kacmar and Williams (2000)	Employees recruited from Study Response Service	9	No	Dawn S. Carlson, Joseph G. Grzywacz and Suzanne Zivnuska	Is work–family balance more than conflict and enrichment?	0.91
Work-Family conflict	Carlson, Kacmar and Williams (2000)	Managers in US, Canada, Australia, Finland, New Zealand	9	No	Laurent Lapierre, Paul E. Spector, Tammy D. Allen, Steven Poelmans, Cary L. Cooper, Michael P. O'Driscoll, Juan I. Sanchez, Paula Brough and Ulla Kinnunen	Family-supportive organization perceptions, multiple dimensions of work–family conflict, and employee satisfaction: A test of model across five samples	0.84
Work-Family	Carlson, Kacmar and	International	9	No	Jesse S. Michel and	Has it been affect all along? A test of	0.92

Conflict	William (2000)	employees via online			Malissa A. Clark	work-to-family and family-to-work models of conflict, enrichment, and satisfaction	
Work interference with family	Carlson, Kacmar and Williams (2000)	Business professionals in USA	9	No	Jeffrey H. Greenhaus, Jonathan C. Ziegert and Tammy D. Allen	When family-supportive supervision matters: Relations between multiple sources of support and work–family balance	
~~Work-Family Conflict~~	~~Carlson, Kacmar and William (2000)~~	~~Managerial and professionals in US~~	~~9~~	~~Yes~~	~~Gary Powell and Jeffrey Greenhaus~~	~~Sex, gender, and the work-to-family interface: Exploring negative and positive interdependencies~~	~~0.51~~ Combination of behavior-based instrument not suitable
Work-Family Conflict	Carlson and Frone (2003)	Working mothers in Switzerland	6	No	Christine P. Seiger and Bettina S. Wiese	Social support from work and family domains as an antecedent or moderator of work–family conflicts?	0.76
Work-Family Conflict	Netemeyer, Boles and McMurrian (1996)	Male manufacturing employees	5	No	Alicia A. Grandey , Bryanne L. Cordeiro and Judd H. Michael	Work-family supportiveness organizational perceptions: Important for the well-being of male blue-collar hourly workers?	0.92
Work-Family Conflict	Netemeyer, Boles and McMurrian (1996)	Various employees in US	5	Yes	Netemeyer, Boles and McMurrian (1996)	Development and Validation of Work-Family Conflict and Family-Work Conflict Scales	0.88
Work-Family Conflict	Netemeyer, Boles and McMurrian (1996)	Frontline hotel employees in Jordan	5	No	Osman M. Karatepe and Lulu Baddar	An empirical study of the selected consequences of frontline employees' work–family conflict and family–work conflict	0.76
Work-Family Conflict	**Netemeyer, Boles and**	**Sales**	**5**	**Yes**	**Shahid Bhuian, Bulent**	**Stressors and job outcomes in sales: a triphasic model versus**	**0.91**

	McMurrian (1996)	persons in New Zealand			Menguc and Rene Borsboom	a linear-quadratic-interactive model	
Work-Family Conflict	Netemeyer, Boles, and McMurrian (1996)	Groceries store staff in US	5	No	Leslie B. Hammer, Ellen Ernst Kossek, Nanette L. Yragui, Todd E. Bodner and Ginger C. Hanson	Development and Validation of a Multidimensional Measure of Family Supportive Supervisor Behaviors (FSSB)	0.87
Work-Family Conflict	Netemeyer, Boles and McMurrian (1996)	Furniture manufacturing employees in US	3	No	Scott Boyar, Carl Maertz, Allison Pearson and Shawn Keough	Work family conflicts: A model of linkages between work and family domain variables and turnover intentions	0.90
Work-Family Conflict	Netemeyer, Boles and McMurrian (1996) and Boles, Howard and Donofrio (2001)	Hotel employees in Northern Cyprus	5	No	Osman Karatepe and Hasan Kilic	Relationships of supervisor support and conflicts in the work–family interface with the selected job outcomes of frontline employees	0.86
Work interference with family	Netemeyer, Boles, and McMurrian (1996)	Medical officer in Peninsular Malaysia	5	No	Dr. Ahmad Zainal Abidin bin Abd Razak, Dr. Che Mohd Zulkifli bin Che Omar and Dr. Jamal Nordin bin Yunus	Family issues and work-family conflict among medical officers in malaysian Public hospitals	0.91
Work interference with family	Netemeyer, Boles, and McMurrian (1996)	Doctors in Peninsular Malaysia	5	No	Ahmad Zainal Abidin Abd Razak, Nek Kamal Yeop Yunus and Aizzat Mohd Nasurdin	The impact of work overload and job Involvement on work-family conflict Among malaysian doctors	0.91
Work interference with family	Netemeyer, Boles, and McMurrian (1996)	Professionals in Brazil	5	No	Wendy Jean Casper, Christopher Harris, Amy Taylor-Bianco and Julie Holliday Wayne	Work–family conflict, perceived supervisor support and organizational commitment among Brazilian professionals	0.84
Work-Family Conflict	Boles, Howard and Donofrio (2001)	Hotel employees in India	5	No	Karthik Namasivayam and Xinyuan Zhao	An investigation of the moderating effects of organizational commitment on the relationships between work–family conflict and job satisfaction among	0.94

						hospitality employees in India	
Work-Family Conflict	Higgins and Duxbury (1992)	Female workers in motor industry and Pharmaceutical industry in South Africa	17	Yes	Koovesheni Reddy	Thesis - An investigation into work–family conflict in Females occupying lower–level jobs	0.86
Work-Family Conflict	Kopelman, Greenhaus and Connolly (1983)	Employees from technology firm, utility company, and members of women's professional business association in US	8	No	Tammy Allen	Family-Supportive Work Environments: The Role of Organizational Perceptions	0.89
Work-Family Conflict	Gutek, Searle and Klepa (1991) based on Kopelman, Greenhaus and Connolly (1983)	Professionals in Canada	4	No	Allyson K McElwain, Karen Korabik and Hazel M Rosin	An Examination of Gender Differences in Work-Family Conflict	0.87
Work-family enrichment	Carlson, Kacmar, Wayne and Grzywacz (2006)	Employees recruited from Study Response Service	9	No	Dawn S. Carlson, Joseph G. Grzywacz and Suzanne Zivnuska	Is work–family balance more than conflict and enrichment?	0.94
Work-To-Family Enrichment	Carlson, Kacmar, Wayne and Grzywacz (2006)	Eye factory & hospital employees in	9	No	Oi-ling Siu, Jia-fang Lu, Paula Brough, Chang-qin Lu, Arnold B. Bakker, Thomas Kalliath,	Role resources and work–family enrichment: The role of work engagement	0.90

