WORK-FAMILY CONFLICT AMONG PROFESSIONAL WOMEN IN THE CONSTRUCTION INDUSTRY

SAY XIAO MEI

A project report submitted in partial fulfilment of the requirements for the award of Bachelor of Science (Hons.) Quantity Surveying

Lee Kong Chian Faculty of Engineering and Science
Universiti Tunku Abdul Rahman

i

DECLARATION

I hereby declare that this project report is based on my original work except for citations and quotations which have been duly acknowledged. I also declare that it has not been previously and concurrently submitted for any other degree or award at UTAR or other institutions.

Signature :

Name : SAY XIAO MEI

ID No. : 15UEB01539

Date : 14 MAY 2020

APPROVAL FOR SUBMISSION

I certify that this project report entitled "WORK-FAMILY CONFLICT AMONG PROFESSIONAL WOMEN IN THE CONSTRUCTION INDUSTRY" was prepared by SAY XIAO MEI has met the required standard for submission in partial fulfilment of the requirements for the award of Bachelor of Science (Hons.) Quantity Surveying at Universiti Tunku Abdul Rahman.

Approved by,		
Signature	:	ping
Supervisor	:	SR. YOW LI PING
Date	:	14 MAY 2020
Signature	:	
Co-Supervisor	:	
Date	:	

The copyright of this report belongs to the author under the terms of the copyright Act 1987 as qualified by Intellectual Property Policy of Universiti Tunku Abdul Rahman. Due acknowledgement shall always be made of the use of any material contained in, or derived from, this report.

© 2020, Say Xiao Mei. All right reserved.

ACKNOWLEDGEMENTS

I would like to thank everyone who had contributed to the successful completion of this project. I would like to express my gratitude to my research supervisor, Sr. Yow Li Ping for her invaluable advice, guidance and her enormous patience throughout the development of the research.

In addition, I would also like to express my gratitude to my loving parents and friends who had helped and given me encouragement throughout this research. I would like to express my sincere thanks to the respondents who had generously spent their precious time to take part in the questionnaire for this research.

ABSTRACT

Most of the individuals experience conflict when trying to balance the roles between work and family. The conflict arises between work and family is known as work-family conflict. The increasing of women's labour force participation and the number of dual-earner families have contributed to workfamily conflict. Prior research has focused mostly on the types of work-family conflict experienced by construction professionals. However, limited studies considered the causes and impacts of work-family conflict in the construction industry. Therefore, this research aims to investigate the causes and impacts of work-family conflict among professional women in the construction industry. The objectives are (1) to identify the causes of work-family conflict; (2) to examine the impacts of work-family conflict and (3) to study the strategies in reducing work-family conflict among professional women in the construction industry. The quantitative research method was used in this research and the data were collected through questionnaire survey. A sample of 104 professional women in the Klang Valley, Malaysia were used for this research. The findings revealed that both single and married respondents perceived work demands as the major contributor to the causes of work-family conflict. The single respondents perceived work-related outcomes as the most significant impacts of work-family conflict, whereas the married respondents perceived individual-related outcomes. The most effective strategies in reducing workfamily conflict was social support as perceived by both single and married respondents. This research also carried out inferential test and found out that there are significant differences between single and married professional women towards the causes, impacts and strategies of work-family conflict. The findings also revealed that there are significant association of working experience and working hours on the causes and impacts of work-family conflict. This research provides a framework for the exploration of workfamily conflict in the Malaysian construction industry. The present study also points to the need of construction companies in engaging the strategies for reducing work-family conflict to assist the employees in achieving workfamily balance.

TABLE OF CONTENTS

DECLAR	ATION		i
APPROV	AL FOR S	SUBMISSION	ii
ACKNOV	VLEDGE	MENTS	iv
ABSTRA	CT		v
TABLE O	F CONTI	ENTS	vi
LIST OF	TABLES		X
LIST OF	FIGURES	}	xii
LIST OF	ABBREV	IATIONS	xiii
LIST OF	APPENDI	ICES	xiv
CHAPTE	R		
1	INTR	ODUCTION	1
	1.1	Background	1
	1.2	Problem Statement	
	1.3	Aims and Objectives	4
	1.4	Scope and Limitation of the Study	4
	1.5	Research Methodology	5
	1.6	Chapter Outline	5
	1.7	Conclusion	6
2	LITE	RATURE REVIEW	7
	2.1	Nature of the Construction Industry	7
	2.2	Professional Women in the Construction Industry	
	2.3	Work-Family Conflict	9
		2.3.1 Time-Based Conflict	9
		2.3.2 Strain-Based Conflict	10
		2.3.3 Behaviour-Based Conflict	10

	2.4	Causes	of Work-Family Conflict	11
		2.4.1	Work Demands	11
		2.4.2	Family Demands	13
		2.4.3	Summary of Causes of Work-Family	
			Conflict	15
	2.5	Impacts	of Work-Family Conflict	16
		2.5.1	Work-Related Outcomes	16
		2.5.2	Family-Related Outcomes	18
		2.5.3	Individual-Related Outcomes	20
		2.5.4	Summary of Impacts of Work-Family	
			Conflict	21
	2.6	Strategi	es in Reducing Work-Family Conflict	22
		2.6.1	Family-Friendly Policies	22
		2.6.2	Social Support	24
		2.6.3	Summary of Strategies in Reducing	
			Work-Family Conflict	26
	2.7	Conclus	sion	27
3	RESEA	ARCH M	IETHODOLOGY	28
3	RESE <i>A</i> 3.1		IETHODOLOGY h Methodology	28 28
3		Researc		
3	3.1	Researc Researc	h Methodology	28
3	3.1	Researce 3.2.1	h Methodology h Approach	28 28
3	3.1 3.2	Researce 3.2.1	th Methodology th Approach Selection of Research Approach	28 28 29
3	3.1 3.2	Researce 3.2.1 Data Co	th Methodology th Approach Selection of Research Approach ollection Method	28 28 29 29
3	3.1 3.2	Researce 3.2.1 Data Co 3.3.1	ch Methodology ch Approach Selection of Research Approach ollection Method Primary Data Secondary Data	28 28 29 29 30
3	3.13.23.3	Research 3.2.1 Data Co 3.3.1 3.3.2	ch Methodology ch Approach Selection of Research Approach ollection Method Primary Data Secondary Data	28 28 29 29 30 30
3	3.13.23.3	Research 3.2.1 Data Co 3.3.1 3.3.2 Samplin	ch Methodology ch Approach Selection of Research Approach collection Method Primary Data Secondary Data	28 28 29 29 30 30 30
3	3.13.23.3	Research 3.2.1 Data Co 3.3.1 3.3.2 Samplin 3.4.1	ch Methodology ch Approach Selection of Research Approach collection Method Primary Data Secondary Data ng Sampling Technique	28 28 29 29 30 30 30
3	3.13.23.3	Research 3.2.1 Data Co 3.3.1 3.3.2 Samplin 3.4.1 3.4.2 3.4.3	ch Methodology ch Approach Selection of Research Approach collection Method Primary Data Secondary Data ng Sampling Technique Sampling Size	28 28 29 29 30 30 30 31
3	3.13.23.33.4	Research 3.2.1 Data Co 3.3.1 3.3.2 Samplin 3.4.1 3.4.2 3.4.3	ch Methodology ch Approach Selection of Research Approach collection Method Primary Data Secondary Data ng Sampling Technique Sampling Size Target Respondents	28 28 29 29 30 30 30 31 31
3	3.13.23.33.4	Research 3.2.1 Data Co 3.3.1 3.3.2 Samplin 3.4.1 3.4.2 3.4.3 Research	ch Methodology ch Approach Selection of Research Approach collection Method Primary Data Secondary Data ng Sampling Technique Sampling Size Target Respondents ch Instrument	28 28 29 29 30 30 30 31 31 31
3	3.13.23.3	Research 3.2.1 Data Co 3.3.1 3.3.2	ch Methodology ch Approach Selection of Research Approach ollection Method Primary Data Secondary Data	28 28 29 29 30 30
3	3.13.23.3	Research 3.2.1 Data Co 3.3.1 3.3.2 Samplin 3.4.1 3.4.2	ch Methodology ch Approach Selection of Research Approach collection Method Primary Data Secondary Data ng Sampling Technique Sampling Size	28 28 29 29 30 30 30 31
3	3.13.23.33.4	Research 3.2.1 Data Co 3.3.1 3.3.2 Samplin 3.4.1 3.4.2 3.4.3	ch Methodology ch Approach Selection of Research Approach collection Method Primary Data Secondary Data ng Sampling Technique Sampling Size Target Respondents	28 28 29 29 30 30 30 31 31
3	3.13.23.33.4	Research 3.2.1 Data Co 3.3.1 3.3.2 Samplin 3.4.1 3.4.2 3.4.3 Research 3.5.1	ch Methodology ch Approach Selection of Research Approach collection Method Primary Data Secondary Data ng Sampling Technique Sampling Size Target Respondents ch Instrument Questionnaire Design	28 28 29 29 30 30 30 31 31 31 31
3	3.13.23.33.4	Research 3.2.1 Data Co 3.3.1 3.3.2 Samplin 3.4.1 3.4.2 3.4.3 Research 3.5.1	ch Methodology ch Approach Selection of Research Approach collection Method Primary Data Secondary Data ng Sampling Technique Sampling Size Target Respondents ch Instrument Questionnaire Design Pilot Test	28 28 29 29 30 30 30 31 31 31 31

		3.6.1 Reliability Analysis	34
		3.6.2 Descriptive Statistics	34
		3.6.3 Inferential Statistics	35
	3.7	Conclusion	37
4	RESU	ULTS AND DISCUSSIONS	38
	4.1	Participants	38
	4.2	Respondent's Demographic	38
	4.3	Respondent's Information on Work Aspects	s 39
		4.3.1 Subordinates Under Control	39
		4.3.2 Working Hours	40
	4.4	Respondent's Information on Family Aspec	ets 40
		4.4.1 Dependent Child/ Children	40
		4.4.2 Elder Family Members	41
		4.4.3 Employment of Maid	42
	4.5	Reliability Analysis	43
	4.6	The Causes of Work-Family Conflict	among
		Professional Women in the Construction In	dustry 43
		4.6.1 Descriptive Test on The Caus	ses of
		Work-Family Conflict	43
		4.6.2 Inferential Test on The Causes of	Work-
		Family Conflict	45
	4.7	The Impacts of Work-Family Conflict	among
		Professional Women in the Construction In	dustry 49
		4.7.1 Descriptive Test on The Impa	cts of
		Work-Family Conflict	49
		4.7.2 Inferential Test on The Impac	ets of
		Work-Family Conflict	50
	4.8	The Strategies in Reducing Work-Family C	onflict
		among Professional Women in the Constr	ruction
		Industry	55
		4.8.1 Descriptive Test on The Strateg	gies in
		Reducing Work-Family Conflict	55

	4.8.2	Inferential Test on The Strategies in	
		Reducing Work-Family Conflict	57
4.9	Conclus	sion	59
5 CC	ONCLUSION	NAND RECOMMENDATIONS	60
5.1	Conclus	sion	60
	5.1.1	To Identify The Causes of Work-Family	
		Conflict Among Professional Women in	
		the Construction Industry	60
	5.1.2	To Examine The Impacts of Work-	
		Family Conflict Among Professional	
		Women in the Construction Industry	61
	5.1.3	To Study The Strategies in Reducing	
		Work-Family Conflict Among	
		Professional Women in the Construction	
		Industry	62
5.2	Limitat	ions and Recommendations for Future	
	Researc	ch	63
5.3	Signific	cance of Research	63
REFEREN(CES		65
APPENDIC	CES		80

LIST OF TABLES

Table 1.1: Overview of Research Methodology	5
Table 2.1: Summary of Causes of Work-Family Conflict	15
Table 2.2: Summary of Impacts of Work-Family Conflict	21
Table 2.3: Summary of Strategies in Reducing Work-Family Conflict	26
Table 3.1: Qualitative Research versus Quantitative Research	29
Table 3.2: Cronbach's Alpha Rules of Thumb	34
Table 3.3: Spearman's Rank Correlation Coefficient	35
Table 4.1: Respondent's Demographic (N = 104)	39
Table 4.2: Information on Subordinates Under Control	39
Table 4.3: Information on Working Hours	40
Table 4.4: Information on Dependent Child or Children	41
Table 4.5: Information on Elder Family Members	42
Table 4.6: Employment of Maid	42
Table 4.7: Cronbach's Alpha Analysis	43
Table 4.8: Ranking on The Causes of Work-Family Conflict (N = 104)	43
Table 4.9: Mann-Whitney U Test on Marital Status for The Causes of Work-Family Conflict	45
Table 4.10: Spearman Rank Correlation between Working Experience and The Causes of Work-Family Conflict (N = 104)	47
Table 4.11: Ranking on The Impacts of Work-Family Conflict (N = 104)	49
Table 4.12: Mann-Whitney U Test on Marital Status for The Impacts of Work-Family Conflict	50
Table 4.13: Spearman Rank Correlation between Total Working Hours and The Impacts of Work-Family Conflict (N = 104)	52

Table 4.14: Spearman Rank Correlation between Working Experience and The Impacts of Work-Family Conflict $(N=104)$	54
Table 4.15: Ranking on The Strategies in Reducing Work-Family Conflict ($N=104$)	55
Table 4.16: Mann-Whitney U Test on Marital Status for The Strategies in Reducing Work-Family Conflict	57
Table 4.17: Summary of Significant Results	59

LIST OF FIGURES

Figure 2.1: Theoretical Framework for Work-Family Conflict (WFC)	27
Figure 3.1: Theoretical Framework for Questionnaire Design	32

LIST OF ABBREVIATIONS

PAM Pertubuhan Arkitek Malaysia

SPSS Statistical Package for Social Sciences

WFC Work-Family Conflict

LIST OF APPENDICES

APPENDIX A: Questionnaire Survey

80

CHAPTER 1

INTRODUCTION

1.1 Background

Work-family conflict has becoming a pressing issue in almost all countries. Research examining work-family conflict has increased in recent years. Work and family play an important role in an individual's life. Individuals experience conflict when trying to balance the roles between work and family (Boyar, et al., 2008; Day and Chamberlain, 2006; Greenhaus and Beutell, 1985). The conflict arises between work and family is known as work-family conflict.

The research on work-family conflict has been largely conducted in Western countries such as Europe, America, Australia and Canada. In Europe, Kotowska, et al. (2010) reported that over 25 % of Europeans experienced work-family conflict and more than 90 % women experienced the conflict in both directions. In Canada, Duxbury and Higgins (2005) reported that more than 30 % of Canadians have experienced high levels of work-family conflict and approximately 40 % of Canadians reported at average levels. In Australia, Wilkins, et al. (2019) reported that 26 % of fathers and 25 % of mothers experience mid-range levels of work-family conflict.

The causes of work-family conflict are derived from work demands and family demands (Barnett, 1999; Boyar, et al., 2008). In view of work demands, many studies have reported that long working hours and high workload are the main causes of work-family conflict in the construction industry (Lingard and Francis, 2004; Turner and Mariani, 2016; Khursheed, et al., 2018). The family demands pertain to the presence of children, dependents care responsibilities and household responsibilities are relatively salient for work-family conflict (Grzywacz, 2000; Stevens, et al., 2007). Financial stress also leads to work-family conflict due to rising of household expenses (Ponnet, et al., 2013; Young and Schieman, 2012).

Work-family conflict demonstrates negative impacts on individuals, families and employers. Long working hours, tight deadlines and high workloads causing employees to suffer high levels of workplace stress (Campbell, 2006; Watts, 2009). This was significantly leads to low job performance and productivity (Leung, Chan and Dongyu, 2011; Avery, et al., 2011). The employees also faced job burnout due to extensive of work and family responsibilities (Lingard and Francis, 2004; Wu, et al., 2018). The work and family demands may interfere with personal life and lead to low life satisfaction (Arora, Hartman and Stoner, 1990; Kim and Choo, 2001). The existence of work-family conflict has influenced family relationship between parent and child, for example less interaction among family members after work (Cinamon, Weisel and Tzuk, 2007). Work-family conflict may also reduce marital satisfaction and increase risk of separation (Bagherzadeh, et al., 2016). In addition, work-family conflict is associated with health outcomes such as heart diseases, hypertension, fatigue and increased psychological strain (Chandola, et al., 2019).

As noted above, it is important to study the strategies in reducing work-family conflict in the construction industry. Most studies suggest that family-friendly policies and social support are effective in reducing work-family conflict. The implementation of family-friendly policies able to assist the employees in balancing the work and family responsibilities (Hill, et al., 2010; Lo, 2003). Gholipour, et al. (2010) also found out that job sharing would reduce the conflict between work and family. The social support from supervisor or co-worker in the workplace enables employees to cope with work-family conflict (Premeaux, Adkins and Mossholder, 2007; Van Daalen, Willemsen and Sanders, 2006). Similarly, the support from spouse or family members in family responsibilities is important in facilitating work-family conflict (Burke and Greenglass, 1999; Rupert, et al., 2012).

1.2 Problem Statement

Construction industry has always been dominated by men. However, women are now entering into construction field previously reserved for men due to cultural shift (Agapiou, 2002; Gurjao, 2006). Based on Department of Statistics Malaysia (2019), female labour force participation rate in the third quarter of 2019 was 56.0 per cent, rose 0.2 percentage points as compared to the second quarter of 2019. The statistics show that over half of women of working age are in the workforce today. The increasing of women's labour

force participation have contributed to work-family conflict (Mahpul and Abdullah, 2011). As more women entered the labour force, they are more likely to reduce the time spent with their family. Women may face problem in performing different roles, such as mother, wife, homemaker and employees.

The number of dual-earner families in which both husband and wife work has increased in recent years. The improvement in educational attainment causing women to enter workforce. Today, women perform better than men in education and in obtaining qualification. This can be seen from the statistics released by Ministry of Education Malaysia (2019) in which there are 77,501 female students graduated at public university whereas the number of male students graduated at public university was 41,844 in 2018. Besides, the greatest acceleration in household expenses driving the rise of dual-earner families. Women have to work in order to improve standard of living for family. However, the existence of dual-earner families raise the issue of workfamily conflict.

The studies on work-family conflict in the construction industry are not extensively studied by the researchers. There are several studies have been conducted regarding to work-family conflict in the construction industry. Lingard and Francis (2004) carried out a research about work-family conflict among construction employees in Australian construction industry. Liu and Low (2011) identified the types of work-family conflict among project managers in Chinese construction industry. Turner and Mariani (2016) conducted an interview with Australia project managers to investigate the strategies and trade-offs in managing the work-family interface. Francis, et al. (2013) compared the work-family conflict experienced by public and private sector of construction workers. The recent study by Wu, et al. (2018) studied the relationship between work-family conflict and job burnout in affecting project performance among Chinese construction professionals.

