A STUDY ON THE BARRIERS TO MALAYSIAN WOMEN CAREER ADVANCEMENT

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DECLARATION

I hereby declare that:

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

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

(3) The word count of this research report is 20,647 words

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DEDICATION

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ABSTRACT

A key challenge for Malaysia today is to attract and retain more qualified women in the workforce. Since women make up more than half of the population in Malaysia, it is necessary to implement gender diversity and inclusion initiative in facilitating Malaysia into high-developed status. In order to increase the women's participation rate in Malaysian workforce, it is essential to analyze the barriers that most women faced in advancing their career path. The purpose of this study is to analyze the barriers such as education level, family consideration, organization culture and structure, work-life imbalance and glass ceiling effect towards women career advancement. Five research questions and hypotheses have been developed and tested in order to accomplish the objective of this research. Convenience sampling method was used in this research, 150 sets of questionnaire have collected from the target respondents who are located in Klang Valley, North and South of Peninsular Malaysia. The data collected was analyzed by using Statistical Package for Social Science Software version 21 to perform Reliability Analysis, Factor Analysis, Descriptive Analysis, Pearson Correlation Analysis and Multiple Regression Analysis. This study disclosed that education level, family consideration, organization culture and structure and work-life imbalance are significantly and positively related with Malaysian women career advancement. At the final stage of this research, research objectives and research questions were achieved and justified based on the statistical analysis and literature review. The contributions of this research to future researchers, the government and employers were highlighted as well. Moreover, the limitations of this study have identified and recommendations have suggested for further improvement in future research.

CHAPTER ONE

RESEARCH OVERVIEW

1.0 Introduction

The aim of this business project is to examine the relational factors which include education level, organization culture and structure, family consideration, work-life imbalance and glass ceiling effect on Malaysian women career advancement. The areas which will be discussed in this chapter are the research background, problem statements, research objectives, research questions, hypotheses and the significances of the research.

1.1 Background of the Study

In the past, women were considered to be responsible for only their house and be a full time housewife. Besides that, the working women had limited choices in occupation. Most of them worked as government servants, administrative staffs, school teacher and nurses. However, they have more active role nowadays with the changing world. In Malaysia, the men are no more the only breadwinner of family as more women are entering into workforce. The reasons for this change may be due to

the expansion of workforce and the intention of women to demand for individual equality (Chek, Mohammad, Jusoff, Razak, Norwani & Khairuddin, 2011). Women have become more social-conscious, they have made progress on their status in family rights and business life. Women's roles have enlarged to the point where most of them tend to involve in the workforce and hence, the status of women has increased substantially. Nowadays, the concept of women and men are equal is more acceptable than last time.

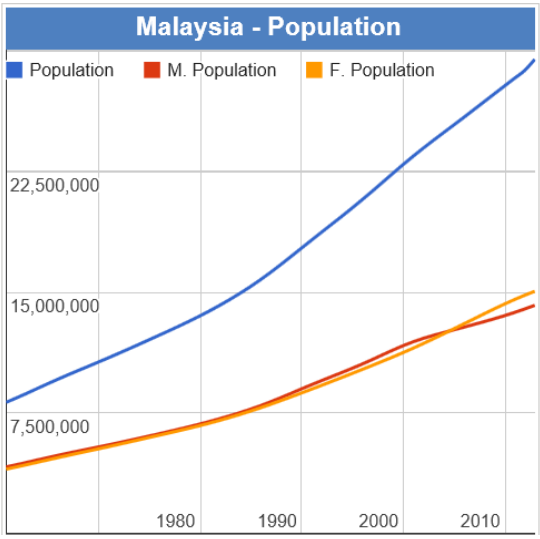
According to Malaysia Economic Monitor Report for December (2013), Malaysia's economy will benefit from stable growth of GDP from 4.8% (2014) to 4.9% (2015). It is important for Malaysian to improve the productivity in various sectors to enhance competition and capabilities in the economy. A recent study (as cited in World Bank Group, 2012b) shows that Malaysia could experience a 23% increase in output per capita if eliminating gender bias in the workforce. This increase can be achieved if more women joined in the workforce and became high executives or entrepreneurs, which boost the pool of managerial talent in the market. According to World Bank Country Director of Malaysia, Dixon (as cited in TalentCorp & ACCA, 2013), Malaysia able to transform into a high income nation with more women participate in the workforce. Therefore, it is important to encourage women to bring their skills to the workforce because closer gender gaps could bring Malaysia into high income status (Yeoh, 2014).