		China			Michael O'Driscoll, David R. Phillips, Wei-qing Chen, Danny Lo, Cindy Sit, Kan Shi		
Work-Family Enrichment	Carlson, Kacmar, Wayne and Grzywacz (2006)	International employees via online	9	No	Jesse S. Michel and Malissa A. Clark	Has it been affect all along? A test of work-to-family and family-to-work models of conflict, enrichment, and satisfaction	0.94
Work-Family Enrichment	**Carlson, Kacmar, Wayne and Grzywacz (2006)**	**Employees from Study Response via email**	**9**	**Yes**	**Aline D. Masuda, Laurel A. McNall, Tammy D. Allen and Jessica M. Nicklin**	**Examining the constructs of work-to-family enrichment and positive spillover**	**0.94**
Work-Family Enrichment	Grzywacz and Marks(2000); Wayne, Musisca and Fleeson (2004); Stephen, Franks and Atienza (1997)	Insurance company employees in USA	3	Yes	Julie Holliday Wayne, Amy Randel and Jaclyn Stevens	The role of identity and work–family support in work–family enrichment and its work-related consequences	0.82
Work-Family Work Positive Spillover	Hanson, Hammer and Colton (2006)	University working staff in US	8	No	Leslie B. Hammer, Ellen Ernst Kossek, Nanette L. Yragui, Todd E. Bodner and Ginger C. Hanson	Development and Validation of a Multidimensional Measure of Family Supportive Supervisor Behaviors (FSSB)	0.86
Work-To-Family Positive Spillover	Hanson, Hammer and Colton (2006)	Groceries store staff in US	9	No	Leslie B. Hammer, Ellen Ernst Kossek, Nanette L. Yragui, Todd E. Bodner and Ginger C. Hanson	Development and Validation of a Multidimensional Measure of Family Supportive Supervisor Behaviors (FSSB)	0.86

Work-To-Family Positive Spillover	Hanson, Hammer and Colton (2006)	Managerial and professionals in US	10	No	Gary Powell and Jeffrey Greenhaus	Sex, gender, and the work-to-family interface: Exploring negative and positive interdependencies	Below 0.7 Combination of behavior-based instrument not suitable
Work-To-Family Positive Spillover (WFPS Scale)	**Hanson, Hammer and Colton (2006)**	**Employees from Study Response via email**	**11**	**Yes**	**Aline D. Masuda, Laurel A. McNall, Tammy D. Allen and Jessica M. Nicklin**	**Examining the constructs of work-to-family enrichment and positive spillover**	**0.92**
Work-family balance	Grzywacz and Carlson (2007)	Employees recruited from Study Response Service	6	Yes	Dawn S. Carlson, Joseph G. Grzywacz and Suzanne Zivnuska	Is work–family balance more than conflict and enrichment?	0.93
Work-family balance	Carlson, Grzywacz, and Zivnuska (2009)	Working couples via online in US	4	No	Merideth Ferguson, Dawn Carlson, Suzanne Zivnuska and Dwayne Whitten	Support at work and home: The path to satisfaction through balance	0.88
Work-family Balance	Refer to article by Hill, E. J., Hawkins, A. J., Ferris, M., & Weitzman, M. (2001). And Saltzstein, A. L., Ting, Y., & Saltzstein, G. H. (2001)	Business professionals in USA	5	No	Jeffrey H. Greenhaus, Jonathan C. Ziegert and Tammy D. Allen	When family-supportive supervision matters: Relations between multiple sources of support and work–family balance	0.92
Family-	Tammy Allen (2001)	Managers in	14	No	Laurent Lapierre, Paul E. Spector, Tammy D. Allen,	Family-supportive organization perceptions, multiple	0.91

		US, Canada, Australia, Finland, New Zealand			Steven Poelmans, Cary L. Cooper, Michael P. O'Driscoll, Juan I. Sanchez, Paula Brough and Ulla Kinnunen	dimensions of work–family conflict, and employee satisfaction: A test of model across five samples	
Supportive Organization Perceptions (FSOP)							
Work-Family Balance Using FSOP Scale	**Tammy Allen (2001)**	**Male manufacturing employees**	**5 (original 14)**	**Yes**	**Alicia A. Grandey , Bryanne L. Cordeiro and Judd H. Michael**	**Work-family supportiveness organizational perceptions: Important for the well-being of male blue-collar hourly workers?**	**0.76**
Family-Supportive Organization Perceptions (FSOP)	Tammy Allen (2001)	Employees from technology firm, utility company, and members of women's professional business association in US	14	Yes	Tammy Allen	Family-Supportive Work Environments: The Role of Organizational Perceptions	0.91
Finding a Balance Staff Survey (2004)	Equal Community Initiative Program	Doctors in Pakistan	11	Yes	Muhammad Irnran Malik, Farida Sakem and Mehbooh Ahmad	Work-Life Balance and Job Satisfaction Among Doctors in Pakistan	0.74
Family-Supportive Organization Perceptions (FSOP)	Tammy Allen (2001)	Working women from various industries in USA	9	No	Kristen M. Shockley and Tammy D. Allen	When flexibility helps: Another look at the availability of flexible work arrangements and work–family conflict	0.84
Family-Supportive	Tammy Allen (2001)	Business professionals	9	No	Jeffrey H. Greenhaus, Jonathan C. Ziegert and	When family-supportive supervision matters: Relations between multiple sources of support and work–family	0.90