In view of above studies, it can be inferred that the earlier studies have focused mostly on the types of work-family conflict experienced by construction professionals in the construction industry. Several research has focused on the strategies in moderating work-family conflict in the construction industry. However, limited studies considered the causes and impacts of work-family conflict among construction professionals in the

construction industry. It is crucial to study the causes that contributes to work-family conflict instead of identifying the types of work-family conflict experienced by construction professionals. Besides, the existing research on work-family conflict in the construction industry was primarily done with both male and female construction professionals. There is less research focus the attention on professional women specifically in work-family conflict in the construction industry. Therefore, this research takes an integrated approach to study the causes and impacts of work-family conflict among professional women in the construction industry. This research also studies the strategies in reducing work-family conflict among professional women in the construction industry.

1.3 Aims and Objectives

The aim of this research is to investigate the causes and impacts of workfamily conflict among professional women in the construction industry. The objectives of this research are:

- (i) To identify the causes of work-family conflict among professional women in the construction industry.
- (ii) To examine the impacts of work-family conflict among professional women in the construction industry.
- (iii) To study the strategies in reducing work-family conflict among professional women in the construction industry.

1.4 Scope and Limitation of the Study

This research concentrated mainly on the female perspective for work-family conflict in the construction industry. The target respondents are professional women working in the Klang Valley area, Malaysia. The professional women in construction industry refer to the architects, engineers and quantity surveyors.

The limitation of this research is the data was collected in the Klang Valley area which does not represent the whole population in Malaysia. Besides, longitudinal study is not applicable for this research due to time constraint.

1.5 Research Methodology

This research carried out in four phases as shown in Table 1.1. Phase 1 is about literature review to understand the problem area and gather preliminary information. The following phase, Phase 2 is related to research proposal to define research objectives, research scope and research methodology for the study. Phase 3 is collecting and analysing the data to discuss the results of the research. The last phase, Phase 4 is about presentation of findings which includes making conclusions and recommendations for the research.

Table 1.1: Overview of Research Methodology

Phase 1	Phase 2	Phase 3	Phase 4
Literature review	Research Proposal	Data Collection	Present findings
		& Analysis	
Problem Area	Research	Data Collection	Conclusions &
Identification	Objectives		Recommendations
Selection of	Research scope	Questionnaire	Future Studies
Research Topic		Survey	
Literature Review	Research	Data Analysis	
	Methodology	•	
Research Problems		Results &	
& Justifications		Discussions	

The quantitative research method was used in this research. The questionnaire surveys were developed and distributed to the professional women in Klang Valley, Malaysia. The data collected from questionnaire surveys were analysed and interpreted by using SPSS software for statistical analysis.

1.6 Chapter Outline

This research consists of five main chapters namely Introduction, Literature Review, Research Methodology, Results and Discussion and Conclusion and Recommendations.

Chapter 1 outlines the background of work-family conflict in the construction industry. This chapter also includes research aim and objectives, problem statement, research method, scope and limitation of study and chapter outline.

Chapter 2 reviews the past literature on the causes of work-family conflict, impacts of work-family conflict and the strategies in reducing work-family conflict among professional women in the construction industry.

Chapter 3 explains the research methods used for this research. This chapter presents the research approach, data collection methods, sampling methods, research instruments and data analysis methods.

Chapter 4 discusses the results of this research. The data collected from questionnaire surveys are analysed and interpreted by using statistical analysis. The findings of the research are explained with the supports from literature review.

Chapter 5 is the last chapter of this research. It summarises the whole research including the findings, limitations and recommendations of the research.

1.7 Conclusion

In summary, this chapter provides an outlook of the research which includes research problem, research aim and objectives, research scope and limitation, research methodology and chapter outline. This chapter also provides a preliminary understanding on work-family conflict in the construction industry. Chapter 2 is established to provide further information on work-family conflict in the construction industry by reviewing past literature.

CHAPTER 2

LITERATURE REVIEW

2.1 Nature of the Construction Industry

Construction is a high risk industry. It has been described as dirty, dangerous and macho which acts against women's entry (Barthorpe, Duncan and Miller, 2000). Construction is a demanding work environment which emphasises on delivering the project on time, controlling the project budget and achieving required standard for the project. These work characteristics have always demand more inputs from the construction professionals, which may lead to job burnout (Wu, et al., 2018). Project delays, time overruns and tight project deadlines contribute to work pressures. These work pressures may lead to poor project performance in the construction industry (Leung, Chan and Olomolaiye, 2008).

Construction employees tend to work longer hours compared to other industries (Lingard and Francis, 2004). Bradley, et al. (2010) stated that it is norm for constructional professionals and project managers to work more than the stipulated work hours and overtime without paid. Research indicated that long working hours may reduce family participation and increase risk of separation (Lingard and Sublet, 2002).

Construction industry is a high conflict workplace (Whitfield, 2012). A construction project requires input from various stakeholders such as client, architects, engineers, contractors and other project related professionals which may lead to work conflict (Acharya, Lee and Im, 2006; Jaffar, Tharim and Shuib, 2011). A study carried out by Ejohwomu, Oshodi and Onifade (2016) in Nigeria found out that the major sources of conflict in construction project was financial failure. The sources of conflict in construction project also include extension of time, variation, quality of work and availability of information (Kumaraswamy and Yogeswaran, 1998).

Construction employees often require relocation due to project-based nature. The site-based employees normally work at the project site for few years. They have to sacrifice with their partner and family life to ensure continuity of employment. Lingard and Sublet (2002) reported that relocation

of work may lead to low marital satisfaction due to the couples participated in a long distance relationship.

2.2 Professional Women in the Construction Industry

Construction is a wide industry that involved of many professionals for a project. The professionals in the construction industry are architect, engineer and quantity surveyor. The construction professionals are well-trained and expertise in construction. They contribute to the success in construction project within their particular knowledge and experience. Besides, construction professionals are highly qualified by the professional bodies such as Board of Architects, Board of Engineers and Board of Quantity Surveyors. Construction professionals are normally highly educated as the qualification for professionals in the construction industry are with Bachelor's Degree or Diploma title. According to Toor and Ofori (2008), construction professionals also bound by their professional code of ethics.

The participation rate for professional women in the construction industry are relatively lower compared to men. Based on Ministry of Education Malaysia (2019), the number of female students (57,474) enrolled in construction fields of study is approximately 20 % lesser as compared to male students (70,223) in 2018. The main reason causing underrepresentation of professional women in the construction industry was inequality of opportunity for women (Dainty, et al., 2004). Toor and Ofori (2011) conducted an interview with professional women in Singapore found out that unfavourable working conditions, discrimination in employment and preference of male employees have contributed to the decline in participation rate for women in the construction industry.

Today, many professional women entering into construction industry due to cultural shift and the policy of gender equalities (Agapiou, 2002; Gurjao, 2006). The rising of women's participation in the construction industry has posed challenges for work-family conflict. The professional women may face in an attempt to balance work and family demands. This often leading to work-family conflict.

2.3 Work-Family Conflict

Work-family conflict is based on the role theory suggested by Kahn, et al. (1964). Individuals occupy a variety of roles in daily life as suggested by role theory. The role conflict arises when individuals experience incompatible between varieties of roles. Kahn, et al. (1964) defined role conflict as "two or more sets of pressures occur simultaneously in which compliance with one would make more difficult compliance with the other".

The term of work-family conflict is conceptualized by Greenhaus and Beutell (1985). The definition of work-family conflict is "a type of inter-role conflict in which the role pressures from work and family domains are mutually incompatible in some respect" (Greenhaus and Beutell, 1985). In other words, work-family conflict arises when there are simultaneous pressures from both work and family roles.

Work-family conflict is bi-directional where one can affect the other. In some research, work-family conflict was distinguished into work-to-family conflict and family-to-work conflict (Frone, Russell and Cooper, 1992; Netemeyer, Boles and McMurrian, 1996; Carlson and Kacmar, 2000). The former is the conflict arises when work demands interfere with family demands whereas the latter is the conflict arises when family demands interfere with work demands. Parasuraman, et al. (1996) have claimed to measure work and family demand for work-family conflict. Hence, this research studied work-family conflict in the form of work demand and family demand.

Three forms of work-family conflict have been identified by Grennhaus and Beutell (1985) which are time-based conflict, strain-based conflict and behaviour-based conflict. These three forms of conflict are related to work and family demands.

2.3.1 Time-Based Conflict

Time-based work-family conflict occurs when the time devoted to work and family are incompatible (Greenhaus and Beutell, 1985). Time is a scarce resources. The employees who work long hours are more likely to have less time for families. The predictors of time-based conflict arise from work demands are long working hours and schedule inflexibility. For example, the

conflict arises when the employees unable to pick up their children due to work overtime. Similarly, the time involved in family demands such as household responsibilities and dependent care responsibilities would reduce the time for work. The example can be seen in which a working mother have to take leave of absence to care for a sick child. The time demands of work and family commitments may contribute to stress and result in strain-based conflict.

2.3.2 Strain-Based Conflict

Strain-based work-family conflict occurs when the pressure from work and family are mutually incompatible (Greenhaus and Beutell, 1985). Strain-based conflict is widely used in measuring work-family conflict. Excessive demands of work causing employees to experience strain-based conflict in the form of dissatisfaction, absenteeism, anxiety, tension and fatigue. The employees may face job burnout result from strain-based conflict due to physically and mentally exhausted for the work. The strain-based conflict also arises from family demands such as presence of children, household responsibilities, dependent care responsibilities and financial stress. This can be seen in a working mother suffering from stress when she have to take care of her sick child and to meet her work deadlines at the same time. The strain-based conflict may turn into behaviour-based conflict due to psychological spill over in attitudes and behaviour.

2.3.3 Behaviour-Based Conflict

Behaviour-based work-family conflict refers to the behavioural interference in performing both work and family roles (Greenhaus and Beutell, 1985). It does not involve the conflicting demands of work and family. The research carried out by Burke, Weir and DuWors (1980) found out that the behavioural patterns of male employees at work are incompatible with the behaviours in family environment. However, the behaviour-based conflict seldom included in work-family conflict research due to the difficulty in predicting the attitude, value and behaviour of an individual (Ling and Powell, 2001; Netemeyer, Boles and McMurrian, 1996). Geszler (2016) also revealed that behaviour-based conflict was not a major source of work-family conflict. Hence, this

research focused on time-based conflict and strain-based conflict among professional women in the construction industry.

2.4 Causes of Work-Family Conflict

The primary causes surrounding work-family conflict were work demand and family demand (Barnett, 1999; Boyar, et al., 2008). Long working hours, excessive workload and schedule inflexibility are the causes that arise from work demand. The causes arise from family demand include presence of children, household responsibilities, dependent care responsibilities and financial stress.

2.4.1 Work Demands

Boyar, et al. (2007) defined work demand as "a global perception of the level and intensity responsibility within the work domain". The demands from work create difficulties for working women in balancing the role between an employee and a mother or a daughter. Increased work demands may lead to greater work-family conflict. The work demands that contribute to work-family conflict are long working hours, excessive workload and schedule inflexibility.

2.4.1.1 Long Working Hours

Many researchers contend that long working hours increase work-family conflict (Adkins and Premeaux, 2012; DiRenzo, Greenhaus, and Weer, 2011). The recent study by Kisi (2019) revealed that Malaysia has the second highest number of people (22 %) working more than 48 hours per week. The employees in construction industry tend to work longer as compared to other industries. According to Lingard and Francis (2004), the construction employees commonly work six days each week on site in Australia. Tunji-Olayeni, et al. (2017) also reported that female professionals in Nigerian construction industry worked more than the stipulated 8 hours per day.

The reasons of construction employees work long hours are excessive of workload and tight project deadlines (Lingard, Francis and Turner, 2010). Turner and Mariani (2016) carried out an interview with construction project managers in Australia found out that long working hours contributed to work-

family conflict. Berger (2018) also reported that working mothers spend more time at work experienced greater work-family conflict. This is because work commitments limit the time and energy to be devoted for family role. The current vice president of PAM, Lilian Tay have mentioned that juggling in long hours for work and family responsibilities imposes greater obstacles for women (Wong, 2019).

2.4.1.2 Excessive Workload

The work-related stress mainly arises from excessive workload. A research carried out by Wanrooy, et al. (2013) revealed that the major reason for employees to work overtime was due to excessive workload. The employees are often being forced to work overtime in order to meet the deadline. Yildirim and Aycan (2008) found out that work overload have resulted in work-family conflict among female nurses in Turkey. A longitudinal study carried out by Lu and Kao (2013) also pointed out that excessive workload was positively associated with work-family conflict.

Dugan, Matthews and Barnes-Farrell (2012) found out that the employees with high workload are more likely to interrupt family domain in negative way. The extensive demands from work causing women to have less time for the family. The conflict may arise when the employees do not manage their work and family balance.

2.4.1.3 Schedule Inflexibility

Most of the companies in Malaysia are still practicing regular work schedule. The employees have no authority in determining the time they arrive at and leave work. This creates problems for working women in fulfilling their family responsibilities. Grant, Wallace and Spurgeon (2013) reported that inflexible of work schedules contributed to work-family conflict. Aryee (1992) also revealed that schedule inflexibility was resulted in work-family conflict among professional women in Singapore. The recent study in Pakistan reported that 42 % of female employees agreed inflexibility of work schedule leads to work-family conflict (Khursheed, et al., 2018).

The working mother always prefer to have flexible work schedules with greater flexibility. This is because women worry that family

responsibilities may affect their performance in the workplace (Adogbo, Ibrahim and Ibrahim, 2015). This can be seen in which a working mother needs to get her child ready in the morning and send to school which causing her to be late for work. Hence, the working women may experience strain on her role as an employee and a mother with the rigid schedule.

2.4.2 Family Demands

Boyar, et al. (2007) defined family demand as "a global perception of the level and intensity responsibility within the family domain". Many studies examining family demands as the predictors of work-family conflict. This is because women experience greater work-family conflict when the family demands are higher. The family demands may affect the career decision making for women. The family demands that contribute to work-family conflict are household responsibilities, dependent care responsibilities, presence of children and financial stress.

2.4.2.1 Household Responsibilities

Household chores are commonly perceived as women's responsibilities. Horne, et al. (2017) found out that women performed more household chores than men in Canada. Cerrato and Cifre (2018) also revealed that women involved more in household chores than men. The study have identified seven tasks of feminine household chores which include house cleaning, sending children to school, caring of children, guiding children with homework, playing with children, home shopping and free-time family management. Men only involved in typically masculine household tasks such as house repairs.

Previous studies found out that women spent more times than men in household responsibilities (Lewis and Cooper, 1987; Tebory and Illgen, 1975). This situation often contribute to work-family conflict. Women may feel unfairness or dissatisfaction when spouse's lack of participation in the household chores (Stevens, et al., 2007). The employed mothers may find it difficult to juggle work and family responsibilities compared to unemployed mothers. However, a study carried out by Voydanoff (2007) found out that household responsibilities were not associated with work-family conflict.

2.4.2.2 Dependent Care Responsibilities

The dependent care responsibilities are higher for married women due to having two sides of families. The National Population and Family Development Board (2016) pointed out that most of the married women are providing daily necessities to their parents and parents in law. Duxbury and Higgins (2005) found out that women report higher levels of work-family conflict with two sets of family responsibilities.

Kossek, Colquitt and Noe (2001) argued that the care responsibilities for elder family members have a greater impacts on work-family conflict than caring for children. Glavin and Peters (2014) found out that Canadian employees with caregiving responsibilities faced high levels of work-family conflict than those without caregiving responsibilities. Research indicated that the stress arises from work and eldercare responsibilities was resulted to low job performance (Sherman and Reed, 2008; Scott, Hwang and Rogers, 2006). The research carried out by Meiner and Lueckenotte (2005) also revealed that 67 % of caregivers faced problems in balancing of work and care responsibilities which have led to low job productivity.

2.4.2.3 Presence of Children

The researchers mostly studied the objective indicators such as age and number of children in measuring family demands. Previous research found out that increased number of children was associated with greater work-family conflict (Grzywacz, 2000). However, this is contrast with the research of Annor (2016) and Michel, et al. (2011) which found out that presence of children does not affect work-family conflict.

The presence of children at home may increase time demands in the family responsibilities (Parasuraman and Simmers, 2001). Stevens, et al. (2007) reported that married women with presence of preschool children experience more work-family conflict. Higgins, et al. (2004) also revealed that working women with children aged below 12 years old experienced greater work-family conflict compared to women with adult children.

2.4.2.4 Financial Stress

Financial stress is a common problem among married couples. A family could not survive without financial stability. The income levels of married couples may contribute to financial stress (Wilmarth, Seay and Britt, 2015). It was found that financial stress increase the conflict between work and family (Ponnet, et al., 2013). Young and Schieman (2012) revealed that higher levels of financial strain was resulting in greater amount of work-family conflict. The research carried out by National Population and Family Development Board (2016) reported that women experienced financial stress particularly on children's education and household expenses.

Financial stress can negatively influence marital outcomes (Dew, LeBaron and Allsop, 2018). It was found that financial stress is one of the leading causes of divorce (Dew, Britt and Huston, 2012). In addition, the financial stress may arise when having spouse with a chronic or frequent illness. Fettro and Nomaguchi (2018) found out that the spouse with poor physical health, poor mental health and behavioural disorders were positively associated with work-family conflict.

2.4.3 Summary of Causes of Work-Family Conflict

The causes of work-family conflict among professional women in the construction industry are summarized in Table 2.1.

Table 2.1: Summary of Causes of Work-Family Conflict

Sources of WFC	Causes of WFC	Previous Research
Work Demand	Time-based conflict	
	 Long Working Hours 	Adkins and Premeaux, 2012;
		DiRenzo, Greenhaus, and
		Weer, 2011; Turner and
		Mariani, 2016
	 Schedule Inflexibility 	Grant, Wallace and Spurgeon,
		2013; Aryee, 1992; Khursheed,
		et al., 2018

Table 2.1 (Continued)

Sources of WFC	Causes of WFC	Previous Research
Work Demand	Strain-based conflict	
	 Excessive Workload 	Yildirim and Aycan, 2008; Lu
		and Kao, 2013
Family Demand	Time-based conflict	
	Household	Cerrato and Cifre, 2018;
	Responsibilities	Stevens, et al., 2007
	 Dependent Care 	Duxbury and Higgins, 2005;
	Responsibilities	Glavin and Peters, 2014;
		National Population and Family
		Development Board, 2016
	Strain-based conflict	
	 Presence of Children 	Grzywacz, 2000; Stevens, et
		al., 2007; Higgins, et al., 2004
	 Financial Stress 	Ponnet, et al., 2013; Young and
		Schieman, 2012; National
		Population and Family
		Development Board, 2016

2.5 Impacts of Work-Family Conflict

The impacts of work-family conflict can be divided into three categories, which are work-related outcomes, family-related outcomes and individual-related outcomes. The work-related outcomes of work-family conflict include high levels of workplace stress, low job performance and job burnout. Besides, work-family conflict may result in family-related outcomes such as poor family relationship and low marital satisfaction. The individual-related outcomes of work-family conflict are low life satisfaction and poor health.

2.5.1 Work-Related Outcomes

Work-related outcomes are the outcomes arise from work demands. Long working hours and excessive workloads have contributed to high levels of workplace stress. It may lead to absenteeism, turnover and low job

performance among employees. The employees may face job burnout in the long run due to prolonged stress.