A study from "The Population Of" (2014) stated that the female population which consists of 51.11% is greater than male population which consists of 48.15% in Malaysia (refer to Figure 1.1). Since women constitute more than half of the Malaysia's population and they are also the world largest group in terms of purchasing power, 70% of household purchasing decisions are made by women

according to Boston Consulting Group (Branson, 2012). Therefore, it is important to encourage women to enter into the workforce and hold a high senior-level position to enhance the competitiveness in the market place. According to the World Bank Senior Economist of Malaysia, Sander (as cited in World Bank Group, 2012b), Malaysia has already eliminated the gender gaps in education, more women than men are enrolled in higher education. Currently, the major challenge of Malaysia is attracting and retaining more qualified women in the workforce. The increase of women enter into the workforce will improve the productivity and mitigates the business risks. However, Malaysian government and employers are quite a way behind in utilizing on this relatively uncontested talent pool (TalentCorp & ACCA, 2013).

Figure 1.1: The Population of Malaysia from 2002-2012

Malaysia - Population				
Date	Population	M. Population	F. Population	Population density
2012	29,457,000	14,184,082	15,055,845	89
2011	28,758,968	13,953,799	14,805,169	87
2010	28,275,835	13,737,005	14,538,830	85
2009	27,790,324	13,534,782	14,255,542	84
2008	27,302,348	13,344,787	13,957,561	83
2007	26,813,819	13,164,729	13,649,090	81
2006	26,327,098	12,990,912	13,336,186	80
2005	25,843,466	12,819,771	13,023,695	78
2004	25,365,089	12,652,322	12,712,767	77
2003	24,890,654	12,487,139	12,403,515	75
2002	24,413,795	12,315,287	12,098,508	74



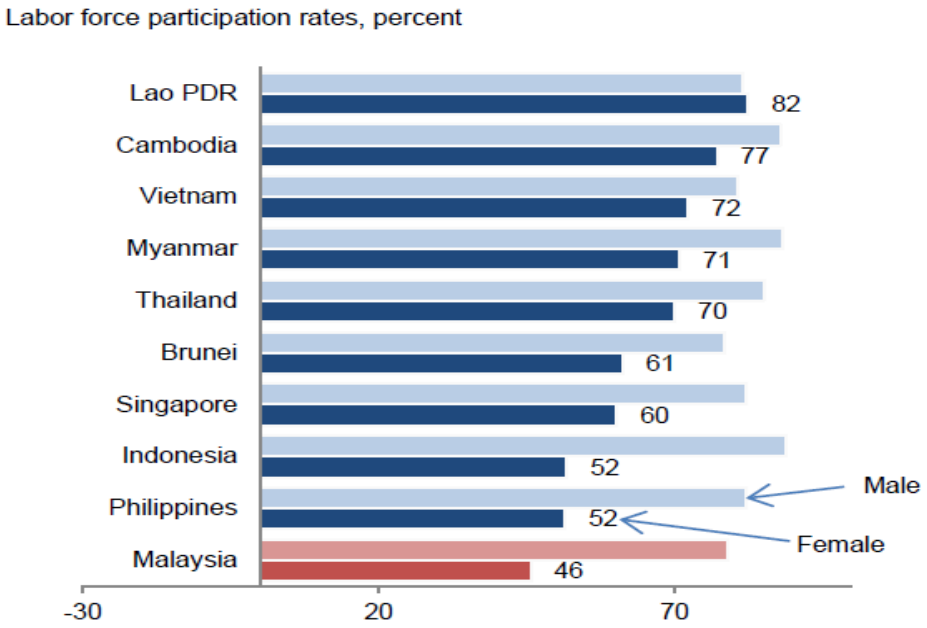
Note. From *The population of Malaysia goes up to 29,620,000 people*. (2014). Retrieved February 3, 2014, from http://countryeconomy.com/demography/population/malaysia

1.2 Problem Statement

Malaysian companies are not carrying programs to attract and retain more women at the workplace, this is one of the reason that the participation rate for women is low in this country (The Malaysian Reserve, 2013). It is important to have women in the companies due to the growing influence of women in the business world and customer base consist of women mostly. Across the globe, a key challenge for economies today is to attract and retain more women in the workforce. In fact, higher participation rate of women in the workforce increases competitiveness and productivity. However, Malaysian government and employers still lag behind in capitalizing on this untapped talent pool (as cited in TalentCorp & ACCA, 2013).