Organization Perceptions (FSOP)		in USA			Tammy D. Allen	balance	

Appendix C: Frequency Results on Respondents' Demographical Information

	Frequency	Percent	Cumulative Percent
Gender			
Male	80	72.7	72.7
Female	30	27.3	100.0
Total	110	100.0	
Age			
20-29 years	65	59.1	59.1
30-39 years	38	34.5	93.6
40-49 years	6	5.5	99.1
50-59 years	1	0.9	100.0
Total	110	100.0	
Nationality			
Malaysian	39	35.5	35.5
Others	71	64.5	100.0
Total	110	100.0	
Marital Status			
Single	57	51.8	51.8
Married	50	45.5	97.3
Divorced	3	2.7	100.0
Total	110	100.0	
Race			
Malay	18	16.4	16.4
Chinese	10	9.1	25.5
Indian	11	10.0	35.5
Expatriate	71	64.5	100.0
Total	110	100.0	
No. of children			
0	76	69.1	69.1
1	15	13.6	82.7
2	13	11.8	94.5
3	6	5.5	100.0
Total	110	100.0	
Highest education			
SPM	2	1.8	1.8
Certificate	2	1.8	3.6
Diploma	8	7.3	10.9
Degree	56	50.9	61.8
Masters	42	38.2	100.0
Total	110	100.0	
Job description			
Senior Management	5	4.5	4.5
Leading Team	19	17.3	21.8
Sales and Marketing	3	2.7	24.5
Software Development/R&D/Implementation	50	45.5	70.0
Executive tasks	26	23.6	93.6
Others	7	6.4	100.0
Total	110	100.0	

	Frequency	Percent	Cumulative Percent
Job Category			
Technical	72	65.5	65.5
Non-Technical	38	34.5	100.0
Total	110	100.0	
Years in service			
0.0-0.9 years	12	10.9	10.9
1.0-4.9 years	65	59.1	70.0
5.0-9.9 years	14	12.7	82.7
10.0-15.0 years	19	17.3	100.0
Total	110	100.0	
Average working hours			
up to 8 hrs	45	40.9	40.9
more than 8 hrs	65	59.1	100.0
Total	110	100.0	

Appendix D: Frequency Results on Respondents' Work-Family Enrichment, Work-Family Positive Spillover and Work-Family Conflict on Job Satisfaction

	Frequency	Percent	Cumulative Percent
Understand different viewpoints			
Strongly Agree	12	10.9	10.9
Agree	48	43.6	54.5
Neutral	40	36.4	90.9
Disagree	10	9.1	100.0
Total	110	100.0	
Gain knowledge			
Strongly Agree	5	4.5	4.5
Agree	54	49.1	53.6
Neutral	35	31.8	85.5
Disagree	15	13.6	99.1
Strongly Disagree	1	0.9	100.0
Total	110	100.0	
Acquire skills			
Strongly Agree	8	7.3	7.3
Agree	60	54.5	61.8
Neutral	30	27.3	89.1
Disagree	11	10.0	99.1
Strongly Disagree	1	0.9	100.0
Total	110	100.0	
Bad mood			
Strongly Agree	6	5.5	5.5
Agree	38	34.5	40.0
Neutral	31	28.2	68.2
Disagree	28	25.5	93.6
Strongly Disagree	7	6.4	100.0
Total	110	100.0	
Feel happy			
Strongly Agree	9	8.2	8.2
Agree	50	45.5	53.6
Neutral	37	33.6	87.3
Disagree	14	12.7	100.0
Total	110	100.0	
Cheerful			
Strongly Agree	7	6.4	6.4
Agree	49	44.5	50.9
Neutral	39	35.5	86.4
Disagree	15	13.6	100.0
Total	110	100.0	
Personally fulfilled			
Strongly Agree	14	12.7	12.7
Agree	45	40.9	53.6
Neutral	34	30.9	84.5
Disagree	17	15.5	100.0
Total	110	100.0	

	Frequency	Percent	Cumulative Percent
Sense of accomplishment			
Strongly Agree	8	7.3	7.3
Agree	50	45.5	52.7
Neutral	39	35.5	88.2
Disagree	10	9.1	97.3
Strongly Disagree	3	2.7	100.0
Total	110	100.0	
Sense of success			
Strongly Agree	11	10.0	10.0
Agree	50	45.5	55.5
Neutral	35	31.8	87.3
Disagree	11	10.0	97.3
Strongly Disagree	3	2.7	100.0
Total	110	100.0	
Going well at work			
Strongly Agree	22	20.0	20.0
Agree	66	60.0	80.0
Neutral	18	16.4	96.4
Disagree	3	2.7	99.1
Strongly Disagree	1	0.9	100.0
Total	110	100.0	
Being in positive mood			
Strongly Agree	30	27.3	27.3
Agree	62	56.4	83.6
Neutral	14	12.7	96.4
Disagree	3	2.7	99.1
Strongly Disagree	1	0.9	100.0
Total	110	100.0	
Being happy at work			
Strongly Agree	34	30.9	30.9
Agree	53	48.2	79.1
Neutral	18	16.4	95.5
Disagree	2	1.8	97.3
Strongly Disagree	3	2.7	100.0
Total	110	100.0	
Having good day at work			
Strongly Agree	31	28.2	28.2
Agree	55	50.0	78.2
Neutral	18	16.4	94.5
Disagree	5	4.5	99.1
Strongly Disagree	1	0.9	100.0
Total	110	100.0	
Skills developed at work			
Strongly Agree	20	18.2	18.2
Agree	45	40.9	59.1
Neutral	31	28.2	87.3
Disagree	9	8.2	95.5
Strongly Disagree	5	4.5	100.0
Total	110	100.0	

	Frequency	Percent	Cumulative Percent
Successfully performing tasks			
Strongly Agree	16	14.5	14.5
Agree	52	47.3	61.8
Neutral	32	29.1	90.9
Disagree	7	6.4	97.3
Strongly Disagree	3	2.7	100.0
Total	110	100.0	
Behaviours required by job			
Strongly Agree	14	12.7	12.7
Agree	52	47.3	60.0
Neutral	31	28.2	88.2
Disagree	10	9.1	97.3
Strongly Disagree	3	2.7	100.0
Total	110	100.0	
Carrying out family responsibilities			
Strongly Agree	9	8.2	8.2
Agree	43	39.1	47.3
Neutral	40	36.4	83.6
Disagree	13	11.8	95.5
Strongly Disagree	5	4.5	100.0
Total	110	100.0	
Values developed at work			
Strongly Agree	9	8.2	8.2
Agree	36	32.7	40.9
Neutral	38	34.5	75.5
Disagree	21	19.1	94.5
Strongly Disagree	6	5.5	100.0
Total	110	100.0	
Apply principles of workplace			
Strongly Agree	9	8.2	8.2
Agree	37	33.6	41.8
Neutral	37	33.6	75.5
Disagree	19	17.3	92.7
Strongly Disagree	8	7.3	100.0
Total	110	100.0	
Values learned through work			
Strongly Agree	11	10.0	10.0
Agree	52	47.3	57.3
Neutral	32	29.1	86.4
Disagree	10	9.1	95.5
Strongly Disagree	5	4.5	100.0
Total	110	100.0	
Demand of work			
Strongly Agree	13	11.8	11.8
Agree	42	38.2	50.0
Neutral	40	36.4	86.4
Disagree	12	10.9	97.3
Strongly Disagree	3	2.7	100.0
Total	110	100.0	