2.5.1.1 High Levels of Workplace Stress

Women are more likely to feel pressure at work compared to men. According to Cigna (2019), 88 % of working women reported to have higher stress level than working men. Women usually have to work harder in male-dominated construction industry in order to get an equal opportunity to compete with male (English and Hay, 2015). This often leads women to feel stress in the workplace.

A study carried out by Loosemore and Waters (2004) found out that high workload was the main stressors for the construction professionals in Australia. Other than heavy workload, the workplace stress in the construction industry include long working hours and tight deadline (Campbell, 2006; Watts, 2009). These work pressures were negatively impacted on mental health (Grzywacz and Bass, 2003).

Work-family conflict is one of the common work-related stressors in the United States (Goh, Pfeffer and Zenios, 2016). Married women still have to take care of children, prepare dinner and do household chores after work. Hence, married women are more likely to report higher levels of stress than single women (American Psychological Association, 2010). The stress inherent in work and family demands causing married women to experience greater work-family conflict.

2.5.1.2 Low Job Performance

Work-family conflict was subjected to low job productivity, low job satisfaction, high absenteeism and high turnover in the workplace (Achour, Grine and Nor, 2014). The employees may lack of motivation on work due to high demands from work. Prior research found out that increased of workplace stress leads to low job performance and productivity (Leung, Chan and Dongyu, 2011; Avey, et al., 2012). The employees that often working in a stressful conditions and potential job insecurity would lead to low job performance and well-being (Schreurs, et al., 2012).

Khursheed, et al. (2018) revealed that the major constraints of work performance for married women was household chores and family commitments. The results indicated that incompatible of family demands may also lead to low job performance. However, the research carried out by Karatepe and Tekinkus (2006) found out that work-family conflict has no significant effect on job performance.

2.5.1.3 Job Burnout

Job burnout is known as a long term job stress that caused anxiety, depression and other health problems (Mooney, Knox and Schacht, 2017). World Health Organization (2019) characterised burnout as the feelings of emotional exhaustion, cynicism and reduced professional efficacy. The research carried out by Purvanova and Muros (2010) found out that women are more prominent suffering burnout in the workplace. Beauregard, et al. (2018) revealed that Canadian women faced high levels of burnout due to workfamily conflict.

The construction professionals and project managers were found to have higher levels of job burnout in comparison with other professions (Lingard and Francis, 2004). Construction professionals are often expected to work under highly stressful condition, along with excessive of workload and tight deadlines caused them to suffer job burnout easily. A research carried out by Lingard (2003) found out that the engineers in Australian construction industry experienced greater job burnout. Yip, et al. (2005) also carried out the similar research and found out that the engineers in Hong Kong construction industry encountered high levels of job burnout. Wu, et al. (2018) revealed that work-family conflict was positively related to job burnout.

2.5.2 Family-Related Outcomes

Family-related outcomes are the outcomes arise from family demands. The family-related outcomes can be seen from poor family relationship and low marital satisfaction. Work-family conflict may impact the quality of interaction between parent and child which resulting in poor family relationship. The extensive of work and family responsibilities may reduce marital satisfaction among married women.

2.5.2.1 Poor Family Relationship

Work-family conflict may affect family relationship between parent and child. The main reason causing poor family relationship was lack of communication. The parents are too busy with their career which often neglected their children. Perry-Jenkins and Gillman (2000) found out that work overload negatively affected the family relationship. Spending time with children is important to cultivate the family bonding. However, it was found that the extensive work demands prevent the employees from participation in family activities (Dugan, Matthews and Barnes-Farrell, 2012).

Besides, the change in nature of communication also contribute to poor family relationship. It can be seen from the increased use of cell phones nowadays. The family members often use cell phones instead of engaging face-to-face communication during family gathering. According to Cinamon, Weisel and Tzuk (2007), they found out that greater work-family conflict were related to perceptions of poorer interaction between parent and child.

2.5.2.2 Low Marital Satisfaction

Work-family conflict often results in job dissatisfaction and marital dissatisfaction. A recent study by Ouyang, et al. (2019) found a direct relationship between marital satisfaction and job satisfaction among Chinese married nurses. The results indicate that poor marital quality may impact on job performance. Prior research found out that employees with higher workloads may experience low marital satisfaction due to role overload (Lavner and Clark, 2017; Perry-Jenkins, et al., 2007). However, this is contrast with the findings of Van Steenbergen, Kluwer and Karney (2011) who pointed out that increased in workloads were associated with increased in marital satisfaction for newlywed couples.

Bagherzadeh, et al. (2016) carried out a cross-sectional study in Iran found out that work-family conflict was resulted in decreased marital satisfaction. Wulandari, Hamzah and Abbas (2019) also highlighted that work-family conflict has a negative effect on marital satisfaction. Presence of children may affect the marital satisfaction. This is because there is a significant shift of role and responsibilities for the couples to become parents as more time and energy are devoted to children. The marital satisfaction

declines as less time spent together and increase the conflict of work and family.

2.5.3 Individual-Related Outcomes

Individual-related outcomes refer to the impacts on individual's well-being. The individual-related outcomes include low life satisfaction and poor body health. The extensive demands from work and family causing women to have very little time for personal life. Besides, work-family conflict may impact on personal health such as depression, anxiety, hypertension, heart diseases and fatigue.

2.5.3.1 Low Life Satisfaction

The literature reveals that work-family conflict was associated with low life satisfaction (Arora, Hartman and Stoner, 1990; Carlson and Kacmar, 2000; Greenhaus, Collins and Shaw, 2003). The research carried out by Kim and Choo (2001) highlighted that work-family conflict reduced life satisfaction among women entrepreneurs in Singapore. The working women may perceive low levels of life satisfaction because the demands from work and family have separated the employees from leisure time. Moen, Kelly and Lam (2013) mentioned that the employees have to reduce or eliminate their personal time when facing high work demands along with household commitment. However, Ferree (1976) found out that employed women are more satisfied with their life than full time homemaker. This may due to the right of autonomy and decision making at work empower women's satisfaction. Hence, it was predicted that women are more satisfied with their life when performing activities they prefer to do.

2.5.3.2 Poor Body Health

Work-family conflict has detrimental effect on personal health. The health outcomes are mainly derived from work demands. Long working hours may associate symptoms such as heart disease, hypertension, headaches, fatigue and weight loss. Working under pressure and dealing with tight deadlines may increase the risk of depression and anxiety among employees. Schneider and Harknett (2019) found out that unstable and unpredictable work schedules was

positively associated with psychological stress. The long term psychological stress can lead to destructive behaviours such as drug and alcohol abuse. The employees with higher work pressures are four times more likely to report in problem drinking (Grzywacz and Marks, 2000).

A longitudinal study carried out by Chandola, et al. (2019) revealed that work-family conflict was resulted in high level of stress, increased psychological strain and lower levels of well-being. The study also reported that women who work in full time position with two dependent children was 40 % higher related to chronic stress than working women without children. Sunindijo and Kamardeen (2017) found out that the professional women in Australian construction industry suffer more anxiety, mental stress and depression.

2.5.4 Summary of Impacts of Work-Family Conflict

The impacts of work-family conflict among professional women in the construction industry are summarized in Table 2.2.

Table 2.2: Summary of Impacts of Work-Family Conflict

Type of Impacts		Impacts of WFC	Previous Research
Work-related	•	High Levels of	Loosemore and Waters, 2004;
outcomes		Workplace Stress	Goh, Pfeffer and Zenios,
			2016
	•	Low Job Performance	Achour, Grine and Nor, 2014;
			Leung, Chan and Dongyu,
			2011; Avey, et al., 2012;
			Schreurs, et al., 2012
	•	Job Burnout	Beauregard, et al., 2018;
			Lingard and Francis, 2004;
			Lingard, 2003; Yip, et al.,
			2005; Wu, et al., 2018

Table 2.2 (Continued)

Type of Impacts	Impacts of WFC	Previous Research
Family-related	Poor Family	Cinamon, Weisel and Tzuk,
outcomes	Relationship	2007; Perry-Jenkins and
		Gillman, 2000
	■ Low Marital	Bagherzadeh, et al., 2016;
	Satisfaction	Wulandari, Hamzah and
		Abbas, 2019
Individual-related	 Low Life Satisfaction 	Moen, Kelly and Lam, 2013;
outcomes		Arora, Hartman and Stoner,
		1990; Carlson and Kacmar,
		2000; Greenhaus, Collins and
		Shaw, 2003
	 Poor Body Health 	Chandola, et al., 2019;
		Sunindijo and Kamardeen,
		2017; Grzywacz and Marks,
		2000

2.6 Strategies in Reducing Work-Family Conflict

Several strategies have to be implemented to reduce the demonstrated outcomes of work-family conflict. This research emphasised on two main approaches in reducing work-family conflict which are family-friendly policies and social support.

2.6.1 Family-Friendly Policies

Family-friendly policies are intended to help the employees in achieving work-life balance. The implementation of family-friendly policies can relieve the burden of employees in work and family commitments (Ezra and Deckman, 1996; Hayman, 2010). Family-friendly policies are expected to reduce the conflict between work and family and at the same time increase job satisfaction (Christensen and Staines, 1990). Malaysia have implemented several family-friendly policies, for example 90-day maternity leave, emergency leave and sick leave. This research will look into family-friendly

policies that are less likely to introduce in the workplace, for example flexible work schedule, job sharing and childcare support.

2.6.1.1 Flexible Work Schedule

Flexible work schedule enables employees to effectively manage the interface between work and family (Edwards and Rothbard, 2000; Hill, et al., 2010). The employees are allowed to leave earlier for picking up their children in school or day-care centre with flexible work schedule. Christensen and Staines (1990) revealed that flexible time arrangement for works would reduce absenteeism, lateness and turnover. Hayman (2010) reported that flexible work schedule has significant advantages in reducing role overload and job stress. Lo (2003) revealed that the professional women in Hong Kong prefer to have work flexibility for reducing work-family conflict.

Flexible working hours also enables married women to concentrate on their work and at the same time make arrangement to take care for her family (Ng and Chiu, 1997). For employees with dependent children, flexible at work allows them to back home early, arrive late on work or stay at home when their child gets sick (Moen, Kelley and Huang, 2009). However, Wayne, Musisca and Fleeson (2004) argued that standard working hours benefits employees to reach work-family balance.

2.6.1.2 Job Sharing

Job sharing is a new method of work arrangement. The employees can share partial workload with their colleagues and reduce time spent on work. According to Singapore National Employers Federation (2019), job sharing is differs from part-time jobs, which are self-contained jobs with less than 35 working hours per week. However, a full time job can become a part time job after job sharing.

Job sharing enables employees to take time off to participate in family responsibilities. This can be seen from the success case of Federal International (2000) Ltd in Singapore proved that the employees manage to achieve work-family balance with the implementation of job sharing. Gholipour, et al. (2010) also reported that 86 % of female entrepreneurs in Iran believed job sharing would reduce the conflict between work and family.

2.6.1.3 Providing Childcare Support

The primary reason of women to leave jobs are failure in providing satisfactory childcare suport (Rosin and Korabik, 1990). This statement is supported by the chairman of Penang Women's Development Corporation (PWDC), YB Chong Eng who mentioned that the company should provide a private nursing room and childcare centre at the office to retain women in the workplace (Ali, 2019). Offering on-site childcare support may reduce absenteeism and job turnover for working mothers because they able to provide care for her child in the workplace.

The attention on providing on-site childcare support was increasing recently. It can be seen from the latest decision of setting up childcare centre in Parliament for the convenience of female Member of Parliament and parliamentary staff with young children (Bernama, 2019). Another example can be seen from Shell Women Action Network (SWAN) and Sarawak Shell Berhad have set up a childcare centre in Lutong to provide childcare support for dual-career parents in oil and gas industry (Johari, 2019). However, the research carried out by Goff, Mount and Jamison (1990) found out that on-site childcare support does not reduce work and family conflict.

2.6.2 Social Support

Social support is classified into work-related social support and non-work related social support. The work-related social support refers to the support provided by supervisor and co-worker in the workplace. The support given by spouse and family members are known as non-work related social support.

Social support comes in two main forms, which are emotional support and instrumental support. Emotional support is a type of moral support that provides encouragement, understanding and attention to relief the emotion of an individual. Instrumental support is a physical support that provides direct assistance on the physical works to reduce the workload of an individual. The emotional support focuses on personal well-being whereas the instrumental support focuses on resolving task-related issue (Beehr, et al., 2000).

2.6.2.1 Supervisor or Co-Worker Support

Prior research found out that supervisory support would reduce work-family conflict among employees (Premeaux, Adkins and Mossholder, 2007; Anderson, Coffey and Byerly, 2002; Thomas and Ganster, 1995). Supervisor can provide instrumental and emotional support to assist employees in balancing work and family responsibilities (Frone, Yardley and Markel, 1997; Kossek, et al., 2011). The instrumental supervisory supports involves of given direct assistance to the employees in the form of money, time and labour to help the employees to meet family demands. The supervisor may also provide emotional support in understanding the work and family issues faced by the employees. Frone, Russell and Cooper (1997) found out that supervisor support increases the work satisfaction among employees and reduces the conflict of work and family.

Several studies have found that the role of co-worker support was negatively influenced work-family conflict (Bernard and Phillips, 2007; Van Daalen, Willemsen and Sanders, 2006). According to Ray and Miller (1994), co-worker is the most suitable person in providing workplace support because of their understanding of the stressors inherent in the workplace. Similarly, co-worker support can be in the form of emotional and instrumental support. Mesmer-Magnus and Viswesvaran (2009) suggested that co-worker instrumental support was most helpful in assisting the employees to juggle between work and family demands.

2.6.2.2 Spouse or Family Support

The supportive behaviour of spouse and family members are important in facilitating work-family conflict. Previous studies have found out that spousal support was associated with positive outcomes in reducing work-family conflict (Aryee, et al., 1999; Burke and Greenglass, 1999; Wallace, 2005). A study carried out by Md-Sidin, Sambasivan and Ismail (2010) pointed out that spousal support have stronger impact in improving quality of life as compared to supervisor support. Kim and Choo (2001) also highlighted that married women perceived lesser work-family conflict when the husband shares in the family responsibilities.

Rupert, et al. (2012) found out that family support helps to reduce work-family conflict among married women. The family members can provide both emotional sustenance and instrumental assistance to the individuals to reduce work-family conflict (King, et al., 1995). Emotional sustenance involves of providing encouragement, understanding and attention to the individuals. For example, family members can listen, talk to and advise on individual's concerns to make them feel better. The instrumental assistance involves of relieving women of household responsibilities. Women have more time to accommodate work requirements when family members are assisting in household tasks. It also reduces the interference between work and family. Lapierre and Allen (2006) suggested that the instrumental assistance was likely to be more effective than emotional sustenance in reducing work-family conflict.

2.6.3 Summary of Strategies in Reducing Work-Family Conflict

The strategies in reducing work-family conflict among professional women in the construction industry are summarized in Table 2.3.

Table 2.3: Summary of Strategies in Reducing Work-Family Conflict

Type of Strategies	Strategies in Reducing WFC	Previous Research
Family-Friendly Policies	Flexible Work Schedule	Edwards and Rothbard, 2000; Hill, et al., 2010; Lo, 2003
	 Job Sharing 	Gholipour, et al., 2010; Singapore National Employers Federation, 2019
	 Providing Childcare Support 	Ali, 2019; Bernama, 2019; Johari, 2019
Social Support	 Supervisor or Co- Worker Support 	Premeaux, Adkins and Mossholder, 2007; Bernard and Phillips, 2007; Van Daalen, Willemsen and Sanders, 2006

Table 2.3 (Continued)

Type of Strategies	Strategies in Reducing WFC	Previous Research
Social Support	 Spouse or Family 	Aryee, et al., 1999; Burke and
	Support	Greenglass, 1999; Wallace,
		2005; Kim and Choo, 2001;
		Rupert, et al., 2012

2.7 Conclusion

In conclusion, this chapter have reviewed the causes and impacts of work-family conflict as well as the strategies in reducing work-family conflict among professional women in the construction industry. The theoretical framework of work-family conflict is provided in Figure 2.1 for better understanding.

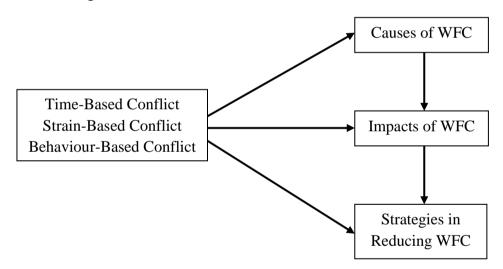


Figure 2.1: Theoretical Framework for Work-Family Conflict (WFC)

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Research Methodology

Research methodology is an organised approach to carry out research. It is the basic plan of a research that provides the procedures or techniques to identify, collect, gather and analyse data. The methodology section is to provide guidance for researchers to carry out research in achieving the research objectives. Generally, two main questions will be answered under research methodology: How to collect data? How to analyse data? The methodology for this research was explained in the following.

3.2 Research Approach

Research can be conducted in two approaches known as qualitative research and quantitative research. Qualitative research is used to explore and seek answers from people's beliefs, behaviour, perceptions, emotions and experiences through interviews or focus group discussions (Pajo, 2018). It focuses on gaining insight and depth of information about the research. Qualitative research generates non-numerical data in the form of texts, words, illustrations and videos.

Quantitative research focuses on generating numerical data to quantify the problem from large population through survey, questionnaire or structure interview (Pajo, 2018). It relies heavily on the information collected from the research. Quantitative research allows testing the established concepts, constructs and hypotheses for generalization of findings (Kumar, Talib and Ramayah, 2012).

The selection of whether to conduct qualitative research or quantitative research depends on the nature of study, the information required for study and the availability of resources such as time, cost and people (Kumar, Talib and Ramayah, 2012). It is common to apply both approaches in a single study which known as mixed methods. Table 3.1 shows the differences between qualitative research and quantitative research.

Table 3.1: Qualitative Research versus Quantitative Research

Characteristic	Qualitative Research	Quantitative Research
Nature	Subjective in nature	Objective in nature
Approach	Inductive approach	Deductive approach
Type of information	Text based	Number based
Sample size	Small	Large
Data collection method	Focus group discussion and in-depth interview	Telephone survey, online questionnaire and face-to-face interview
Response option	Generally unstructured or semi-structured	Generally structured
Type of data collected	Non-measurable and does not involve statistical test	Measurable and statistical test are used for data analysis
Results	Less generalizable	More generalizable

Source: Kumar, Talib and Ramayah, 2012

3.2.1 Selection of Research Approach

Quantitative research approach was used in this research. This research is to test the established concepts of work-family conflict in the construction industry. A questionnaire was developed based on the comprehensive literature review to find out the causes, impacts and strategies in reducing work-family conflict among professional women in the construction industry. The questionnaires were distributed to the construction professional women in the Klang Valley area. The data gathered from questionnaire were analysed and interpreted by using SPSS 18 to generalise the findings of this research.