According to the Malaysian Economic Monitor Report for November 2012 (as cited in World Bank Group, 2012a), although Malaysian women having a higher education level than men but the participation rate of women in the workforce remain low at 46% compared to the neighboring countries such as Indonesia (52%), Thailand (70%) and Singapore (60%) (Kok, 2012) (refer to Figure 1.2). Besides that, according to Malaysian Prime Minister Najib Razak (as cited in "More Women In", 2013), 75% of university student are women but the women were not equally representing Malaysia's labor force, there was a mismatch between education and employment. In the Malaysian education sector, there are only 44.8% of headmasters are women while there are 71% of teacher are women. In the corporate sector, there are only 6.1% of directors are female and 7 chief executive officers are female in of Bursa's 100 companies. (Malaysian Working Mother Forum [MWMF], 2012).

Figure 1.2: Female Workforce Participation Rate in Malaysia is Low Compared to ASEAN Countries



Note. From Kok, C. (2012, December 1). *The under-developed asset: women*. Retrieved February 4, 2014,fromhttp://www.thestar.com.my/Story/?sec=business&file=%2F2012%2F12%2F1%2Fbusiness%2F12395913

The estimated number of women 'absent' in Malaysian workforce is range from 500,000 to 2.3 million, indicating a brain drain from Malaysia's talent pool (World Bank Group, 2012a). By bringing some of these 'absent women' back into the workforce, it will lead to higher human capital and GDP rate will be higher than 5% as well. Malaysia also could experience a 23% increase in income per capita with the existence of gender equality in the workforce.

There are some gaps persisting between women and men in the workforce in terms of pay, career path and leadership development. According to Department of statistic study in Malaysia (as cited in Ng, 2012), women were far more likely than men to

work as clerical workers (19.2%), service worker and shop and market sales (21%) (refer to Figure 1.3). These jobs are normally labor-intensive and seem as low-skilled. In addition, the men receive much higher monthly paid for every occupation type even in women-dominated jobs. The National Employment Returns Report in 2008 (as cited in Ng, 2012) stated the gender wages difference from RM82 for clerical workers to RM1,774 for senior officers and managers (refer to Figure 1.4). Moreover, the women are underrepresented in management roles. Korn Ferry's study (as cited in Yi, 2011) found that 56% of the boards in Malaysia have no female representation. It is relatively high compared with Australia (29% only), China (39%) and Hong Kong (43%) (refer to Figure 1.5). In fact, the composition of board should reflect the customer base which women form a significant proportion. This is because women have more new ideas and different opinions to address their market. In short, it is important to examine the barriers to Malaysian women career advancement in order to solve the underlying socio-economic and cultural issues in Malaysia.

Figure 1.3: Occupation Category for Male and Female in 2001 and 2009

OCCUPATIONAL CATEGORY	2001				2009			
	MALE		FEMALE		MALE		FEMALE	
	NO. ('000)	%	NO. ('000)	%	NO. ('000)	%	NO. ('000)	%
Legislators, senior officials & managers	543.5	9.0	151.5	4.6	632.6	9.1	197.3	4.8
Professionals	272.7	4.5	184.5	5.6	359.1	5.1	325.5	8.3
Technicians & associate professionals	714.6	11.8	411.5	12.5	941.5	13.5	618.5	15.7
Clerical workers	317.3	5.2	573.3	17.4	326.7	4.7	759.9	19.2
Service workers and shop & market sales	733.7	12.1	557.5	16.9	1,040.2	15.0	828.9	21.0
Skilled agricultural and fishery workers	889.5	14.7	375.8	11.4	933.7	13.4	322.0	8.1
Craft &related trades workers	977.7	16.1	182.5	5.5	980.6	14.0	152.3	3.9
Plant/Machine operators & assemblers	990.7	16.4	485.9	14.7	939.9	13.5	302.7	7.7
Elementary occupations	616.3	10.2	378.6	11.5	801.4	11.5	441.5	11.2
TOTAL	6,055.9	100.0	3,301.1	100.0	6,955.7	100.0	3,941.6	100.0