	Frequency	Percent	Cumulative Percent
Job processes strain			
Strongly Agree	12	10.9	10.9
Agree	34	30.9	41.8
Neutral	40	36.4	78.2
Disagree	21	19.1	97.3
Strongly Disagree	3	2.7	100.0
Total	110	100.0	
Amount of time			
Strongly Agree	8	7.3	7.3
Agree	36	32.7	40.0
Neutral	38	34.5	74.5
Disagree	26	23.6	98.2
Strongly Disagree	2	1.8	100.0
Total	110	100.0	
Things do not get done			
Strongly Agree	12	10.9	10.9
Agree	33	30.0	40.9
Neutral	38	34.5	75.5
Disagree	23	20.9	96.4
Strongly Disagree	4	3.6	100.0
Total	110	100.0	
Make changes to plans			
Strongly Agree	23	20.9	20.9
Agree	39	35.5	56.4
Neutral	31	28.2	84.5
Disagree	15	13.6	98.2
Strongly Disagree	2	1.8	100.0
Total	110	100.0	
Fairly satisfied			
Strongly Agree	16	14.5	14.5
Agree	39	35.5	50.0
Neutral	45	40.9	90.9
Disagree	8	7.3	98.2
Strongly Disagree	2	1.8	100.0
Total	110	100.0	
Enthusiastic			
Strongly Agree	15	13.6	13.6
Agree	47	42.7	56.4
Neutral	38	34.5	90.9
Disagree	9	8.2	99.1
Strongly Disagree	1	0.9	100.0
Total	110	100.0	
Work will never end			
Strongly Agree	1	0.9	0.9
Agree	31	28.2	29.1
Neutral	32	29.1	58.2
Disagree	36	32.7	90.9
Strongly Disagree	10	9.1	100.0
Total	110	100.0	

	Frequency	Percent	Cumulative Percent
Real enjoyment			
Strongly Agree	11	10.0	10.0
Agree	43	39.1	49.1
Neutral	47	42.7	91.8
Disagree	5	4.5	96.4
Strongly Disagree	4	3.6	100.0
Total	110	100.0	
Job unpleasant			
Strongly Agree	6	5.5	5.5
Agree	35	31.8	37.3
Neutral	45	40.9	78.2
Disagree	21	19.1	97.3
Strongly Disagree	3	2.7	100.0
Total	110	100.0	

Appendix E: Pearson Chi Square Test for Categorical Variables

AgeCategory * Working Hours Crosstabulation

Count

		Working Hours		Total
		up to 8 hrs	more than 8 hrs	
AgeCategory	20-29 years	30	35	65
	30-39 years	14	24	38
	40-49 years	1	5	6
	50-59 years	0	1	1
Total		45	65	110

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.151[a]	3	.369
Likelihood Ratio	3.688	3	.297
Linear-by-Linear Association	2.911	1	.088
N of Valid Cases	110		

a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is .41.

Respondent's nationality * Working Hours Crosstabulation

Count

		Working Hours		Total
		up to 8 hrs	more than 8 hrs	
Respondent's nationality	Malaysian	17	22	39
	Others	28	43	71
Total		45	65	110

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.180[b]	1	.672		
Continuity Correction[a]	.049	1	.825		
Likelihood Ratio	.179	1	.672		
Fisher's Exact Test				.690	.411
Linear-by-Linear Association	.178	1	.673		
N of Valid Cases	110				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.95.

Respondent's no of children * Working Hours Crosstabulation

Count

		Working Hours		Total
		up to 8 hrs	more than 8 hrs	
Respondent's no of children	0	34	42	76
	1	6	9	15
	2	4	9	13
	3	1	5	6
Total		45	65	110

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.477[a]	3	.479
Likelihood Ratio	2.676	3	.444
Linear-by-Linear Association	2.336	1	.126
N of Valid Cases	110		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 2.45.

Respondent's gender * Working Hours Crosstabulation

Count

		Working Hours		Total
		up to 8 hrs	more than 8 hrs	
Respondent's gender	Male	34	46	80
	Female	11	19	30
Total		45	65	110

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.307[b]	1	.579		
Continuity Correction[a]	.113	1	.737		
Likelihood Ratio	.310	1	.578		
Fisher's Exact Test				.666	.371
Linear-by-Linear Association	.304	1	.581		
N of Valid Cases	110				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 12.27.

YearsofService * Working Hours Crosstabulation

Count

		Working Hours		Total
		up to 8 hrs	more than 8 hrs	
YearsofService	0.0-0.9 years	6	6	12
	1.0-4.9 years	30	35	65
	5.0-9.9 years	5	9	14
	10.0-15.0 years	4	15	19
Total		45	65	110

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.405[a]	3	.221
Likelihood Ratio	4.670	3	.198
Linear-by-Linear Association	4.110	1	.043
N of Valid Cases	110		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 4.91.

Respondent's job category * Working Hours Crosstabulation

Count

		Working Hours		Total
		up to 8 hrs	more than 8 hrs	
Respondent's job category	Technical	30	42	72
	Non-Technical	15	23	38
Total		45	65	110

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.049[b]	1	.824		
Continuity Correction[a]	.000	1	.985		
Likelihood Ratio	.050	1	.824		
Fisher's Exact Test				.842	.494
Linear-by-Linear Association	.049	1	.825		
N of Valid Cases	110				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.55.