3.3 Data Collection Method

Data come in two main forms: primary data and secondary data. Primary data is directly collected from original sources such as consumers or users. It is the easiest way to record the information. Primary data can be conducted through observed, experienced or recorded from actual sources (Walliman, 2011). There are four basic types of primary data, which are observation, experimentation, survey and in-depth interview (Kumar, Talib and Ramayah, 2012).

Data entirely from published sources such as journals, books, magazines, internet or internal records are known as secondary data (Kumar, Talib and Ramayah, 2012). Secondary data refers to the information that have been gathered, interpreted and recorded by other researchers. The information is readily available to the researcher and it can be accessed through internet or published information.

3.3.1 Primary Data

The primary data for this research was collected through questionnaire survey. The reason of using questionnaire survey is to get the raw data from the respondents. The questionnaires were distributed to the target respondents through online or email. The questionnaire was developed in a structured manner with a list of structured questions. The respondents are required to answer each question according to the instructions given.

3.3.2 Secondary Data

The secondary data in this research was collected through online journals, online articles, online news, reference books, published reports and conference papers. The access is mainly provided by the Universiti Tunku Abdul Rahman Library. Secondary data used to triangulate the findings of primary data which obtained from questionnaire surveys.

3.4 Sampling

Sampling is the process of choosing a subset from large population known as sample (Pajo, 2018). The accuracy of the research findings largely depends on the sample. The selected sample was genuinely represented the entire population. There are two types of sampling: probability sampling and non-probability sampling.

Probability sampling techniques implied that the probability of selection of sample from a large population is equal and independent (Kumar, 2011). This means that the selection of elements in the sample does not influence by other considerations such as personal preference. Non-probability sampling techniques were used in which the sample in the population are unknown or cannot be calculated (Kumar, 2011). The selection of samples for

non-probability sampling are based on non-random selection and subjected to researcher's judgement.

3.4.1 Sampling Technique

The sampling technique used in this research was convenient sampling. It is classified as non-probability sampling technique. The reason of using non-probability sampling technique was due to the sample in the population is difficult to reach. Convenient sampling involves the sample being taken from the population that are easy to obtain for the researchers (Kumar, Talib and Ramayah, 2012). It is commonly used to cover large number of population in shorter time and cost effective.

3.4.2 Sampling Size

This research applied the concept of Central Limit Theorem (CLT) for sample size. The central limit theorem states that when the sample size is equal or greater than 30 the sampling distribution of the mean would be approximately normal distributed. This means that the sample size required for independent variables such as marital status and working experience would be $n \ge 30$ for the central limit theorem to hold. For example, the sample size for marital status would be single ($n \ge 30$) and married ($n \ge 30$) in order to get a valid response. The findings would be more generalizable with larger sample size (Dolnicar, Grün and Leisch, 2015).

3.4.3 Target Respondents

The target respondents for this research are single and married professional women with children working in the construction industry. The married professional women without children will be excluded from this research because it may result in selection bias. The professional women refer to architects, engineers and quantity surveyors. The target respondents for this research would be concentrated mainly in the Klang Valley area.

3.5 Research Instrument

Research instrument refers to the data collection tools or techniques used in the research. Applying correct tools or techniques in the research are important to ensure the conclusions are reasonable and soundly based. There are four types of research instrument that commonly used for quantitative research which are telephone survey, online questionnaire, structured-interview and quantitative observation.

This research used online questionnaire as the instrument to collect data from the respondents. Online questionnaires are widely used nowadays with the growth of internet and technology. The major advantages of online questionnaire are large numbers of respondents can be obtained in shorter time with higher response rate (Pajo, 2018). It is useful to review previous studies that measure similar constructs when designing the questions for questionnaire. The questions need to be clear and precise without double meanings that can be misinterpreted by the respondents because it may affect the research results.

3.5.1 Questionnaire Design

The questionnaire of this research consisted of four sections with Section A, B, C and D. There are both closed and open ended questions in the questionnaire. The questionnaire design was developed based on the theoretical framework in Chapter 2 as shown in Figure 3.1.

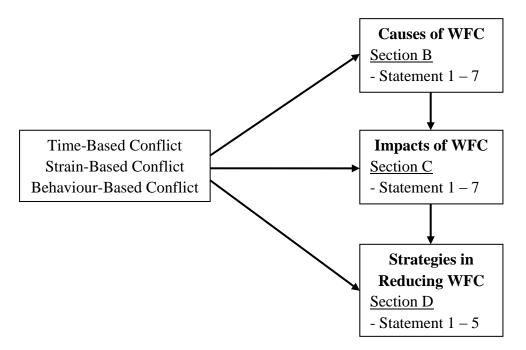


Figure 3.1: Theoretical Framework for Questionnaire Design

Section A consists of two parts to collect the general information from the respondents. The first part is respondent's demographic information which includes gender verification, marital status, profession, nature of company and working experience. The second part consists of 13 questions, four questions on respondent's work aspect and nine questions on respondent's family aspect. The data collected in this section would be used as independent variables to reveal the outcome of result for this research and to support the findings in following section.

Section B consists of seven statements on the causes of work-family conflict. Respondents are required to rate the frequency of occurrences for each statement from 1 = never to 5 = always.

Section C is about the impacts of work-family conflict. It consists of seven statements and the respondents are required to rate the frequency of occurrences for each statement from 1 = never to 5 = always.

Section D focuses on the strategies in reducing work-family conflict. Respondents are required to rate their level of agreement for the five statements in Section D from 1 = strongly disagree to 5 = strongly agree.

3.5.2 Pilot Test

Pilot test was conducted before collecting the actual data from respondents. It is a trial run on questionnaire to make sure all questions are understandable and without mistakes. In this research, five sets of questionnaire were distributed for pilot test. The pilot test was conducted on 27 October 2019 to 29 October 2019. These five sets of questionnaire would be excluded in the analysis. The feedbacks from pilot test such as unclear instructions, confusing statements and language errors were fixed to make improvements on the questionnaire design. The questionnaires were distributed to the target respondents after validation.

3.6 Data Analysis

Data analysis is the process of analysing large amounts of data gathered from the research into statistics. It is used to interpret data and draw conclusions from the accumulated data. The analysis of quantitative data is usually in number, mathematical and statistical computation. The data collected for this research were interpreted by three analysis, which are reliability analysis, descriptive analysis and non-parametric statistical test using SPSS.

3.6.1 Reliability Analysis

Reliability analysis is commonly used in Likert scale based questionnaire surveys to determine the reliability of the scale. The reliability analysis applied for this research is Cronbach's Alpha. It is used to measure the internal consistency of the scale. The rules of thumb is applied to Cronbach's Alpha value as shown in Table 3.2. A high degree of alpha value above 0.70 indicates the variables in the test are highly correlated (Tavakol and Dennick, 2011).

Table 3.2: Cronbach's Alpha Rules of Thumb

Cronbach's Alpha	Internal Consistency	
0.9 ≤ α	Excellent	
$0.8 \le \alpha < 0.9$	Good	
$0.7 \leq \alpha < 0.8$	Acceptable	
$0.6 \le \alpha < 0.7$	Questionable	
$0.5 \le \alpha < 0.6$	Poor	
$\alpha < 0.5$	Unacceptable	

Source: Carver and Nash, 2009

In this research, Cronbach's Alpha Reliability test is used to measure the internal consistency of the scale for the causes, impacts and strategies of work-family conflict.

3.6.2 Descriptive Statistics

The descriptive statistics is computed by using mean in this research. The mean indicates the degree of central tendency of the respondents towards the statement in the questionnaire. The mean is used to rank the variables of this research. This research also compared the mean for single and married professional women towards the causes, impacts and strategies of work-family conflict in the construction industry. The demographic data is categorized

under descriptive statistics. This research used marital status, working hours and working experience to test for the variables.

3.6.3 Inferential Statistics

This research used non-parametric statistical test for inferential statistics due to small sample size. The non-parametric statistical test is applied to the data that are not normally distributed. It is the alternative of parametric statistical test such as Pearson rank correlation and independent t-test. In this research, two types of non-parametric statistical test would be applied which are associational test (Spearman Rank Correlation) and differential test (Mann-Whitney U test).

3.6.3.1 Associational Test: Spearman Rank Correlation

Spearman Rank Correlation is used to measure the strength and direction of the linear relationship between two variables. The value of Spearman's rank correlation coefficient, r_s is measured based on the strength of the correlation as shown in Table 3.3. Two hypothesis statements are formed under Spearman rank correlation. The null hypothesis (H_0) assumes that there is no relationship between two variables, whereas the alternative hypothesis (H_1) assumes that there is a relationship between two variables.

Table 3.3: Spearman's Rank Correlation Coefficient

Value of correlation coefficient, r _s (positive or negative)	Interpretation
0.00 - 0.19	A very weak correlation
0.20 - 0.39	A weak correlation
0.40 - 0.69	A moderate correlation
0.70 - 0.89	A strong correlation
0.90 - 1.00	A very strong correlation

Source: Fowler, Cohen and Jarvis, 1998

In this research, the Spearman rank correlation is used to discover whether there are correlation between working experience on the causes and impacts of work-family conflict. It is believed that working experience higher, accountability higher and the causes and impacts of work-family conflict will be higher. The hypothesis statements were formed as following:

H₀ : There is no relationship between working experience on the causes and impacts of work-family conflict.

H₁: There is a relationship between working experience on the causes and impacts of work-family conflict.

This research also find out whether there are correlation between total working hours and the impacts of work-family conflict. It is believed that work longer, less time in family and the impacts of work-family conflict will be higher. The hypothesis statements were formed as following:

H₀ : There is no relationship between total working hours and the impacts of work-family conflict.

H₁ : There is a relationship between total working hours and the impacts of work-family conflict.

3.6.3.2 Differential Test: Mann-Whitney U Test

Mann-Whitney U test is used to test whether there are statistical differences between two independent variables (Weaver, et al., 2018). Mann-Whitney U test is suitable for comparing differences in the same population. This test ranks all the scores from both groups (Carver and Nash, 2009). The Mann-Whitney U test would test on the null hypothesis (H_0) and alternative hypothesis (H_1). H_0 indicates that there are no significant differences between two independent samples whereas H_1 indicates that there are significant differences between two independent samples.

In this research, the Mann-Whitney U test is used to test whether there are significant differences between single and married professional women towards the causes, impacts and strategies of work-family conflict. The hypothesis statements were formed as following:

- H₀: There are no significant differences between single and married professional women towards the causes, impacts and strategies of work-family conflict.
- H₁: There are significant differences between single and married professional women towards the causes, impacts and strategies of work-family conflict.

3.7 Conclusion

In conclusion, this chapter have explained the methodology used for this research. Quantitative research method was used in this research by collecting data through questionnaire surveys. The data collected for this research are analysed and interpreted by using Cronbach's Alpha reliability analysis, descriptive analysis, Spearman rank correlation and Mann-Whitney U Test. The results of this research will be discussed in Chapter 4.

CHAPTER 4

RESULTS AND DISCUSSIONS

4.1 Participants

A total of 110 responses were received for this research excluding 5 sets of questionnaire for pilot test. Out of 110 responses, 2 responses were excluded due to responded by male. For consistency of results, 4 responses were excluded based on identifying being a married respondent without children. Hence, 104 qualified responses of single and married respondents with children were included in this research. The questionnaires were distributed to the respondents through social media such as LinkedIn, Facebook, WhatsApp and email. The data collection period was from 30 October 2019 to 20 February 2020.

4.2 Respondent's Demographic

This research studied on female's perspectives towards the work-family conflict. Gender differences do not take into account for this research. Lingard and Francis (2004) reported that male and female have no significant difference on work-family conflict. Supporting to this notion, many studies have found that no gender differences in work-family conflict (Duxbury and Higgins, 1991; Frone, Russell and Cooper, 1992). Perry-Smith and Blum (2000) further suggested that less attention should be paid on gender differences in work-family research.

The demographic data of respondents is presented in Table 4.1. Out of 104 responses, 54.8 % of respondents were single and 45.2 % of respondents were married. None of the respondents were divorced and widowed. For this research, 31.7 % of respondents were architect, 33.7 % of respondents were engineer and 34.6 % of respondents were quantity surveyor. Nearly half of the respondents (47.1 %) were from consultant firm. The years of working experience of the respondents ranged from 0 to 20 years, with the highest of the respondents (38.5 %) had 4-7 years.

Table 4.1: Respondent's Demographic (N = 104)

Parameter	Category	Frequency (n)	Percentage (%)
Marital Status	Single	57	54.8
	Married	47	45.2
	Divorced	0	0
	Widowed	0	0
Profession	Architect	33	31.7
	Engineer	35	33.7
	Quantity Surveyor	36	34.6
Nature of	Developer	25	24.1
organization	Consultant	49	47.1
	Contractor	30	28.8
Years of working	0-3 years	31	29.8
experience	4-7 years	40	38.5
	8-20 years	33	31.7

4.3 Respondent's Information on Work Aspects

4.3.1 Subordinates Under Control

This section is to find out the job position of respondents in the company. The respondents with subordinates are normally in the higher work position. According to Lundberg and Frankenhaeuser (1999), women in higher work position are more likely to suffer from higher stress due to increasing of work demands. Table 4.2 shows that 45.2 % of respondents have subordinates that work under them whereas 54.8 % of respondents does not have subordinate. Among the 47 respondents who have subordinates that work under them, half of the respondents (51.1 %) have 3 – 6 numbers of subordinates.

Table 4.2: Information on Subordinates Under Control

	Category	Frequency (n)	Percentage (%)
Having subordinates that	Yes	47	45.2
work under respondents	No	57	54.8
Number of subordinates	1-2 numbers	15	31.9
that worked under	3-6 numbers	24	51.1
respondents	7 - 15 numbers	8	17.0

4.3.2 Working Hours

Majority of the respondents (73.1 %) worked on five days per week as shown in Table 4.3. The table shows that 41.3 % of respondents do not work for overtime, however 58.6 % of respondents reported to have average overtime hours within the range of 1 to 40 hours per week. Looking at the total working hours per week (which is calculated based on working days and overtime hours), 65.4 % of respondents had total working hours less than 45 hours per week. This means that majority of them (65.4 %) do not have excessive working hours. The reason of using 45 hours as the breakeven hours was the standard working hours, in principle could be 40 hours (8 hours x 5 days) or 45 hours (9 hours x 5 days) which depends on the company operations.

Category Frequency (n) Percentage (%) Working days per week Five days 76 73.1 16 15.4 Five and half days Six days 11 10.6 Seven days 1 0.9 Average overtime hours 0 hours 43 41.3 32.7 1 - 4 hours per week 34 5 - 9 hours 20 19.2 10-40 hours 7 6.7 65.4 Total working hours < 45 hours 68 per week > 45 hours 36 34.6

Table 4.3: Information on Working Hours

4.4 Respondent's Information on Family Aspects

4.4.1 Dependent Child/ Children

The dependent child or children information on respondents is tabulated in Table 4.4. The table shows that 45.2 % of the married respondents have dependent child. The remaining 54.8 % without dependent child are single respondents. Majority of the married respondents had two children (66.0 %). It was noted that the highest of the respondents (38.3 %) had child aged 4-6 years old.

The main choice of child care arrangements among the married respondents are sending children to school and day care centre (41.1 %). This

is followed by the parents who are staying together with respondents (31.5 %) and the babysitter (24.7 %). Most of the respondents (95.7 %) are staying together with their child every day.

Table 4.4: Information on Dependent Child or Children

	Categories	Frequency (n)	Percentage (%)
Having dependent	Yes	47	45.2
child/ children	No	57	54.8
Number of child/	1	9	19.1
	1	-	
children	2	31	66.0
	3	7	14.9
Age of child/ children	0-3 years old	16	34.0
	4 – 6 years old	18	38.3
	7 - 18 years old	13	27.7
Child care arrangement	Sending to school and day care centre	30	41.1
	Nanny/ Babysitter	18	24.7
	Parents who are staying together	23	31.5
	Parents who are not staying together	2	2.7
Staying together with	Everyday	45	95.7
child/ children	Weekend only	2	4.3

4.4.2 Elder Family Members

The elder family members information on respondents is tabulated in Table 4.5. The table shows that 36.5 % of the single respondents and 26.0 % of the married respondents are staying together with their elder family members such as parents or grandparents. Most of the respondents (80.0 %) reported that their elder family members do not require extra care. However, 20.0 % of the respondents mentioned that their elder family members required extra care. The main selection in taking care of elder family members is parents either father or mother (38.5 %), followed by maid (23.1 %), relatives such as brothers and sisters (15.4 %) and husband (15.4 %).

Table 4.5: Information on Elder Family Members

	Categories	Frequency (n)	Percentage (%)
Staying together with	Single		
elder family members	Yes	38	36.5
	No	19	18.3
	Married		
	Yes	27	26.0
	No	20	19.2
Extra care needed for	Yes	13	20.0
elder family members	No	52	80.0
Taking care of elder family members when working	Parents (Father/ Mother)	5	38.5
members when working	Relatives (Brother/ Sister)	2	15.4
	Husband	2	15.4
	Maid	3	23.1
	No one	1	7.7

4.4.3 Employment of Maid

This section is to find out whether the respondents are employing full time or part time maid in assisting household responsibilities. Table 4.6 shows that the single respondents (49.0 %) and the married respondents (37.5 %) does not employ full time or part time maid in assisting household responsibilities.

Table 4.6: Employment of Maid

	Frequency (n)	Percentage (%)
Single		
Yes	6	5.8
No	51	49.0
Married		
Yes	8	7.7
No	39	37.5
Total	104	100

4.5 Reliability Analysis

Table 4.7: Cronbach's Alpha Analysis

	Cronbach's Alpha Value	N of Items
Causes of WFC	0.900	7
Impacts of WFC	0.858	7
Strategies in Reducing WFC	0.789	5

^{*}WFC: Work-Family Conflict

Cronbach's Alpha analysis was carried out to measure the reliability of the data. The values obtained for the causes of work-family conflict, impacts of work-family conflict and strategies in reducing work-family conflict were 0.900, 0.858 and 0.789 respectively. All values are higher than 0.70 indicates that the data are highly reliable and good internal consistency.

4.6 The Causes of Work-Family Conflict among Professional Women in the Construction Industry

4.6.1 Descriptive Test on The Causes of Work-Family Conflict

Table 4.8: Ranking on The Causes of Work-Family Conflict (N = 104)

Causes	Mean	Overall Rank	Single (N = 57)		Married $(N = 47)$	
			Mean	Rank	Mean	Rank
Financial Stress ²	3.250	1	2.842	3	3.745	1
Long Working Hours ¹	3.240	2	3.053	1	3.468	2
Excessive Workload ¹	3.212	3	3.035	2	3.426	3
Schedule Inflexibility ¹	2.981	4	2.649	4	3.383	4
Household	2.615	5	2.105	5	3.234	5
Responsibilities ² Dependent Care Responsibilities ²	2.019	6	1.702	6	2.404	7
Presence of Children ²	1.942	7	1.263	7	2.766	6

Note: ¹Work Demand, ²Family Demand

Table 4.8 presents the mean of the causes of work-family conflict among professional women in the construction industry. The seven causes of work-family conflict in this research were ranked based on their means. Overall, the married respondents ranked higher on the causes of work-family conflict than single respondents. The table reveals that both single and married respondents perceived work demand as the major contributor to the causes of work-family conflict.

The married respondents ranked *financial stress* (mean = 3.745) in the first place, followed by *long working hours* (mean = 3.468) and *excessive workload* (mean = 3.426). The highest ranked causes of work-family conflict among single respondents are *long working hours* (mean = 3.053), followed by *excessive workload* (mean = 3.035) and *financial stress* (mean = 2.842). The top three underlying causes of work-family conflict are further discussed.

Financial stress was the main causes leads to work-family conflict in the construction industry with mean of 3.250. This is correspondent with Young and Schieman (2012) findings who revealed that high levels of financial strain was resulted in greater work-family conflict. The survey carried out by National Population and Family Development Board (2016) further supported the findings that Malaysian women experienced high levels of financial stress especially on children's education and household expenses.

The second-ranked causes was *long working hours* in the construction industry (mean = 3.240). The findings in Table 4.3 shows that more than half of the respondents (58.6 %) reported to have work overtime. Hence, this is true with the statement of construction industry are characterised by long working hours (Lingard and Francis, 2004). Berger (2018) also revealed that working women with higher work hours experienced greater work-family conflict.

Excessive workload was ranked in the third place with mean of 3.212. High workload in the workplace are more likely to prevent from family participation. A research carried out by Dugan, Matthews and Barnes-Farrell (2012) found out that the employees with higher workload are more likely to interrupt family domain in negative way. Similar finding was found in the research of Lu and Kao (2013) that excessive of workload was positively associated with work-family conflict.

The least important causes of work-family conflict was *presence of children* (mean = 1.942). This is contradict with Stevens, et al. (2007) findings that women with presence of young children experienced greater conflict in work and family. However, this result is equivalent with the previous studies carried out by Annor (2016) and Michel, et al. (2011) who found out that presence of children does not affect work-family conflict.

4.6.2 Inferential Test on The Causes of Work-Family Conflict

4.6.2.1 Causes of Work-Family Conflict Based on Marital Status

Table 4.9: Mann-Whitney U Test on Marital Status for The Causes of Work-Family Conflict

Causes	Mean	Asymp. Sig	
-	Single (N = 57)	Married $(N = 47)$	- p-value
Financial Stress ²	42.95	64.09	0.032*
Long Working Hours ¹	46.96	59.21	0.037*
Excessive Workload ¹	47.16	58.98	0.000*
Schedule Inflexibility ¹	43.44	63.49	0.000*
Household Responsibilities ²	38.60	69.36	0.000*
Dependent Care Responsibilities ²	43.51	63.40	0.000*
Presence of Children ²	36.66	71.71	0.000*

Note: ¹Work Demand, ²Family Demand

Table 4.9 shows the causes of work-family conflict perceived by single and married respondents. Mann-Whitney U test was carried out to find out the significant difference between single and married respondents towards the causes of work-family conflict. The significance level for this research is 0.05. The hypothesis statements were formed as following:

H₀: Both single and married respondents have same perception towards the causes of work-family conflict, p > 0.05.

 H_1 : Both single and married respondents have different perception towards the causes of work-family conflict, $p \le 0.05$.

The table shows that all causes of work-family conflict had p-values less than 0.05 (p < 0.05). This indicates that the null hypothesis (H_0) is being rejected and the results supported the alternative hypothesis (H_1) that both single and married respondents have different perception towards the causes of work-family conflict. Generally, all causes of work-family conflict were significant difference where married respondents has higher mean rank compared to single respondents.

The single and married respondents perceived differently on *financial* stress (p = 0.032). Married respondents ranked higher (mean rank = 64.09) on *financial* stress as the married respondents facing high levels of financial strain especially on children's education and household expenses (National Population and Family Development Board, 2016). The reason of single respondents to rank lower (mean rank = 42.95) on financial stress could be the expenses for single respondents are more likely on personal usage.

Besides, there are significant differences between single and married respondents on *long working hours* (p = 0.037) and *excessive workload* (p = 0.000). The mean rank for married respondents on *long working hours* and *excessive workload* were 59.21 and 58.98 respectively. The reason could be the married respondents were more likely to suffer from role overload due to increasing demands from work and family.

The single and married respondents ranked differently on *schedule* inflexibility with the value of p=0.000. Married respondents ranked higher (mean rank = 59.21) on *schedule inflexibility* perhaps due to their working schedule that unable to pick up their children from school or child care centre. The earlier findings in Table 4.3 reveals that all respondents were working on the standard work schedule with a majority of the respondents (73.1 %) having five days work schedule. Aryee (1992) revealed that schedule inflexibility was resulted in work-family conflict among professional women in Singapore.

The married respondents also ranked higher (mean rank = 69.36) on household responsibilities than single respondents with the value of p = 0.000. This can be explained by the fact in Table 4.6 that 37.5 % of the married respondents does not employ full-time or part-time maid in assisting household responsibilities. Hence, the married respondents would be more likely to perceive higher on the household responsibilities.

In addition, the married respondents reported greater *dependent care responsibilities* (mean rank = 63.40) than single respondents with the value of p = 0.000. This is possible due to the evidence in Table 4.5 reveals that 26.0 % of the married respondents were living together with their elder family members. Hence, the married respondents would be perceived higher on dependent care responsibilities. The research from National Population and Family Development Board (2016) further supported the findings that most of the married women are providing daily necessities to their parents and parents in law.

The evidence of p = 0.000 shows the difference of single and married respondents on *presence of children*. Married respondents ranked higher (mean rank = 71.71) on *presence of children* because they tend to contribute more time for their children (Parasuraman and Simmers, 2001). The results in Table 4.4 validated this finding that most of the married respondents (95.7 %) are staying together with their child every day. Stevens, et al. (2007) and Higgins, et al. (2004) also reported that married women with presence of preschool children experienced greater conflict in work and family. The findings in Table 4.4 can support this statement that 72.3 % of the married respondents having children below six years old.

4.6.2.2 Causes of Work-Family Conflict Based on Working Experience

Table 4.10: Spearman Rank Correlation between Working Experience and The Causes of Work-Family Conflict (N = 104)

Causes	Working Experience		
	r_s	p	
Financial Stress ²	0.118	0.235	
Long Working Hours ¹	0.087	0.380	
Excessive Workload ¹	0.045	0.650	
Schedule Inflexibility ¹	0.203	0.039*	
Household Responsibilities ²	0.361	0.000*	
Dependent Care Responsibilities ²	0.191	0.052	
Presence of Children ²	0.436	0.000*	

Note: ¹Work Demand, ²Family Demand

Spearman rank correlation was carried out to find out the correlation between working experiences and the causes of work-family conflict. The significance level for this research is 0.05. The hypothesis statements were formed as following:

 H_0 : There is no relationship between working experience and the causes of work-family conflict, p > 0.05.

 H_1 : There is a relationship between working experience and the causes of work-family conflict, $p \le 0.05$.

The table shows that the p-values of the causes of work-family conflict for *schedule inflexibility*, *household responsibilities* and *presence of children* are less than 0.05 (p < 0.05). This indicates that the alternative hypothesis (H_1) is against the null hypothesis (H_0). There is a relationship between working experience and the causes of work-family conflict.

The correlation coefficient, r_s for schedule inflexibility is 0.203 with p = 0.039 shows that there is a weak positive correlation between working experience and schedule inflexibility. This finding shows that increased working experience was found to have higher schedule inflexibility. Hill, et al. (2013) mentioned that the employees engaged with greater work responsibilities tend to have less control over their work schedule.

A weak positive correlation was found between working experience and household responsibilities ($r_s = 0.361$ and p = 0.000). This finding shows that the respondents with higher working experience perceived higher on household responsibilities. It could be explained as the increased work responsibilities causing women to have less time for household responsibilities. This is supported by Becker (1965) who suggested that women spend less time on housework when increasing economic opportunities.

The evidence of $r_s = 0.436$ and p = 0.000 shows that a moderate positive correlation was found between working experience and presence of children. This finding assumes that the respondents with higher working experience perceived higher on presence of children in contributing to workfamily conflict. The reason could be the amount of time spent for children was decreased with higher work demands (Milkie, et al., 2004).

4.7 The Impacts of Work-Family Conflict among Professional Women in the Construction Industry

4.7.1 Descriptive Test on The Impacts of Work-Family Conflict

Table 4.11: Ranking on The Impacts of Work-Family Conflict (N = 104)

Impacts	Mean	Overall Rank	Single (N = 57)		Married $(N = 47)$	
			Mean	Rank	Mean	Rank
High Levels of Workplace Stress ¹	3.760	1	3.702	1	3.830	1
Poor Family Relationship ²	3.058	2	3.333	2	2.723	7
Low Life Satisfaction ³	3.039	3	2.544	4	3.638	2
Low Job Performance ¹	2.875	4	2.790	3	2.979	4
Poor Body Health ³	2.731	5	2.474	5	3.043	3
Job Burnout ¹	2.510	6	2.246	6	2.830	6
Low Marital Satisfaction ²	2.173	7	1.561	7	2.915	5

Note: ¹Work-Related Outcomes, ²Family-Related Outcomes, ³Individual-Related Outcomes

Table 4.11 indicates the mean of the impacts of work-family conflict among professional women in the construction industry. The seven impacts of work-family conflict in this research were ranked based on their means. Overall, the married respondents ranked higher on the impacts of work-family conflict than single respondents. The table shows that the most significant impacts of work-family conflict perceived by single respondents was work-related outcomes whereas the married respondents perceived individual-related outcomes.

Both single and married respondents ranked *high levels of workplace stress* in the first place with mean of 3.702 and 3.830 respectively. The single respondents ranked *poor family relationship* (mean = 3.333) and *low job performance* (mean = 2.790) in the second and third place. The second-ranked impacts for married respondents was *low life satisfaction* (mean = 3.638), followed by *poor body health* (mean = 3.043). The top three impacts of workfamily conflict are further discussed.

High levels of workplace stress was the major impacts of work-family conflict in the construction industry with mean of 3.760. This can be linked to

the results in Table 4.2 which reveals that 45.2 % of the respondents have subordinates that work under them. According to Lundberg and Frankenhaeuser (1999), women in higher work position are more likely to suffer from stress due to increasing of work demands.

The second-ranked impacts was *poor family relationship* with the mean of 3.058. This finding is correspondent with Cinamon, Weisel and Tzuk (2007) who found out that work-family conflict was resulted in poorer interaction between parent and child.

Low life satisfaction was ranked in the third place with mean of 3.039. This result is consistent with past literature that work-family conflict had negative effect on life satisfaction (Arora, Hartman and Stoner, 1990; Carlson and Kacmar, 2000; Greenhaus, Collins and Shaw, 2003).

The least important impacts of work-family conflict was *low marital* satisfaction (mean = 2.173). This is contradict with Bagherzadeh, et al. (2016) and Wulandari, Hamzah and Abbas (2019) findings who revealed that work-family conflict may affect marital satisfaction.

4.7.2 Inferential Test on The Impacts of Work-Family Conflict4.7.2.1 Impacts of Work-Family Conflict Based on Marital Status

Table 4.12: Mann-Whitney U Test on Marital Status for The Impacts of Work-Family Conflict

Impacts	Mean	Asymp. Sig	
	Single (N = 57)	Married $(N = 47)$	- p-value
High Levels of Workplace Stress ¹	50.82	54.54	0.507
Poor Family Relationship ²	61.09	42.09	0.001*
Low Life Satisfaction ³	41.44	65.91	0.000*
Low Job Performance ¹	49.14	56.57	0.185
Poor Body Health ³	45.82	60.61	0.010*
Job Burnout ¹	44.83	61.80	0.003*
Low Marital Satisfaction ²	38.05	70.02	0.000*

Note: ¹Work-Related Outcomes, ²Family-Related Outcomes, ³Individual-Related Outcomes

Table 4.12 indicates the impacts of work-family conflict perceived by single and married respondents. Mann-Whitney U test was carried out to find out the significant difference between single and married respondents towards the impacts of work-family conflict. The significance level for this research is 0.05. The hypothesis statements were formed as following:

H₀ : Both single and married respondents encounter similar impacts of work-family conflict, p > 0.05.

H₁ : Both single and married respondents encounter different impacts of work-family conflict, p ≤ 0.05.

The impacts of work-family conflict namely *poor family relationship*, low life satisfaction, poor body health, job burnout and low marital satisfaction had p-values less than 0.05 (p < 0.05). The results supported the alternative hypothesis (H_1) that both single and married respondents encounter different impacts of work-family conflict.

The single and married respondents perceived differently on *poor* family relationship (p = 0.001). Single respondents ranked higher (mean rank = 61.09) on poor family relationship than married respondents. The reason could be lack of communication with family members among single respondents due to work overload. This is in line with the findings of Perry-Jenkins and Gillman (2000) who revealed that work overload negatively affected family relationship.

Besides, the single and married respondents ranked differently on *low life satisfaction* with p = 0.000. Married respondents ranked higher (mean rank = 65.91) on *low life satisfaction* perhaps due to the increased duties being a mother and employee at the same time. This is supported by Moen, Kelly and Lam (2013) who highlighted that the working women have to reduce or eliminate their personal time with the increasing demands from work and family life.

The married respondents also ranked higher (mean rank = 60.61) on poor body health than single respondents with the value of p = 0.010. This is concur with Chandola, et al. (2019) findings that married women with children reported higher chronic stress as compared to single women.

In addition, the married respondents reported high levels of *job* burnout (mean rank = 61.80) than single respondents with p = 0.003. The burden of work for married women may be higher due to extensive of family responsibilities, along with high job demands. Evidence from American Psychological Association (2010) revealed that married women are more likely to suffer job burnout than single women.

The evidence of p = 0.000 shows the significant difference between single and married respondents on *low marital satisfaction*. The reason could be the married respondents suffer role overload from the work and family commitments that lead to low marital satisfaction (mean rank = 70.02).

4.7.2.2 Impacts of Work-Family Conflict Based on Total Working Hours

Table 4.13: Spearman Rank Correlation between Total Working Hours and The Impacts of Work-Family Conflict (N = 104)

Impacts	Total Working Hours		
<u> </u>	r_s	p	
High Levels of Workplace Stress ¹	0.308	0.001*	
Poor Family Relationship ²	0.101	0.305	
Low Life Satisfaction ³	0.132	0.183	
Low Job Performance ¹	0.266	0.006*	
Poor Body Health ³	0.197	0.045*	
Job Burnout ¹	0.117	0.237	
Low Marital Satisfaction ²	0.174	0.078	

Note: ¹Work-Related Outcomes, ²Family-Related Outcomes, ³Individual-Related Outcomes

Spearman rank correlation was carried out to find out the correlation between total working hours and the impacts of work-family conflict. The significance level for this research is 0.05. The hypothesis statements were formed as following:

 H_0 : There is no relationship between total working hours and the impacts of work-family conflict, p > 0.05.

 H_1 : There is a relationship between total working hours and the impacts of work-family conflict, $p \le 0.05$.

Table 4.13 shows that the impacts of work-family conflict for *high* levels of workplace stress, low job performance and poor body health had p-values less than 0.05 (p < 0.05). This indicates the alternative hypothesis (H₁) is against the null hypothesis (H₀). There is a relationship between total working hours and the impacts of work-family conflict for high levels of workplace stress, low job performance and poor body health.

A weak positive correlation was found between total working hours and high levels of workplace stress ($r_s = 0.308$, p = 0.001). This indicates that the higher the total working hours the higher the level of workplace stress. This is consistent with Artazcoz, et al. (2007) findings who revealed that long working hours was associated with high levels of occupational stress among women.

Besides, low job performance had r_s value of 0.266 and p=0.006 shows that the relationship between total working hours and low job performance demonstrated a weak positive correlation. This finding indicates that increased of total working hours was resulted in low job performance. This is match with Artazcoz, et al. (2018) findings who found out that long working hours was associated with poor job quality among women.

The evidence of $r_s = 0.197$ and p = 0.045 shows that a very weak positive correlation was found between total working hours and poor body health. This finding assumes that increased of total working hours are more likely to have poor body health. Evidence from Wong, Chan and Ngan (2019) was found to support this finding which discovered a positive correlation between long working hours and health outcomes among employees.

4.7.2.3 Impacts of Work-Family Conflict Based on Working Experience

Table 4.14: Spearman Rank Correlation between Working Experience and The Impacts of Work-Family Conflict (N = 104)

Impacts	Working Experience		
	$r_{\rm s}$	p	
High Levels of Workplace Stress ¹	-0.007	0.947	
Poor Family Relationship ²	-0.272	0.005*	
Low Life Satisfaction ³	0.179	0.069	
Low Job Performance ¹	0.004	0.968	
Poor Body Health ³	0.005	0.958	
Job Burnout ¹	0.088	0.373	
Low Marital Satisfaction ²	0.359	0.000*	

Note: ¹Work-Related Outcomes, ²Family-Related Outcomes, ³Individual-Related Outcomes

Spearman rank correlation was carried out to find out the correlation between working experience and the impacts of work-family conflict. The significance level for this research is 0.05. The hypothesis statements were formed as following:

 H_0 : There is no relationship between working experience and the impacts of work-family conflict, p > 0.05.

 H_1 : There is a relationship between working experience and the impacts of work-family conflict, $p \le 0.05$.

Table 4.14 shows the p-values of the impacts of work-family conflict for *poor family relationship* and *low marital status* are less than 0.05 (p \leq 0.05). This indicates that the alternative hypothesis (H₁) is against the null hypothesis (H₀). There is a relationship between working experience and the impacts of work-family conflict for poor family relationship and low marital status.

There is a weak negative correlation between working experience and poor family relationship ($r_s = -0.272$, p = 0.005). The findings indicate that the

respondents with lower working experience perceived higher on poor family relationship. The reason could be the younger generation are less likely to communicate with their family members.

Besides, the evidence of $r_s = 0.359$ and p = 0.000 shows that the relationship between working experience and low marital satisfaction demonstrated a weak positive correlation. This finding assumes that the respondents with higher working experience perceived higher on low marital satisfaction. This was perhaps due to the increased work responsibilities causing married women to suffer role overload which lead to low marital satisfaction.

4.8 The Strategies in Reducing Work-Family Conflict among Professional Women in the Construction Industry

4.8.1 Descriptive Test on The Strategies in Reducing Work-Family Conflict

Table 4.15: Ranking on The Strategies in Reducing Work-Family Conflict (N = 104)

Strategies	Mean	Overall Rank	Single $(N = 57)$		Married $(N = 47)$	
			Mean	Rank	Mean	Rank
Spouse or Family Support ²	4.673	1	4.541	1	4.851	1
Supervisor or Co-Worker Support ²	4.644	2	4.526	2	4.787	2
Job Sharing ¹	4.414	3	4.333	3	4.511	4
Flexible Work Schedule ¹	4.337	4	4.105	4	4.617	3
Providing Childcare Support ¹	3.942	5	3.474	5	4.493	5

Note: ¹Family-Friendly Policies, ²Social Support

Table 4.15 shows the mean of the strategies in reducing work-family conflict among professional women in the construction industry. The five strategies in reducing work-family conflict in this research were ranked based on their means. Overall, the married respondents ranked higher on the strategies in reducing work-family conflict than single respondents. The table indicates that

both single and married respondents perceived social support as the most effective strategies in reducing work-family conflict.