Respondent's marital status * Working Hours Crosstabulation

Count

		Working Hours		Total
		up to 8 hrs	more than 8 hrs	
Respondent's marital status	Single	27	30	57
	Married	17	33	50
	Divorced	1	2	3
Total		45	65	110

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.042[a]	2	.360
Likelihood Ratio	2.052	2	.358
Linear-by-Linear Association	1.870	1	.171
N of Valid Cases	110		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 1.23.

Respondent's nationality * YearsofService Crosstabulation

Count

		YearsofService				Total
		0.0-0.9 years	1.0-4.9 years	5.0-9.9 years	10.0-15.0 years	
Respondent's nationality	Malaysian	2	22	7	8	39
	Others	10	43	7	11	71
Total		12	65	14	19	110

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.586[a]	3	.310
Likelihood Ratio	3.761	3	.289
Linear-by-Linear Association	2.302	1	.129
N of Valid Cases	110		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 4.25.

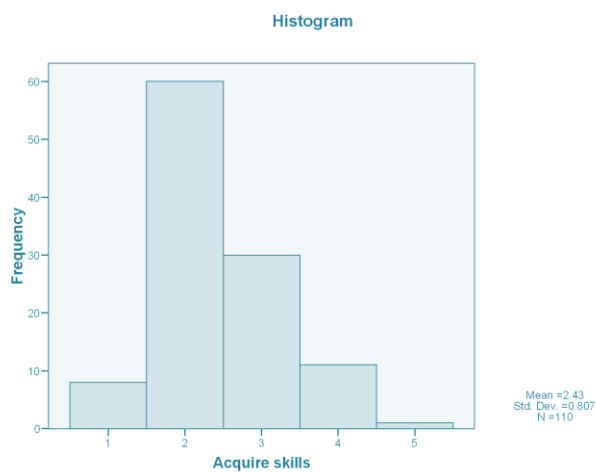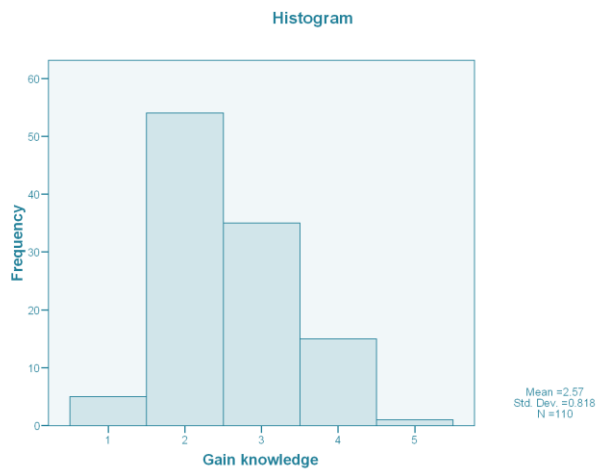**Respondent's gender * YearsofService Crosstabulation**

Count

		YearsofService				Total
		0.0-0.9 years	1.0-4.9 years	5.0-9.9 years	10.0-15.0 years	
Respondent's gender	Male	9	50	11	10	80
	Female	3	15	3	9	30
Total		12	65	14	19	110

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.718[a]	3	.194
Likelihood Ratio	4.352	3	.226
Linear-by-Linear Association	2.872	1	.090
N of Valid Cases	110		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 3.27.

Appendix F: Histogram (Test of Normality)

Histogram

Mean =2.44
Std. Dev. =0.807
N =110

Understand different viewpoints

Histogram

Mean =2.57
Std. Dev. =0.818
N =110

Gain knowledge

Histogram

Mean =2.43
Std. Dev. =0.807
N =110

Acquire skills

Histogram

Histogram

Histogram

Mean =2.49
Std. Dev. =0.906
N =110

Personally fulfilled

Histogram

Mean =2.55
Std. Dev. =0.863
N =110

Sense of accomplishment

Histogram

Mean =2.5
Std. Dev. =0.906
N =110

Sense of success

Histogram

Mean =2.05
Std. Dev. =0.747
N =110

Going well at work

Histogram

Mean =1.94
Std. Dev. =0.77
N =110

Being in positive mood

Histogram

Mean =1.97
Std. Dev. =0.893
N =110

Being happy at work

Histogram

Mean =2
Std. Dev. =0.846
N =110

Having good day at work

Histogram

Mean =2.4
Std. Dev. =1.024
N =110

Skills developed at work

Histogram

Mean =2.35
Std. Dev. =0.904
N =110

Successfully performing tasks

Histogram

Mean =2.42
Std. Dev. =0.923
N =110

Behaviours required by job

Histogram

Mean =2.65
Std. Dev. =0.952
N =110

Carrying out family responsibilities

Histogram

Mean =2.81
Std. Dev. =1.018
N =110

Values developed at work

Histogram

Mean =2.82
Std. Dev. =1.051
N =110

Histogram

Mean =2.51
Std. Dev. =0.955
N =110

Histogram

Mean =2.55
Std. Dev. =0.935
N =110

Histogram

Mean =2.72
Std. Dev. =0.987
N =110

Job processes strain

Histogram

Mean =2.8
Std. Dev. =0.946
N =110

Amount of time

Histogram

Mean =2.76
Std. Dev. =1.022
N =110

Things do not get done

Histogram

Mean =2.4
Std. Dev. =1.024
N =110

Histogram

Mean =2.46
Std. Dev. =0.895
N =110

Histogram

Mean =2.4
Std. Dev. =0.859
N =110

Histogram

Mean =3.21
Std. Dev. =0.987
N =110

Histogram

Mean =2.53
Std. Dev. =0.875
N =110

Histogram

Mean =2.82
Std. Dev. =0.9
N =110

Appendix G: Assumption of Normally Distributed Data (Test of Normality)