Single respondents ranked *spouse or family support* (mean = 4.541) in the first place, followed by *supervisor or co-worker support* (mean = 4.526) and *job sharing* (mean = 4.333). The top strategies ranked by married respondents was *spouse or family support* (mean = 4.851), followed by *supervisor or co-worker support* (mean = 4.787) and *flexible work schedule* (mean = 4.617). The top three strategies in reducing work-family conflict are further discussed.

The most effective strategies in reducing work-family conflict was *spouse or family support* with mean of 4.673. This is consistent with Rupert, et al. (2012) findings who revealed that family support was important in reducing work-family conflict. The evidence from Burke and Greenglass (1999) also highlighted that spousal support was found to reduce work-family conflict among nurses in Canada.

The second-highest strategies was *supervisor or co-worker support* in the workplace (mean = 4.644). This finding is consistent with past literature that supervisor support would reduce work and family conflict (Premeaux, Adkins and Mossholder, 2007; Anderson, Coffey and Byerly, 2002; Thomas and Ganster, 1995). The research of Van Daalen, Willemsen and Sanders (2006) also support the findings that the co-worker support was helped in reducing work-family conflict.

Job sharing was ranked in the third place with mean of 4.414. This is match with Gholipour, et al. (2010) findings who reported that 86 % of female entrepreneurs in Iran agreed with job sharing in reducing work and family conflict. The success case of Federal International (2000) Ltd in Singapore can further support the findings that the female employees are able to achieve work-life balance with the implementation of job sharing (Singapore National Employers Federation, 2019).

The least important strategies in reducing work-family conflict was *providing childcare support* (mean = 3.942). This is contrast with the findings of Rosin and Korabik (1990) who found out that the primary reason for women to leave jobs are failure in providing satisfactory childcare support. However, this result is equivalent with the findings of Goff, Mount and

Jamison (1990) who found out that on-site childcare support does not reduce work and family conflict.

4.8.2 Inferential Test on The Strategies in Reducing Work-Family Conflict

4.8.2.1 Strategies in Reducing Work-Family Conflict Based on Marital Status

Table 4.16: Mann-Whitney U Test on Marital Status for The Strategies in Reducing Work-Family Conflict

Strategies	Mear	Asymp.	
·	Single (N = 57)	Married (N = 47)	- Sig p-value
Spouse or Family Support ²	45.92	60.48	0.002*
Supervisor or Co-Worker Support ²	46.43	59.86	0.006*
Job Sharing ¹	48.31	57.59	0.081
Flexible Work Schedule ¹	44.68	61.99	0.001*
Providing Childcare Support ¹	39.16	68.68	0.000*

Note: ¹Family-Friendly Policies, ²Social Support

Table 4.16 shows the strategies in reducing work-family conflict perceived by single and married respondents. Mann-Whitney U test was carried out to find out the significant difference between single and married respondents towards the strategies in reducing work-family conflict. The significance level for this research is 0.05. The hypothesis statements were formed as following:

 H_0 : Both single and married respondents have same perception towards the strategies in reducing work-family conflict, p > 0.05.

 H_1 : Both single and married respondents have different perception towards the strategies in reducing work-family conflict, $p \le 0.05$.

The strategies in reducing work-family conflict, namely *spouse or* family support, supervisor or co-worker support, flexible work schedule and providing childcare support had p-values less than 0.05 (p < 0.05). The results

supported the alternative hypothesis (H_1) that both single and married respondents have different perception towards the strategies in reducing work-family conflict. From Table 4.16, the married respondents have higher perception on the strategies in reducing work-family conflict than single respondents. This is compatible with the earlier findings in Table 4.12 that the married respondents faced greater impacts of work-family conflict than single respondents.

First, the single and married respondents perceived differently on *spouse or family support* (p = 0.002). The married respondents ranked higher (mean rank = 60.48) on *spouse or family support* because the support from spouse in sharing of family responsibilities able to minimise work-family conflict (Kim and Choo, 2001).

Besides, the married respondents ranked higher (mean rank = 59.86) on *supervisor or co-worker support* than single respondents with the value of p = 0.006. This is consistent with the findings in Table 4.9 that the married respondents perceived work demands as the causes of work-family conflict. Therefore, the married respondents considered this strategy as the viable strategy for reducing work-family conflict.

The single and married respondents also perceived differently *on flexible work schedule* with the value of p = 0.001. It was found that the married respondents ranked higher (mean rank = 61.99) on *flexible work schedule* than single respondents. This can be supported by the findings in Table 4.9 which revealed that the married respondents reported higher on schedule inflexibility. Moen, Kelley and Huang (2009) highlighted that flexible work schedule allows married women with dependent children to back home early, arrive late on work or stay at home when their child gets sick.

The evidence of p = 0.000 shows that there are significant difference between single and married respondents on *providing childcare support*. The reason of married respondents ranked higher (mean rank = 68.68) on *providing childcare support* could be the married respondents can stay focus at work with on-site childcare support.

4.9 Conclusion

In summary, this chapter have analysed and interpreted the data obtained from questionnaire. The Cronbach's alpha values obtained for this research were all higher than 0.70 which indicated the data are highly reliable and good internal consistency. The summary of significant results in Chapter 4 is provided in Table 4.17.

Т	Table 4.17: Summary of Significant Results
	Significant Results
Causes of WFC	 Both single and married respondents perceived work demands as the major contributor to the causes of work-family conflict. All causes were significant differences between single and married respondents. Schedule inflexibility, household responsibilities and presence of children has positive correlation with working experience.
Impacts of WFC	 Single respondents perceived work-related outcomes, whereas married respondents perceived individual-related outcomes as the most significant impacts of work-family conflict. 5 impacts were significant differences between single and married respondents. High levels of workplace stress, low job performance and poor body health has positive correlation with total working hours. Low marital satisfaction have positive correlation with working experience but poor family relationship have negative correlation with working experience.
Strategies In Reducing WFC	 Both single and married respondents perceived social support as the most effective strategies in reducing work-family conflict. 4 strategies were significant differences between single and married respondents.

*WFC: Work-Family Conflict

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This research provides an overview of work-family conflict among professional women in the construction industry. The objectives of this research are (1) to identify the causes of work-family conflict, (2) to examine the impacts of work-family conflict, and (3) to study the strategies in reducing work-family conflict among professional women in the construction industry. The research objectives have been achieved based on the findings in Chapter 4.

A total of 104 qualified responses were received in this research. The data was collected through questionnaire distributed to the professional women working in the Klang Valley area. The target respondents for this research were single and married professional women with children in the construction industry. The data collected were analysed and interpreted by using descriptive test, Mann-Whitney U Test and Spearman Rank Correlation.

5.1.1 To Identify The Causes of Work-Family Conflict Among Professional Women in the Construction Industry

This research revealed that the major contributor to the causes of work-family conflict among professional women was work demand. The most significant underlying causes of work-family conflict in the construction industry were:

- (i) Financial stress (mean = 3.250).
- (ii) Long working hours (mean = 3.240).
- (iii) Excessive workload (mean = 3.212).

The Mann-Whitney U Test were conducted between single and married professional women and revealed the significant findings of the causes of work-family conflict as follows.

The married professional women perceived higher on the following causes than single professional women:

- (i) Financial stress (p = 0.032).
- (ii) Long working hours (p = 0.037).

- (iii) Excessive workload (p = 0.000).
- (iv) Schedule inflexibility (p = 0.000).
- (v) Household responsibilities (p = 0.000).
- (vi) Dependent care responsibilities (p = 0.000).
- (vii) Presence of children (p = 0.000).

The significant findings of Spearman Rank Correlation on the association of working experience with the causes of work-family conflict were as follows:

- (i) Weak positive correlation between working experience and schedule inflexibility ($r_s = 0.203$, p = 0.039).
- (ii) Weak positive correlation between working experience and household responsibilities ($r_s = 0.361$, p = 0.000).
- (iii) Moderate positive correlation between working experience and presence of children ($r_s = 0.436$, p = 0.000).

5.1.2 To Examine The Impacts of Work-Family Conflict Among Professional Women in the Construction Industry

The single professional women perceived work-related outcomes as the most significant impacts of work-family conflict whereas the married professional women perceived individual-related outcomes. The top three impacts of work-family conflict in the construction industry were:

- (i) High levels of workplace stress (mean = 3.760).
- (ii) Poor family relationship (mean = 3.058).
- (iii) Low life satisfaction (mean = 3.039).

The Mann-Whitney U Test were conducted between single and married professional women and revealed the significant findings of the impacts of work-family conflict as follows.

The married professional women perceived higher on the following impacts than single professional women:

- (i) Low life satisfaction (p = 0.000).
- (ii) Poor body health (p = 0.010).
- (iii) Job burnout (p = 0.003).

(iv) Low marital satisfaction (p = 0.000).

The married professional women has another is perceived lower than single professional women on item:

(i) Poor family relationship (p = 0.001).

The significant findings of Spearman Rank Correlation on the association of working hours and working experience with the impacts of work-family conflict were as follows.

Correlation between total working hours and the following impacts of workfamily conflict:

- (i) Weak positive correlation with high levels of workplace stress $(r_s = 0.308, p = 0.001)$.
- (ii) Weak positive correlation with low job performance ($r_s = 0.266$, p = 0.006).
- (iii) Very weak positive correlation with poor body health ($r_s = 0.197$, p = 0.045).

Correlation between working experience and the following impacts of workfamily conflict:

- (i) Weak negative correlation with poor family relationship ($r_s = -0.272$, p = 0.005).
- (ii) Weak positive correlation with low marital satisfaction ($r_s = 0.359$, p = 0.000).

5.1.3 To Study The Strategies in Reducing Work-Family Conflict Among Professional Women in the Construction Industry

The most effective strategies in reducing work-family conflict among professional women was social support. This research suggested that the strategies in reducing work-family conflict in the construction industry were:

- (i) Spouse or family support (mean = 4.673).
- (ii) Supervisor or co-worker support (mean = 4.644).
- (iii) Job sharing (mean = 4.414).

The Mann-Whitney U test were conducted between single and married professional women and revealed the significant findings of the strategies in reducing work-family conflict as follows.

The married professional women perceived higher on the following strategies than single professional women:

- (i) Spouse or family support (p = 0.002).
- (ii) Supervisor or co-worker support (p = 0.006).
- (iii) Flexible work schedule (p = 0.001).
- (iv) Providing childcare support (p = 0.000).

5.2 Limitations and Recommendations for Future Research

The limitation of this research is the findings are based on the viewpoint of the Malaysian construction professional women. The perception might be different for other countries due to different culture. Besides, this research used single approach to collect data instead of mixed method. The findings of this research may be less generalizable due to small sample size. This research does not take into account for gender differences, however some studies found out that there are significant differences between male and female on workfamily conflict.

The recommendation for future research are to compare the viewpoint of construction professional women in other developing countries, for example Cambodia, Philippines and Indonesia. Future research should apply mixed method by distributing questionnaire and carrying out in-depth interview to further enhance the findings on work-family conflict. The future research should also increase the sample size for more generalizable findings. In addition, future studies should include the perception of male for work-family conflict to observe any significant difference between male and female in the Malaysian construction industry.

5.3 Significance of Research

This research contributes to the growing context of work-family conflict in the construction industry. This research is significant for professional women to identify what are the causes that contributes to work-family conflict and what are the impacts demonstrated from work-family conflict. This research also

provides some potential strategies for professional women to overcome the work-family conflict in the construction industry.

This research have several implications for construction companies. The causes identified in this research can be used by the construction companies in understanding the issues of work-family conflict. With the increasing of working women enter into the workforce, the construction companies should aware of the strategies in reducing work-family conflict. The construction companies should emphasise strategies of family-friendly policies and social support to assist the working women in achieving work-family balance.

REFERENCES

- Acharya, N. K., Lee, Y. D. and Im, H. M., 2006. Conflicting factors in construction projects: Korean perspective. *Engineering, Construction and Architectural Management*, [e-journal] 13(6), pp. 543–566. http://dx.doi.org/10.1108/09699980610712364.
- Achour, M., Grine, F. and Nor, M. R., 2014. Work Family Conflict and Coping Strategies: A Qualitative Study of Muslim Female Academicians in Malaysia. *Mental Health Religion and Culture*, 17(10), pp. 1002-1014.
- Adkins, C. L. and Premeaux, S. F., 2012. Spending time: The impact of hours worked on work–family conflict. *Journal of Vocational Behavior*, 80(2), pp. 380–389.
- Adogbo, K. J., Ibrahim, A. D. and Ibrahim, Y. M., 2015. Development of a framework for attracting and retaining women in construction practice. *Journal of Construction in Developing Countries*, 20(1), pp. 99–115.
- Agapiou, A., 2002. Perceptions of gender roles and attitudes toward work among male and female operatives in the Scottish construction industry. *Construction Management and Economics*, [e-journal] 20(8), pp. 697–705. https://doi.org/10.1080/0144619021000024989.
- Ali, I. A. M., 2019. Supporting mums who breastfeed. *The Star Online*, [online] 26 July. Available at: https://www.thestar.com.my/metro/metro-news/2019/07/26/supporting-mums-who-breastfeed/ [Accessed 28 July 2019].
- American Psychological Association, 2010. *Stress and Gender*. [online] Available at: https://www.apa.org/news/press/releases/stress/2010/genderstress.pdf> [Accessed 2 March 2020].
- Anderson, S. E., Coffey, B. S. and Byerly, R. T., 2002. Formal organizational initiatives and informal workplace practices: links to work-life conflict and job-related outcomes. *Journal of Management*, 28(6), pp. 787–810.
- Annor, F., 2016. Work/family demands and support: Examining direct and moderating influences on work-family conflict. *Journal of Workplace Behavioral Health*, 31(2), pp. 87–103.
- Arora, R., Hartman, R. I. and Stoner, C. R., 1990. Work-Home Role Conflict in Female Owners of Small Business: An Exploratory Study. *Journal of Small Business Management*, 28(1), pp. 30–38.
- Artazcoz, L., Cortès, I., Borrell, C., Escribà-Agür, V., Cascant, L., 2007. Gender perspective in the analysis of the relationship between long work hours, health and health-related behavior. *Scandinavian Journal of Work, Environment and Health*, 33(5), pp. 344–350.

- Artazcoz, L., Cortès-Franch, I., Escribà-Agüir, V., López, M. and Benavides, F., 2018. Long Working Hours and Job Quality in Europe: Gender and Welfare State Differences. *International Journal of Environmental Research and Public Health*, 15(11), pp. 2592.
- Aryee, S., 1992. Antecedents and Outcomes of Work-family Conflict Among Married Professional Women: Evidence from Singapore. *Human Relations*, 45(2), pp. 813–837.
- Aryee, S., Luk, V., Leung, A. and Lo, S., 1999. Role stressors, inter-role conflict, and well-being: The moderating influence of spousal support and coping behaviors among employed parents in Hong Kong. *Journal of Vocational Behavior*, 54(2), pp. 259–278.
- Avey, J. B., Luthans, F., Hannah, S. T., Sweetman, D. and Peterson, C., 2012. Impact of employees' character strengths of wisdom on stress and creative performance. *Human Resource Management Journal*, [e-journal] 22(2), pp. 165–181. http://dx.doi.org/10.1111/j.1748-8583.2010.00157.x.
- Bagherzadeh, R., Taghizadeh, Z., Mohammadi, E., Kazemnejad, A., Pourreza, A. and Ebadi, A., 2016. Relationship of work-family conflict with burnout and marital satisfaction: cross-domain or source attribution relations? *Health Promotion Perspectives*, [e-journal] 6(1), pp. 31–36. http://dx.doi.org/10.15171/hpp.2016.05.
- Barnett, R. C., 1999. A new work-life model for the twenty-first century. *The Annals of the American Academy of Political and Social Science*, 562(1), pp. 143–158.
- Barthorpe, S., Duncan, R. and Miller, C., 2000. The pluralistic facets of culture and its impact on construction. *Property management*, 18(5), pp. 335–351.
- Beauregard, N., Marchand, A., Bilodeau, J., Durand, P., Demers, A. and Haines, V. Y., 2018. Gendered Pathways to Burnout: Results from the SALVEO Study. *Annals of Work Exposures and Health*, 62(4), pp. 426–437.
- Becker, G. S., 1965. A Theory of the Allocation of Time. *The Economic Journal*, [e-journal] 75(299), pp. 493–517. https://doi.org/10.2307/2228949.
- Beehr, T. A., Jex, S. M., Stacy, B. A. and Murray, M. A., 2000. Work stressors and coworker support as predictors of individual strain and job performance. *Journal of Organizational Behavior*, 21(4), pp. 391–405.
- Berger, L., 2018. Working Mothers Satisfaction: The Influence of Time Demands and Time-Based Conflict. *Journal of Mental Disorders and Treatment*, [e-journal] 4(2), 1000158. https://doi.org/10.4172/2471-271X.1000158.

- Bernama, 2019. Speaker: Parliament to have childcare centre this year. *The Star Online*, [online] 19 February. Available at: https://www.thestar.com.my/news/nation/2019/02/19/speaker-parliament-to-have-childcare-centre-this-year/ [Accessed 28 July 2019].
- Bernard, M. and Phillips, J. E., 2007. Working carers of older adults: What helps and what hinders in juggling work and care? *Community, Work, & Family*, 10(2), pp. 139–160.
- Boyar, S. L., Carr, J. C., Mosley, D. C. and Carson, C. M., 2007. The development and validation of scores on perceived work and family demand scales. *Educational and Psychological Measurement*, 67(1), pp. 110–115.
- Boyar, S. L., Maertz, C. P., Mosley, D. C. and Carr, J. C., 2008. The impact of work/family demand on work family conflict. *Journal of Managerial Psychology*, 23(3), pp. 215–235.
- Bradley, L., Brown, K., Lingard, H., Townsend, K. and Bailey, C., 2010. Talking the talk and walking the walk: How managers can influence the quality of work-life balance in a construction project. *International Journal of Managing Projects in Business*, 3(4), pp. 589–603.
- Burke, R. J. and Greenglass, E. R., 1999. Work-family conflict, spouse support, and nursing staff well-being during organizational restructuring. *Journal of Occupational Health Psychology*, 4(4), pp. 327–336.
- Burke, R. J., Weir, T. and DuWors, R. E., 1980. Work Demands on Administrators and Spouse Well-Being. *Human Relations*, [e-journal] 33(4), pp. 253–278. http://dx.doi.org/10.1177/001872678003300404.
- Campbell, F., 2006. Occupational stress in the construction industry. [online] Ascot: The Chartered Institute of Building. Available at: https://policy.ciob.org/wp-content/uploads/2006/03/Occupational-Stress-in-the-Construction-Industry-March-2006.pdf> [Accessed 20 July 2019].
- Carlson, D. S. and Kacmar, K. M., 2000. Work-family conflict in the organization: Do life role values make a difference? *Journal of Management*, [e-journal] 26(5), pp. 1031–1054. http://dx.doi.org/10.1016/S0149-2063(00)00067-2.
- Carver, R. H. and Nash, J. G., 2009. *Doing Data Analysis with SPSS Version 16*. Brooks/Cole: Cengage Learning.
- Cerrato, J. and Cifre, E., 2018. Gender Inequality in Household Chores and Work-Family Conflict. *Frontiers in Psychology*, [e-journal] 9(1). http://dx.doi.org/10.3389/fpsyg.2018.01330.

- Chandola, T., Booker, C. L., Kumari, M. and Benzeval, M., 2019. Are Flexible Work Arrangements Associated with Lower Levels of Chronic Stress-Related Biomarkers? A Study of 6025 Employees in the UK Household Longitudinal Study. *Sociology*, [e-journal] 53(4), pp. 779–799. http://dx.doi.org/10.1177/0038038519826014.
- Christensen, K. E. and Staines, G. L., 1990. Flextime: A Viable Solution to Work/Family Conflict? *Journal of Family Issues*, 11(4), pp. 455–476.
- Cigna, 2019. 2019 Cigna 360 Well-Being Survey. [online] Available at: https://wellbeing.cigna.com/360Survey_Report.pdf [Accessed 2 March 2020].
- Cinamon, R. G., Weisel, A. and Tzuk, K., 2007. Work–Family Conflict Within the Family: Crossover Effects, Perceived Parent–Child Interaction Quality, Parental Self-Efficacy, and Life Role Attributions. *Journal of Career Development*, 34(1), pp. 79–100.
- Dainty, A. R. J., Bagilhole, B. M., Ansari, K. H. and Jackson, J., 2004. Creating Equality in the Construction Industry: An Agenda For Change For Women and Ethnic Minorities. *Journal of Construction Research*, 5(1), pp. 75–86.
- Day, A. L. and Chamberlain, T. C., 2006. Committing to your work, spouse, and children: Implications for work–family conflict. *Journal of Vocational Behavior*, 68(1), pp. 116–130.
- Department of Statistics Malaysia, 2019. *Labour Force Survey Report Malaysia, Third Quarter 2019*. [online] Putrajaya: Department of Statistics Malaysia. Available at: https://newss.statistics.gov.my/newss-portalx/ep/epFreeDownloadContentSearch.seam?cid=52592 [Accessed on 21 December 2019].
- Dew, J., Britt, S. and Huston, S., 2012. Examining the relationship between financial issues and divorce. *Family Relations*, [e-journal] 61(4), pp. 615–628. https://doi.org/10.1111/j.1741-3729.2012.00715.x.
- Dew, J., LeBaron, A. and Allsop, D., 2018. Can stress build relationships? Predictors of increased marital commitment resulting from the 2007–2009 recession. *Journal of Family and Economic Issues*, 39(3), pp. 405–421. https://doi.org/10.1007/s10834-018-9566-7.
- DiRenzo, M. S., Greenhaus, J. H. and Weer, C. H., 2011. Job level, demands, and resources as antecedents of work–family conflict. *Journal of Vocational Behavior*, 78(2), pp. 305–314.
- Dolnicar, S., Grün, B., Leisch, F., 2015. Increasing sample size compensates for data problems in segmentation studies. *Journal of Business Research*, 69(1), pp. 992–999.

- Dugan, A. G., Matthews, R. A. and Barnes-Farrell, J. L., 2012. Understanding the roles of subjective and objective aspects of time in the work-family interface. *Community, Work & Family*, [e-journal] 15(2), pp. 149–172. http://dx.doi.org/10.1080/13668803.2011.609656.
- Duxbury, L. and Higgins, C., 2005. Report Four: Who Is at Risk? Predictors of Work-Life Conflict. Ottawa: Public Health Agency of Canada.
- Duxbury, L. E. and Higgins, C. A., 1991. Gender differences in work-family conflict. *Journal of Applied Psychology*, 76(1), pp. 60–74.
- Edwards, J. R. and Rothbard, N. P., 2000. Mechanisms linking work and family: Clarifying the relationship between work and family constructs. *The Academy of Management Review*, 25(1), pp. 178–199.
- Ejohwomu, O. A., Oshodi, O. S. and Onifade, M. K., 2016. Identifying the critical causes of conflict in construction projects in Nigeria. *Nigerian Journal of Technology*, 35(2), pp. 290–296.
- English, J. and Hay, P., 2015. Black South African women in construction: cues for success. *Journal Engineering, Design and Technology*, 13(1), pp.144–164.
- Ezra, M. and Deckman, M., 1996. Balancing work and family responsibilities: Flextime and childcare in the Federal Government. *Public Administration Review*, 56(2), pp. 174–178.
- Ferree, M. M., 1976. Working-class jobs: Housework and paid work as sources of satisfaction. *Social Problems*, 23(4), pp. 431–441.
- Fettro, M. N. and Nomaguchi, K., 2018. Spousal Problems and Family-to-Work Conflict Among Employed US Adults. *Journal of Family and Economic Issues*, 39(2), pp. 277–296.
- Fowler, J., Cohen, L. and Jarvis, P., 1998. *Practical Statistics for Field Biology*. Second Edition. Chichester, New York: Wiley.
- Francis, V., Lingard, H., Prosser, A. and Turner, M., 2013. Work-Family and Construction: Public and Private Sector Differences. *Journal of Management in Engineering*, 29(4), pp. 392–399.
- Frone, M. R., Russell, M. and Cooper, C. L., 1997. Relation of work-family conflict to health outcomes: A four-year longitudinal study of employed parents. *Journal of Occupational and Organizational Psychology*, [e-journal] 70(4), pp. 325–335. https://doi.org/10.1111/j.2044-8325.1997.tb00652.x.
- Frone, M. R., Russell, M. and Cooper, M. L., 1992. Antecedents and outcomes of work-family conflict: Testing a model of the work-family interface. *Journal of Applied Psychology*, 77(1), pp. 65–78.

- Frone, M. R., Yardley, J. K. and Markel, K. S., 1997. Developing and testing an integrative model of the work-family interface. *Journal of Vocational Behavior*, 50(2), pp. 145–167.
- Geszler, N., 2016. Behaviour-Based Work-Family Conflict among Hungarian Manager Fathers. *East European Journal of Society and Politics*, 2(3), pp. 118–136.
- Gholipour, A., Bod, M., Zehtabi, M., Pirannejad, A. and Kozekanan, S. F., 2010. The Feasibility of Job Sharing as a Mechanism to Balance Work and Life of Female Entrepreneurs. *International Business Research*, 3(3), pp. 133–140.
- Glavin, P. and Peters, A., 2014. The Costs of Caring: Caregiver Strain and Work-Family Conflict Among Canadian Workers. *Journal of Family and Economic Issues*, [e-journal] 36(1), pp. 5–20. http://dx.doi.org/10.1007/s10834-014-9423-2.
- Goff, S. J., Mount, M. K. and Jamison, R. L., 1990. Employer Supported Child Care, Work/ Family Conflict, And Absenteeism: A Field Study. *Personnel Psychology*, [e-journal] 43(4), pp. 793–809. https://doi.org/10.1111/J.1744-6570.1990.Tb00683.X.
- Goh, J., Pfeffer, J. and Zenios, S. A., 2016. The Relationship Between Workplace Stressors and Mortality and Health Costs in the United States. *Management Science*, 62(2), pp. 608–628.
- Grant, C. A., Wallace, L. M. and Spurgeon, P. C., 2013. An Exploration of the Psychological Factor Affect Remote E-Working's Job Effectiveness Well Beings and Work Life Balance. *Employee Relations*, 35(5), pp. 527–546.
- Greenhaus, J. H. and Beutell, N. J., 1985. Sources of conflict between Work and Family roles. *Academy of Management Review*, 10(1), pp. 76–88.
- Greenhaus, J. H., Collins, K. M. and Shaw, J. D., 2003. The relation between work–family balance and quality of life. *Journal of Vocational Behavior*, 63(1), pp. 510–531.
- Grzywacz, J. G. and Bass, B. L., 2003. Work, Family, and Mental Health: Testing Different Models of Work-Family Fit. *Journal of Marriage and Family*, 65(1), pp. 248–262.
- Grzywacz, J. G. and Marks, N. F., 2000. Family, Work, Work-Family Spillover, and Problem Drinking During Midlife. *Journal of Marriage and Family*, 62(2), pp. 336–348.
- Grzywacz, J. G., 2000. Work-Family Spillover and Health during Midlife: Is Managing Conflict Everything? *American Journal of Health Promotion*, 14(4), pp. 236–243.

- Gurjao, S., 2006. *Inclusivity: The Changing Role of Women in the Construction Workforce*. England: Chartered Institute of Building Report (CIOB).
- Hayman, J., 2010. Flexible work schedules and employee well-being. *New Zealand Journal of Employment Relations*, 35(2), pp. 76–87.
- Higgins, M. K., Bokma, E., Koronakis, E., Hughes, C. and Koronakis, V., 2004. Structure of the periplasmic component of a bacterial drug efflux pump. *Proceedings of the National Academy of Sciences of the USA*, 101(27), pp. 9994–9999.
- Hill, E. J., Erickson, J. J., Holmes, E. K. and Ferris, M., 2010. Workplace flexibility, work hours, and work-life conflict: Finding an extra day or two. *Journal of Family Psychology*, 24(3), pp. 349–358.
- Hill, R., Tranby, E., Kelly, E. and Moen, P., 2013. Relieving the Time Squeeze? Effects of a White-Collar Workplace Change on Parents. *Journal of Marriage and Family*, 75(4), pp. 1014–1029.
- Horne, R. M., Johnson, M. D., Galambos, N. L. and Krahn, H. J., 2017. Time, Money, or Gender? Predictors of the Division of Household Labour Across Life Stages. *Sex Roles*, [e-journal] 78(11-12), pp. 731–743. https://doi.org/10.1007/s11199-017-0832-1.
- Jaffar, N., Tharim, A. H. A. and Shuib, M. N., 2011. Factors of Conflict in Construction Industry: A Literature Review. *Procedia Engineering*, 20(1), pp. 193–202.
- Johari, Z., 2019. Child care centre supports parents. *Borneo Post Online*, [online] 16 February. Available at: https://www.theborneopost.com/2019/02/16/child-care-centre-supports-parents/> [Accessed 28 July 2019].
- Kahn, R. L., Wolfe, D. M., Quinn, R. P., Snoek, J. D. and Rosenthal, R. A., 1964. *Organizational stress: Studies in role conflict and ambiguity*. England: John Wiley.
- Karatepe, O. M. and Tekinkus, M., 2006. The effects of work-family conflict, emotional exhaustion, and intrinsic motivation on job outcomes of front-line employees. *International Journal of Bank Marketing*, [e-journal] 24(3), pp. 173–193. https://doi.org/10.1108/02652320610659021.
- Khursheed, A., Mustafa, F., Arshad, I. and Gill, S., 2018. Work-Family Conflict among Married Female Professionals in Pakistan. *Management Studies and Economic Systems (MSES)*, 4(2), pp. 123–130.
- Kim, J. L. S. and Choo, S. L., 2001. Work-family conflict of women entrepreneurs in Singapore. *Women in Management review*, 16(5), pp. 204–221.

- King, L. A., Mattimore, L. K., King, D. W. and Adams, G. A., 1995. Family support inventory for workers: A new measure of perceived social support from family members. *Journal of Organizational Behavior*, 16(3), pp. 235–258.
- Kisi, 2019. 2019 Work–Life Balance Index. [online] Available at: https://www.getkisi.com/work-life-balance> [Accessed 22 February 2020].
- Kossek, E. E., Pichler, S., Bodner, T. and Hammer, L. B., 2011. Workplace Social Support and Work-Family Conflict: A Meta-Analysis Clarifying The Influence of General and Work-Family-Specific Supervisor and Organizational Support. *Personnel Psychology*, [e-journal] 64(2), pp. 289–313. http://dx.doi.org/10.1111/J.1744-6570.2011.01211.X.
- Kossek, E., Colquitt, J. and Noe, R., 2001. Caregiving decisions, well-being and performance: The effects of place and provider as a function of dependent type and work-family climates. *Academy of Management Journal*, 44(1), pp. 29–44.
- Kotowska, E. I., Matysiak, A., Styrc, M., Paillhe, A., Solaz, A., Vignoli, D., Vermeylen, G. and Anderson, R., 2010. *Second European Quality of Life Survey: Family Life and Work*. Office for Official Publications of the European Communities, Luxembourg.
- Kumar, M., Talib, S. A. and Ramayah, T., 2012. *Business Research Methods*. Kuala Lumpur: Oxford University Press.
- Kumar, R., 2011. *Research Methodology: A Step by Step Guide for Beginners*. [e-book] SAGE Publications Ltd. Available at: http://www.sociology.kpi.ua/wp-content/uploads/2014/06/Ranjit_Kumar-Research_Methodology_A_Step-by-Step_G.pdf [Accessed 21 July 2019].
- Kumaraswamy, M. and Yogeswaran, K., 1998. Significant sources of construction claims. *International Construction Law Review*, 15(1), pp. 144–160.
- Lapierre, L. M. and Allen, T. D., 2006. Work-supportive family, family-supportive supervision, use of organizational benefits, and problem-focused coping: Implications for work-family conflict and employee well-being. *Journal of Occupational Health Psychology*, 11(2), pp. 169–181.
- Lavner, J. A. and Clark, M. A., 2017. Workload and marital satisfaction over time: Testing lagged spillover and crossover effects during the newlywed years. *Journal of Vocational Behavior*, [e-journal] 101, pp. 67–76. http://dx.doi.org/10.1016/j.jvb.2017.05.002.
- Leung, M. Y., Chan, Y. S. I. and Dongyu, C., 2011. Structural linear relationships between job stress, burnout, physiological stress, and performance of construction project managers. *Engineering, Construction and Architectural*, 18(3), pp. 312–328.

- Leung, M. Y., Chan, Y. S., Olomolaiye, P., 2008. Impact of stress on the performance of construction project managers. *ASCE Journal of Construction Engineering and Management*, 134(8), pp. 644–652.
- Lewis, S. and Cooper, C., 1987. Stress in two-earner couples and stage in the life cycle. *Journal of Occupational Psychology*, 60(4), pp. 289–303.
- Ling, Y. and Powell, G., 2001. Work-family conflict in contemporary China: beyond an American-based model. *International Journal of Cross Cultural Management*, 1(3), pp. 357–373.
- Lingard, H. and Francis, V., 2004. The work-life experiences of office and site-based employees in the Australian construction industry. *Construction Management and Economics*, 22(9), pp. 991–1002.
- Lingard, H. and Sublet, A., 2002. The impact of job and organizational demands on marital of relationship satisfaction and conflict among Australian civil engineers. *Construction Management & Economics*, 20(6), pp. 507–521.
- Lingard, H., 2003. The impact of individual and job characteristics on "burnout" among civil engineers in Australia and the implications for employee turnover. *Construction Management and Economics*, [e-journal] 21(1), pp. 69–80. http://dx.doi.org/10.1080/0144619032000065126.
- Lingard, H., Francis, V. and Turner, M., 2010. The rhythms of project life: A longitudinal analysis of work hours and work-life experiences in construction. *Construction Management and Economics*, 28(10), pp. 1085–1098.
- Liu, J. Y. and Low, S. P., 2011. Work-family conflicts experienced by project managers in the Chinese construction industry. *International Journal of Project Management*, 29(2), pp. 117–128.
- Lo, S., 2003. Perceptions of work-family conflict among married female professionals in Hong Kong. *Personnel Review*, 32(3), pp. 376–390.
- Loosemore, M. and Waters, T., 2004. Gender differences in occupational stress among professionals in the construction industry. *Journal of Management in Engineering*, 20(3), pp. 126–132.
- Lu, L. and Kao, S., 2013. The reciprocal relations of pressure, work/family interference, and role satisfaction: Evidence from a longitudinal study in Taiwan. *Human Resource Management*, 52(3), pp. 353–373.
- Lundberg, U. and Frankenhaeuser, M., 1999. Stress and workload of men and women in high-ranking positions. *Journal of Occupational Health Psychology*, [e-journal] 4(2), pp. 142–151. https://doi.org/10.1037/1076-8998.4.2.142.
- Mahpul, N. I. and Abdullah, N. A., 2011. The Prevalence of Work-Family Conflict among Mothers in Peninsular Malaysia. *International Journal of Humanities and Social Science*, 1(17), pp. 154–161.

- Md-Sidin, S., Sambasivan, M. and Ismail, I., 2010. Relationship between work-family conflict and quality of life. *Journal of Managerial Psychology*, [e-journal] 25(1), pp. 58–81. http://dx.doi.org/10.1108/02683941011013876.
- Meiner, S. E. and Lueckenotte, A. G., 2005. *Gerontologic nursing*. New York: Elsevier Health Sciences.
- Mesmer-Magnus, J. and Viswesvaran, C., 2009. The role of the coworker in reducing work–family conflict: A review and directions for future research. *Pratiques Psychologiques*, 15(2), pp. 213–224.
- Michel, J., Kotrba, L., Mitchelson, J. K., Clark, M. A. and Baltes, B. B., 2011. Antecedents of work-family conflict: A meta-analytic review. *Journal of Organizational Behavior*, 32(5), pp. 689–725.
- Milkie, M. A., Mattingly, M. J., Nomaguchi, K. M., Bianchi, S. M. and Robinson, J. P., 2004. The Time Squeeze: Parental Statuses and Feelings About Time With Children. *Journal of Marriage and Family*, [e-journal] 66(3), pp. 739–761. https://doi.org/10.1111/j.0022-2445.2004.00050.x.
- Ministry of Education Malaysia, 2019. *Quick Facts 2019: Malaysia Educational Statistics*. [online] Available at: https://www.moe.gov.my/muatturun/penerbitan-dan-jurnal/terbitan/buku-informasi/2722-quick-facts-2019/file [Accessed 19 December 2019].
- Moen, P., Kelley, E. L., Huang, R., 2009. "Fit" inside the work-family black box: An ecology of the life course, cycles of control reframing. *Journal of Occupational and Organizational Psychology*, 81(3), pp. 411–433.
- Moen, P., Kelly, E. L. and Lam, J., 2013. Healthy work revisited: Do changes in time strain predict well-being?. *Journal of Occupational Health Psychology*, 18(2), pp. 157–172.
- Mooney, L. A., Knox, D. and Schacht, C., 2017. *Understanding Social Problems*. 10th ed. USA: Cengage Learning.
- National Population and Family Development Board, 2016. *Fifth Malaysian Population and Family Survey [MPFS-5]*. Kuala Lumpur: Population and Family Research Sector, National Population and Family Development Board.
- Netemeyer, R. G., Boles, J. S. and McMurrian, R., 1996. Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied Psychology*, 81(4), pp. 400–410.
- Ng, C. W. and Chiu, W., 1997. Women-Friendly Human Resource Management Good for Quality Work of Life. *The International Journal of Human Resource Management*, 8(5), pp. 644–659.