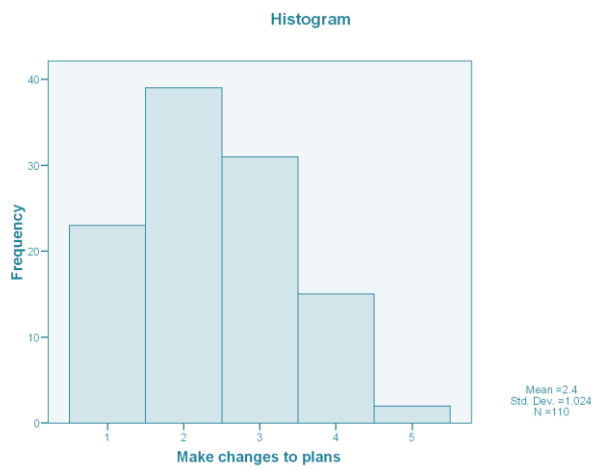|	Kolmogorov-Smirnov(a)			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Respondent's gender	.456	110	.000	.556	110	.000
Respondent's age	.199	110	.000	.890	110	.000
Respondent's nationality	.415	110	.000	.605	110	.000
Respondent's marital status	.339	110	.000	.700	110	.000
Respondent's race	.392	110	.000	.659	110	.000
Respondent's no of children	.414	110	.000	.636	110	.000
Respondent's highest education	.284	110	.000	.747	110	.000
Respondent's job description	.300	110	.000	.868	110	.000
Respondent's job category	.420	110	.000	.601	110	.000
Respondent's years in service	.264	110	.000	.795	110	.000
Respondent's average working hours	.255	110	.000	.743	110	.000
Understand different viewpoints	.251	110	.000	.864	110	.000
Gain knowledge	.294	110	.000	.841	110	.000
Acquire skills	.320	110	.000	.830	110	.000
Bad mood	.214	110	.000	.897	110	.000
Feel happy	.269	110	.000	.858	110	.000
Cheerful	.267	110	.000	.853	110	.000
Personally fulfilled	.242	110	.000	.874	110	.000
Sense of accomplishment	.263	110	.000	.861	110	.000
Sense of success	.264	110	.000	.872	110	.000
Going well at work	.324	110	.000	.800	110	.000
Being in positive mood	.303	110	.000	.798	110	.000
Being happy at work	.279	110	.000	.807	110	.000
Having good day at work	.282	110	.000	.832	110	.000
Skills developed at work	.243	110	.000	.880	110	.000
Successfully performing tasks	.271	110	.000	.863	110	.000
Behaviours required by job	.275	110	.000	.869	110	.000
Carrying out family responsibilities	.227	110	.000	.885	110	.000
Values developed at work	.196	110	.000	.907	110	.000
Apply principles of workplace	.200	110	.000	.904	110	.000
Values learned through work	.276	110	.000	.860	110	.000
Demand of work	.220	110	.000	. 891	110	.000
Job processes strain	.194	110	.000	.905	110	.000
Amount of time	.201	110	.000	.894	110	.000
Things do not get done	.182	110	.000	.909	110	.000
Make changes to plans	.216	110	.000	.894	110	.000
Fairly satisfied	.225	110	.000	.880	110	.000
Enthusiastic	.243	110	.000	.878	110	.000
Work will never end	.207	110	.000	.880	110	.000
Real enjoyment	.218	110	.000	.856	110	.000
Job unpleasant	.207	110	.000	.893	110	.000
AVGenr	.127	110	.000	.950	110	.000
AVGpos	.099	110	.009	.952	110	.001
AVGcon	.094	110	.019	.983	110	.161
AVGjob	.130	110	.000	.974	110	.029
AgeCategory	.363	110	.000	.701	110	.000
YearsofService	.358	110	.000	.785	110	.000
Working Hours	.387	110	.000	.624	110	.000

*Value for Kolmogorov-Smirnov and Shapiro-Wilk for all variables were .00 (p<.05). Hence, normal distribution assumption is violated.

Appendix H: Pearson Correlation Coefficient Test

Correlations

		AVGenr	AVGpos	AVGcon	AVGjob
AVGenr	Pearson Correlation	1	.640**	-.248**	.570**
	Sig. (2-tailed)		.000	.009	.000
	N	110	110	110	110
AVGpos	Pearson Correlation	.640**	1	-.127	.432**
	Sig. (2-tailed)	.000		.187	.000
	N	110	110	110	110
AVGcon	Pearson Correlation	-.248**	-.127	1	-.373**
	Sig. (2-tailed)	.009	.187		.000
	N	110	110	110	110
AVGjob	Pearson Correlation	.570**	.432**	-.373**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	110	110	110	110

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		AVGjob	Understand different viewpoints	Gain knowledge	Acquire skills	Bad mood	Feel happy	Cheerful	Personally fulfilled	Sense of accomplishment	Sense of success
AVGjob	Pearson Correlation	1	.428**	.479**	.364**	.347**	.403**	.346**	.439**	.451**	.497**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	110	110	110	110	110	110	110	110	110	110
Understand different viewpoints	Pearson Correlation	.428**	1	.660**	.500**	.126	.575**	.520**	.607**	.603**	.489**
	Sig. (2-tailed)	.000		.000	.000	.190	.000	.000	.000	.000	.000
	N	110	110	110	110	110	110	110	110	110	110
Gain knowledge	Pearson Correlation	.479**	.660**	1	.669**	.136	.504**	.479**	.546**	.684**	.662**
	Sig. (2-tailed)	.000	.000		.000	.157	.000	.000	.000	.000	.000
	N	110	110	110	110	110	110	110	110	110	110
Acquire skills	Pearson Correlation	.364**	.500**	.669**	1	.125	.417**	.444**	.426**	.571**	.621**
	Sig. (2-tailed)	.000	.000	.000		.193	.000	.000	.000	.000	.000
	N	110	110	110	110	110	110	110	110	110	110
Bad mood	Pearson Correlation	.347**	.126	.136	.125	1	.130	.159	.068	.157	.059
	Sig. (2-tailed)	.000	.190	.157	.193		.176	.097	.483	.101	.544
	N	110	110	110	110	110	110	110	110	110	110
Feel happy	Pearson Correlation	.403**	.575**	.504**	.417**	.130	1	.836**	.795**	.614**	.629**
	Sig. (2-tailed)	.000	.000	.000	.000	.176		.000	.000	.000	.000
	N	110	110	110	110	110	110	110	110	110	110
Cheerful	Pearson Correlation	.346**	.520**	.479**	.444**	.159	.836**	1	.672**	.595**	.539**
	Sig. (2-tailed)	.000	.000	.000	.000	.097	.000		.000	.000	.000
	N	110	110	110	110	110	110	110	110	110	110
Personally fulfilled	Pearson Correlation	.439**	.607**	.546**	.426**	.068	.795**	.672**	1	.722**	.670**
	Sig. (2-tailed)	.000	.000	.000	.000	.483	.000	.000		.000	.000
	N	110	110	110	110	110	110	110	110	110	110
Sense of accomplishment	Pearson Correlation	.451**	.603**	.684**	.571**	.157	.614**	.595**	.722**	1	.704**
	Sig. (2-tailed)	.000	.000	.000	.000	.101	.000	.000	.000		.000
	N	110	110	110	110	110	110	110	110	110	110
Sense of success	Pearson Correlation	.497**	.489**	.662**	.621**	.059	.629**	.539**	.670**	.704**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.544	.000	.000	.000	.000	
	N	110	110	110	110	110	110	110	110	110	110

· Correlation is significant at the 0.01 level (2-tailed).

Correlations

		AVGjob	Going well at work	Being in positive mood	Being happy at work	Having good day at work	Skills developed at work	Successfully performing tasks	Behaviours required by job	Carrying out family responsibilities	Values developed at work	Apply principles of workplace	Values learned through work
AVGjob	Pearson Correlation	1	.306**	.240*	.279**	.294**	.386**	.404**	.236*	.215*	.194*	.267**	.371**
	Sig. (2-tailed)		.001	.012	.003	.002	.000	.000	.013	.024	.042	.005	.000
	N	110	110	110	110	110	110	110	110	110	110	110	110
Going well at work	Pearson Correlation	.306**	1	.516**	.538**	.596**	.480**	.519**	.358**	.396**	.096	.315**	.366**
	Sig. (2-tailed)	.001		.000	.000	.000	.000	.000	.000	.000	.318	.001	.000
	N	110	110	110	110	110	110	110	110	110	110	110	110
Being in positive mood	Pearson Correlation	.240*	.516**	1	.705**	.676**	.370**	.468**	.232*	.383**	.160	.246**	.182
	Sig. (2-tailed)	.012	.000		.000	.000	.000	.000	.015	.000	.095	.009	.057
	N	110	110	110	110	110	110	110	110	110	110	110	110
Being happy at work	Pearson Correlation	.279**	.538**	.705**	1	.668**	.584**	.591**	.292**	.442**	.105	.327**	.318**
	Sig. (2-tailed)	.003	.000	.000		.000	.000	.000	.002	.000	.274	.000	.001
	N	110	110	110	110	110	110	110	110	110	110	110	110
Having good day at work	Pearson Correlation	.294**	.596**	.676**	.668**	1	.434**	.528**	.317**	.399**	.053	.268**	.261**
	Sig. (2-tailed)	.002	.000	.000	.000		.000	.000	.001	.000	.581	.005	.006
	N	110	110	110	110	110	110	110	110	110	110	110	110
Skills developed at work	Pearson Correlation	.386**	.480**	.370**	.584**	.434**	1	.598**	.530**	.669**	.109	.571**	.587**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000	.257	.000	.000
	N	110	110	110	110	110	110	110	110	110	110	110	110
Successfully performing tasks	Pearson Correlation	.404**	.519**	.468**	.591**	.528**	.598**	1	.425**	.538**	.064	.493**	.554**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000	.000	.505	.000	.000
	N	110	110	110	110	110	110	110	110	110	110	110	110
Behaviours required by job	Pearson Correlation	.236*	.358**	.232*	.292**	.317**	.530**	.425**	1	.625**	-.031	.543**	.610**
	Sig. (2-tailed)	.013	.000	.015	.002	.001	.000	.000		.000	.744	.000	.000
	N	110	110	110	110	110	110	110	110	110	110	110	110
Carrying out family responsibilities	Pearson Correlation	.215*	.396**	.383**	.442**	.399**	.669**	.538**	.625**	1	.092	.597**	.588**
	Sig. (2-tailed)	.024	.000	.000	.000	.000	.000	.000	.000		.338	.000	.000
	N	110	110	110	110	110	110	110	110	110	110	110	110
Values developed at work	Pearson Correlation	.194*	.096	.160	.105	.053	.109	.064	-.031	.092	1	-.127	.044
	Sig. (2-tailed)	.042	.318	.095	.274	.581	.257	.505	.744	.338		.186	.646
	N	110	110	110	110	110	110	110	110	110	110	110	110
Apply principles of workplace	Pearson Correlation	.267**	.315**	.246**	.327**	.268**	.571**	.493**	.543**	.597**	-.127	1	.733**
	Sig. (2-tailed)	.005	.001	.009	.000	.005	.000	.000	.000	.000	.186		.000
	N	110	110	110	110	110	110	110	110	110	110	110	110
Values learned through work	Pearson Correlation	.371**	.366**	.182	.318**	.261**	.587**	.554**	.610**	.588**	.044	.733**	1
	Sig. (2-tailed)	.000	.000	.057	.001	.006	.000	.000	.000	.000	.646	.000	
	N	110	110	110	110	110	110	110	110	110	110	110	110

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix I: Cronbach's Alpha Using Reliability Test

Work-family Enrichment Variable

Reliability Statistics

Cronbach's Alpha	N of Items
.889	9

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Understand different viewpoints	20.54	25.994	.683	.874
Gain knowledge	20.40	25.545	.732	.870
Acquire skills	20.55	26.415	.627	.878
Bad mood	20.05	29.530	.147	.923
Feel happy	20.46	25.278	.765	.868
Cheerful	20.41	25.749	.716	.872
Personally fulfilled	20.48	24.601	.761	.867
Sense of accomplishment	20.43	24.706	.794	.865
Sense of success	20.47	24.802	.736	.869

Work-family Positive Spillover Variable

Reliability Statistics

Cronbach's Alpha	N of Items
.876	11

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Going well at work	23.87	39.543	.609	.864
Being in positive mood	23.98	39.743	.565	.866
Being happy at work	23.95	37.722	.665	.859
Having good day at work	23.92	38.773	.601	.864
Skills developed at work	23.52	35.610	.749	.852
Successfully performing tasks	23.56	37.129	.714	.856
Behaviours required by job	23.50	38.289	.585	.865
Carrying out family responsibilities	23.26	36.618	.720	.855
Values developed at work	23.11	43.823	.071	.901
Apply principles of workplace	23.10	37.118	.593	.865
Values learned through work	23.41	37.345	.648	.860