- Ouyang, Y. Q., Zhou, W. B., Xiong, Z. F., Wang, R. and Redding, S. R., 2019. A Web-based Survey of Marital Quality and Job Satisfaction among Chinese Nurses. *Asian Nursing Research*, [e-journal] 13(3), pp. 216–220. https://doi.org/10.1016/j.anr.2019.07.001.
- Pajo, B., 2018. Introduction to Research Method: A Hands-On Approach. Los Angeles: SAGE.
- Parasuraman, S. and Simmers, C., 2001. Type of employment, work-family conflict and well-being: A comparative study. *Journal of Organizational Behavior*, 22(5), pp. 551–568.
- Parasuraman, S., Purohit, Y. S., Godshalk, V. M. and Beutell, N. J., 1996. Work and Family Variables, Entrepreneurial Career Success, and Psychological Well-Being. *Journal of Vocational Behavior*, 48(3), pp. 275–300.
- Perry-Jenkins, M. and Gillman, S., 2000. Parental Job Experiences and Children's Well-Being: The Case of Two-Parent and Single-Mother Working-Class Families. *Journal of Family and Economic Issues*, 21(2), pp. 123–147.
- Perry-Jenkins, M., Goldberg, A. E., Pierce, C. P. and Sayer, A. G., 2007. Shift work, role overload, and the transition to parenthood. *Journal of Marriage and Family*, [e-journal] 69(1), pp. 123–138. http://dx.doi.org/10.2307/351302.
- Perry-Smith, J. E. and Blum, T. C., 2000. Work-family human resource bundles and perceived organizational performance. *Academy of Management Journal*, 43(6), pp. 1107–1117.
- Ponnet, K., Wouters, E., Goedem & T. and Mortelmans, D., 2013. Family Financial Stress, Parenting and Problem Behavior in Adolescents. *Journal of Family Issues*, 37(4), pp. 574–597.
- Premeaux, S. F., Adkins, C. L. and Mossholder, K. W., 2007. Balancing work and family: A field study of multi-dimensional, multi-role work-family conflict. *Journal of Organizational Behavior*, 28(6), pp. 705–727.
- Purvanova, R. K. and Muros, J. P., 2010. Gender differences in burnout: a meta-analysis. *Journal of Vocational Behaviour*, 77(2), pp. 168–185.
- Ray, E. B. and Miller, K. I., 1994. Social support, home/work stress, and burnout: Who can help? *Journal of Applied Behavioral Science*, 30(3), pp. 357–373.
- Rosin, H. M. and Korabik, K., 1990. Marital and family correlates of women managers' attrition from organizations. *Journal of Vocational Behavior*, 37(1), pp. 104–120.

- Rupert, P. A., Stevanovic, P., Hartman, E. R. T., Bryant, F. B. and Miller, A., 2012. Predicting Work-Family Conflict and Life Satisfaction Among Professional Psychologists. Professional Psychology, 43(4), pp. 341–348.
- Schneider, D. and Harknett, K., 2019. Consequences of Routine Work-Schedule Instability for Worker Health and Well-Being. *American Sociological Review*, 84(1), pp. 82–114.
- Schreurs, B. H. J., Emmerik, I. J. H. V., Günter, H. and Germeys, F., 2012. A weekly diary study on the buffering role of social support in the relationship between job insecurity and employee performance. *Human Resource Management*, 51(2), pp. 259–279.
- Scott, L., Hwang, W. T. and Rogers, A., 2006. The impact of multiple care giving roles on fatigue, stress, and work performance among hospital staff nurses. *Journal of Nursing Administration*, 36(2), pp. 86–95.
- Sherman, K. C. and Reed, K., 2008. Eldercare and job productivity: An accommodation analysis. *Journal of Leadership Studies*, 1(4), pp. 23–36.
- Singapore National Employers Federation, 2019. *Job Sharing Implementation Guide 2019*. [online] Singapore: Singapore National Employers Federation. Available at: https://snef.org.sg/wpcontent/uploads/2019/05/Snef_Job_Sharing_Implement ation_Guide_2019-1.pdf> [Accessed 25 July 2019].
- Stevens, D. P., Minnotte, K. L., Mannon, S. E. and Kiger, G., 2007. Examining the "neglected side of the work-family interface" antecedents of positive and negative family-to-work spillover. *Journal of Family Issues*, 28(2), pp. 242–262.
- Sunindijo, R. Y. and Kamardeen, I., 2017. Work Stress is a Threat to Gender Diversity in the Construction Industry. *Journal of Construction Engineering and Management*, [e-journal] 143(10). http://dx.doi.org/10.1061/(asce)co.1943-7862.0001387.
- Tavakol, M. and Dennick, R., 2011. Making sense of Cronbach's alpha. *International Journal of Medical Education*, [e-journal] 2(1), pp. 53–55. https://doi:10.5116/ijme.4dfb.8dfd.
- Tebory, J. R. and Illgen, D. R., 1975. A theoretical approach to sex discrimination in traditionally masculine occupations. *Organizational Behavior and Human Performance*, 13(3), pp. 352–376.
- Thomas, L.T. and Ganster, D.C., 1995. Impact of family-supportive work variables on work-family conflict and strain: a control perspective. *Journal of Applied Psychology*, 80(1), pp. 6–15.

- Toor, S. and Ofori, G., 2008. Leadership for future construction industry: Agenda for authentic leadership. *International Journal of Project Management*, 26(6), pp. 620–630.
- Toor, S. and Ofori, G., 2011. Women Leaders Breaking the Glass Ceiling in Singapore's Construction Industry. *Journal of Professional Issues in Engineering Education and Practice*, 137(1), pp. 1–6.
- Tunji-Olayeni, P. F., Ogunde, A. O., Joshua, O. and Oni, A. A., 2017. Work-Life Balance of Women in Male Dominated Fields. *International Journal of Mechanical Engineering and Technology*, 8(12), pp. 1197–1205.
- Turner, M. and Mariani, A., 2016. Managing the work-family interface: Experience of construction project managers. *International Journal of Managing Projects in Business*, 9(2), pp. 243–258.
- Van Daalen, G., Willemsen, T. M. and Sanders, K., 2006. Reducing workfamily conflict through different sources of social support. *Journal of Vocational Behavior*, 69(3), pp. 462–476.
- Van Steenbergen, E. F., Kluwer, E. S. and Karney, B. R., 2011. Workload and the trajectory of marital satisfaction in newlyweds: Job satisfaction, gender, and parental status as moderators. *Journal of Family Psychology*, [e-journal] 25, pp. 345–355. https://doi.org/10.1037/a0023653.
- Voydanoff, P., 2007. Work, family, and community: Exploring interconnections. US: Lawrence Erlbaum Associates Publishers.
- Wallace, J. E., 2005. Job stress, depression and work-to-family conflict: A test of the strain and buffer hypotheses. *Relations Industrielles*, 60(3), pp. 510–539.
- Walliman, N., 2011. *Research Methods: The Basics*. [e-book] New York: Routledge. Available at: https://edisciplinas.usp.br/pluginfile.php/2317618/mod_resource/content/1/B LOCO%202_Research%20Methods%20The%20Basics.pdf> [Accessed 21 July 2019].
- Wanrooy, B. V., Bewley, H., Bryson, A., Forth, J., Freeth, S., Stokes, L. and Wood, S., 2013. *The 2011 Workplace Employment Relations Study*. [online] UK: Economic and Social Research Council (ESRC), Advisory, Conciliation and Arbitration Serivce (Acas), National Institute of Economic and Social Research (NIESR). Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/336651/bis-14-1008-WERS-first-findings-report-fourthedition-july-2014.pdf [Accessed 27 March 2020].
- Watts, J. H., 2009. Allowed into a Man's World' Meanings of Work-Life Balance: Perspectives of Women Civil Engineers as "Minority" Workers in Construction. *Gender, Work & Organization*, 16(1), pp. 37–57.

- Wayne, J. H., Musisca, N. and Fleeson, W., 2004. Considering the role of personality in the work–family experience: Relationships of the big five to work–family conflict and facilitation. *Journal of Vocational Behavior*, 64(1), pp. 108–130.
- Weaver, K. F., Morales, V. C., Dunn, S. L., Godde, K. and Weaver, P. F., 2018. *An Introduction to Statistical Analysis in Research: With Applications in the Biological and Life Sciences*. John Wiley & Sons.
- Whitfield, J., 2012. *Conflict in Construction: Avoiding, Managing and Resolving*. 2nd ed. Wiley-Blackwell: West Sussex.
- Wilkins, R., Laß, I., Butterworth, P. and Vera-Toscano, E., 2019. *The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 17*. [online] Melbourne Institute: Applied Economic & Social Research, University of Melbourne. Available at: https://melbourneinstitute.unimelb.edu.au/__data/assets/pdf_file/0011/3127664/HILDA-Statistical-Report-2019.pdf [Accessed 24 March 2020].
- Wilmarth, M. J., Seay, M. C. and Britt, S. L., 2015. Psychology, Money, and Marital Arguments: What Shapes a Woman's Happiness Level? *Journal of Financial Planning*, 28(8), pp. 42–48.
- Wong, K., Chan, A. H. S. and Ngan, S. C., 2019. The Effect of Long Working Hours and Overtime on Occupational Health: A Meta-Analysis of Evidence from 1998 to 2018. *International Journal of Environmental Research and Public Health*, 16(12), pp. 2102.
- Wong, L. Z., 2019. 3 Malaysian women architects who thrive in a male-dominated industry. *The Star Online*, [online] March 29. Available at: https://www.star2.com/people/2019/03/29/3-women-architects-and-how-they-broke-the-glass-ceiling/ [Accessed 30 Jun 2019].
- World Health Organization, 2019. *Burn-out an "occupational phenomenon": International Classification of Diseases.* [online] Available at: https://www.who.int/mental_health/evidence/burn-out/en/ [Accessed 14 July 2019].
- Wu, G. D., Wu, Y., Li, H. Y. and Dan, C. L., 2018. Job Burnout, Work-Family Conflict and Project Performance for Construction Professionals: The Moderating Role of Organizational Support. *International Journal of Environmental Research and Public Health*, 15(12), pp. 2869.
- Wulandari, D. A., Hamzah, H. and Abbas, N. A. H., 2019. Correlation between Work-Family Conflict, Marital Satisfaction and Job Satisfaction. *Advances in Social Science, Education and Humanities Research*, [e-journal] 239, pp. 52–55. https://doi.org/10.2991/upiupsi-18.2019.9.

Yildirim, D. and Aycan, Z., 2008. Nurses' work demands and work–family conflict: A questionnaire survey. *International Journal of Nursing Studies*, 45(9), pp. 1366–1378.

Yip, L. P., Rowlinson, S., Kvan, T. and Lingard, H., 2005. *Job burnout within Hong Kong construction industry: A cultural perspective*. In: Sullivan, K. and Kashiwagi, D. T., International Symposium on Procurement Systems: The Impact of Cultural Differences and Systems on Construction Performance. Las Vegas, Nevada, USA, 8-10 February 2005. Nevada: Performance Based Studies Research Group (PBSRG), Arizona State University.

Young, M. and Schieman, S., 2012. When hard times take a toll the distressing consequences of economic hardship and life events within the family—work interface. *Journal of Health and Social Behavior*, 53(1), pp. 84–98.

APPENDICES

APPENDIX A: Questionnaire Survey



Wholly owned by UTAR Education Foundation (Co. No. 578227-M) DU012(A)

Work-Family Conflict among Professional Women in the Construction Industry

Dear Sir/Madam,

I am Say Xiao Mei, a final year undergraduate from Universiti Tunku Abdul Rahman (UTAR) studying Bachelor of Science (Hons) Quantity Surveying. I am conducting a Final Year Project on the title of "Work-Family Conflict among Professional Women in the Construction Industry". The research aim is to investigate the causes and impacts of work-family conflict among professional women in the construction industry. The target respondents for this research are female respondents from construction industry only.

Research Objectives

To identify the causes of work-family conflict, to examine the impacts of work-family conflict and to study the strategies in reducing work-family conflict among professional women in the construction industry.

I really appreciate if you could spend about 10 minutes of your time to participate in this survey. Your participation would be greatly appreciated and contributed tremendously in this research. Information given will be kept confidential and used for academic purposes only.

If you have any queries, please email to ginysay@hotmail.com

Thank you.

Section A: Respondent's Demographic

Yes

Please respond to the following by ticking ($\sqrt{}$) *the related box.* Q1. Gender verification *(Important: This research only required female respondents) ☐ Male (Please quit the survey. Thank you) Female Q2. Marital status Single Married Divorced Widowed Others (Please specify): Q3. Profession that best described you Architect ☐ Engineer ☐ Quantity Surveyor Others (Please specify): _____ Q4. Nature of your company Developer Consultant Contractor Others (Please specify): Q5. How many years of working experience do you have in the construction industry? Q6. Do you have subordinates that work under you? *(If "NO", please proceed to Q8) Yes □ No Q7. How many subordinates that work under you? Q8. Do you have dependent child/ children? *(If "NO", please proceed to Q13)

☐ No

1	2	3	4	5	6	7	8	9	10
Age of	child/ c	hildre	n *(Ple	ase state	the ago	e for EA	CH of y	our chil	(d)
. Who to	ake car	e your	child/	childre	en whe	n you a	re wor	king? *	(You
may ch	oose mo	re thai	n one o _l	otion)					
☐ Sen	ding to	school	and day	y care ce	entre				
☐ Nar	nny/ bab	ysitter							
☐ You	ır parent	ts who	are stay	ying toge	ether wi	th you			
☐ You	ır parent	ts who	are not	staying	togethe	r with ye	ou		
Oth	ers (Plea	ase spe	cify): _						
. Do you	r child/	childr	on star	41	9				
		Cilliai	en stay	with yo	Ju :				
_ Ever	ryday		•	-		ers (Plea	ise spec	ify):	
_ Ever			•	-		ers (Plea	ise spec	ify):	
☐ Even	ryday	□ Wo	eekend	only	Oth		-		
. Do you	ryday	□ We	eekend	only nember	Oth	parents/	grandp		
. Do you	ryday ı have e	□ We	eekend	only nember	Oth	parents/	grandp		
. Do you	ryday ı have e	□ We	eekend	only nember	Oth	parents/	grandp		
. Do you	ryday 1 have 6 er with y	□ Wo	eekend amily 1	only nember O", pleas	Oth s (eg. 1) se proce	parents/ ged to Q	grandp	arents)	stay
. Do you togethe	ryday 1 have 6 er with y	□ Welder for the work of the	eekend amily 1	only nember O", pleas	Oth s (eg. 1) se proce	parents/ ged to Q	grandp	arents)	stay
. Do you togethe	ryday i have e er with y our elde	□ Welder for the work of the	eekend amily 1	only nember O", pleas	Oth s (eg. 1) se proce	parents/ ged to Q	grandp	arents)	stay
. Do you togethed Yes	ryday i have e er with y our elde	□ Welder for the work of the	eekend amily 1	only nember O", pleas	Oth S (eg. 1) Se proce No eed ext	parents/ ged to Q	grandp	arents)	stay
. Do you togethed Yes	ryday i have e er with y our elder d to Q16	□ Woelder for the work of the	eekend amily 1	nember O", pleas	Oth s (eg. 1) se proce No eed ext	parents/ ged to Q ra care	grandp 16) ? *(If "	arents)	stay lease
. Do you togethed Yes Are you proceed Yes	ryday i have e er with y our elder d to Q16	□ Woelder for the work of the	eekend amily 1	nember O", pleas	Oth s (eg. 1) se proce No eed ext	parents/ ged to Q ra care	grandp 16) ? *(If "	arents)	stay lease
. Do you togethed Yes Are you proceed Yes	ryday i have e er with y our elder d to Q16	□ Woelder for the work of the	eekend amily 1	nember O", pleas	Oth s (eg. 1) se proce No eed ext	parents/ ged to Q ra care	grandp 16) ? *(If "	arents)	stay lease
. Do you togethed Yes Are you proceed Yes	tyday thave experience with your elder down to Q16	□ Welder favou? *	eekend amily 1	nember O", pleas abers ne	Oth s (eg. 1) se proce No eed ext	parents/ eed to Q ra care	grandp l6) ? *(If "	arents) NO", p	stay lease
. Do you togethed Yes . Are you proceed Yes . Who ta	n have of the have eare the have care u empl	□ Woelder for the work of the	eekend amily 1	nember O", pleas abers ne	Oth s (eg. 1) se proce No eed ext	parents/ eed to Q ra care	grandp l6) ? *(If "	arents) NO", p	stay lease
. Do you togethed Yes . Are you proceed Yes . Who ta	tyday thave experience with your elder down to Q16	□ Woelder for the work of the	eekend amily 1	nember O", pleas abers ne	Oth s (eg. 1) se proce No eed ext	parents/ eed to Q ra care	grandp l6) ? *(If "	arents) NO", p	stay lease

Q18. How many days you worked per week?
☐ Five days per week
☐ Five and half days per week
☐ Six days per week
Seven days per week
Others (Please specify):

Section B: Causes of Work-Family Conflict in the Construction Industry

Please rate the frequency of occurrences on the following causes of work-family conflict in the construction industry.

1 - Never 2 - Seldom 3 - Sometimes 4 - Often 5 - Always

Definition of Work-Family Conflict (WFC):

WFC is the conflict arises when work demands interfere with family demands or vice versa.

Causes of WFC	1	2	3	4	5
Do you frequently experience long working					
hours in the workplace preventing you from					
family participation?					
Do you frequently feel excessive of					
workload preventing you from family					
participation?					
Do you frequently feel inflexible of work					
schedule preventing your contribution					
towards the family?					
Do you frequently experience household					
responsibilities interfering with your work					
domain?					
Do you frequently feel elderly care					
responsibilities preventing you from					
contributing to your work?					
Do you frequently feel presence of children					
preventing you from contributing to your					
work?					
Do you frequently experience financial					
stress due to household expenses?					

Section C: Impacts of Work-Family Conflict in the Construction Industry

Please rate the frequency of occurrences on the following impacts of work-family conflict in the construction industry.

1 - Never 2 - Seldom 3 - Sometimes 4 - Often 5 - Always

Impacts of WFC	1	2	3	4	5
Do you frequently feel the demands from					
work causing you experience high level of					
stress?					
Do you frequently become less					
enthusiastic on your work due to high					
demands on your job?					
Do you frequently feel physically and					
mentally exhausted for your job resulting					
from family commitment?					
Do you frequently feel you are less					
communicating with your family members					
after work?					
Do you frequently experience low marital					
relationship due to role overload?					
Do you frequently feel the demands from					
work and family have interfered with your					
personal life?					
Do you frequently experience poor body					
health resulting from work and family					
demand?					

Section D: Strategies in Reducing Work-Family Conflict in the Construction Industry

Do you agree that the following strategies able to help in reducing work-family conflict in the construction industry?

1 – Strongly Disagree 2 – Disagree 3 – Neutral 4 – Agree 5 – Strongly Agree

Strategies in reducing WFC	1	2	3	4	5
Company provides flexible work schedule					
instead of 8 hours work routine.					
Job sharing between colleagues instead of					
one person handles for the project.					
Providing childcare centre in the					
workplace.					
Support from supervisor or co-worker in					
the workplace.					
Support from spouse or family members in					
family responsibilities.					