Work-family Conflict Variable

Reliability Statistics

Cronbach's Alpha	N of Items
.917	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Demand of work	10.68	12.659	.698	.916
Job processes strain	10.51	11.371	.876	.880
Amount of time	10.43	11.898	.825	.891
Things do not get done	10.46	11.407	.829	.890
Make changes to plans	10.83	12.034	.717	.914

Job Satisfaction Variable

Reliability Statistics

Cronbach's Alpha	N of Items
.564	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Fairly satisfied	10.95	4.869	.452	.433
Enthusiastic	11.02	4.697	.543	.382
Work will never end	10.21	5.635	.181	.596
Real enjoyment	10.89	4.924	.455	.433
Job unpleasant	10.60	6.334	.069	.643

Appendix J: Multiple Regression for Work-Family Enrichment, Work-Family Positive Spillover, Work-Family Conflict versus Job Satisfaction

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	AVGcon, AVGpos, AVGenr(a)	.	Enter

a All requested variables entered.
b Dependent Variable: AVGjob

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df 1	df 2	Sig. F Change
1	.626^a	.392	.375	.43182	.392	22.784	3	106	.000

a. Predictors: (Constant), AVGcon, AVGpos, AVGenr

b. Dependent Variable: AVGjob

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.745	3	4.248	22.784	.000(a)
	Residual	19.765	106	.186		
	Total	32.511	109			

a Predictors: (Constant), AVGcon, AVGpos, AVGenr
b Dependent Variable: AVGjob

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	1.901	.253		7.519	.000
	AVGenr	.369	.087	.427	4.223	.000
	AVGpos	.113	.088	.127	1.290	.200
	AVGcon	-.161	.050	-.251	-3.211	.002

a Dependent Variable: AVGjob

Residuals Statistics(a)

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.7968	3.7505	2.6836	.34195	110
Std. Predicted Value	-2.594	3.120	.000	1.000	110
Standard Error of Predicted Value	.043	.177	.078	.026	110
Adjusted Predicted Value	1.8492	3.7405	2.6828	.34073	110
Residual	-1.47835	.76775	.00000	.42583	110
Std. Residual	-3.424	1.778	.000	.986	110
Stud. Residual	-3.544	1.792	.001	1.006	110
Deleted Residual	-1.58418	.77969	.00080	.44296	110
Stud. Deleted Residual	-3.757	1.811	-.002	1.017	110
Mahal. Distance	.100	17.267	2.973	2.826	110
Cook's Distance	.000	.225	.010	.024	110
Centered Leverage Value	.001	.158	.027	.026	110

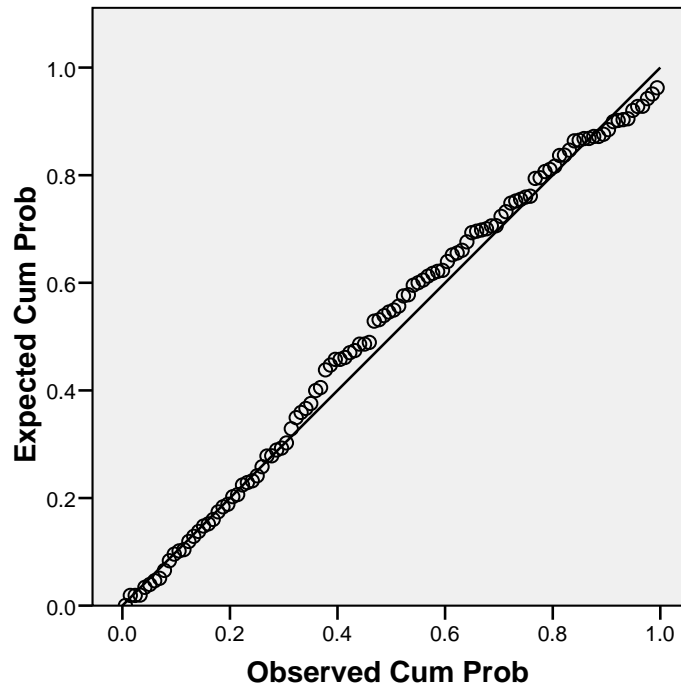a Dependent Variable: AVGjob

Histogram

Dependent Variable: AVGjob
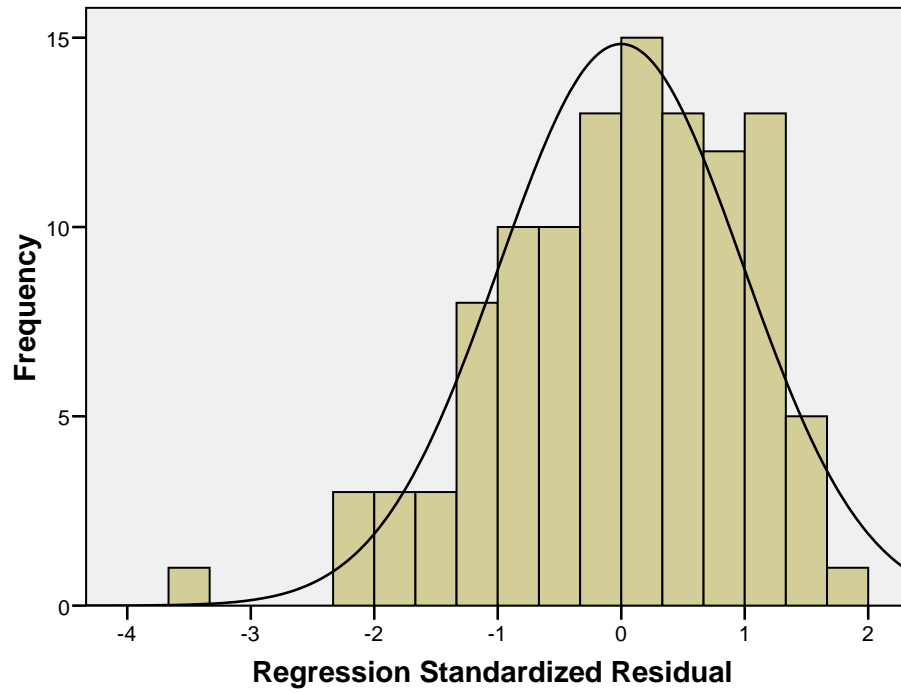
Mean =-1.74E-15
Std. Dev. =0.986
N =110

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: AVGjob

Scatterplot

Dependent Variable: AVGjob