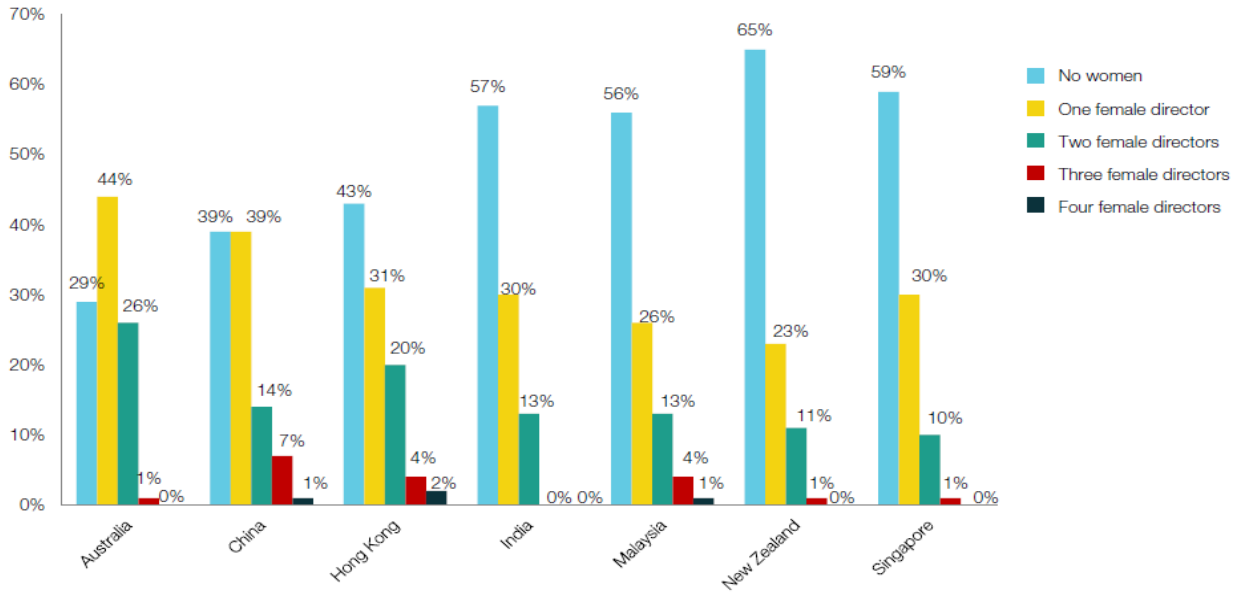
Note. From Ng, C. (2012). *Women: Economy and employment*. Retrieved February 5, 2014, from http://penangmonthly.com/women-economy-and-employment/

Figure 1.4: Wage Differential between Male and Female in 2008

OCCUPATION	MALE (RM)	FEMALE (RM)	WAGE DIFFERENTIAL
Senior officers & managers	4,296	2,522	1,774
Professionals	3,670	2,848	822
Technicians & associate professionals	2,007	1,957	50
Clerical workers	1,407	1,325	82
Service workers and shop & market sales workers	924	802	122
Skilled agricultural and fishery workers	730	513	217
Craft & related trade workers	1,081	727	354
Plant/Machine operators & assemblers	860	623	237
Elementary occupation	693	561	132

Note. From Ng, C. (2012). *Women: Economy and employment*. Retrieved February 5, 2014, from http://penangmonthly.com/women-economy-and-employment/

Figure 1.5: Asia Boards' Level of Female Representation



Note. From Yi, A. (2011). *Mind the gap: Half of Asia's boards have no women, a risky position for governance and growth*. Retrieved May 28, 2014, from http://kornferryinstitute.com/reports-insights/mind-gap-half-asias-boards-have-no-women-risky-position-governance-and-growth

1.3 Research Gap

According to TalentCorp and ACCA (2013), gender diversity and inclusion are vital for organization sustainability but the awareness of this issue is still low within Malaysian organization. There are many companies in Malaysia are not implementing programs to promote more women enter into the workforce even though many studies have shown that utilizing female capital leads to economic growth. Currently only general information is available about factors contributing low participation rate in women workforce. In order to contribute in achieving gender equality in the Malaysian workforce, this research will analyze the barriers to women career advancement which also determining the reasons behind low participation rate of women in Malaysian workforce. Most importantly, this research also provides implications for the government and employer to identify the specific policies and programs can be implemented to address these barriers.

1.4 Research Objectives

1.4.1 General Objective

The general objective of this study is to understand the barriers and challenges faced by women in advancing their career life and understand how these barriers could be

eliminated or negotiated. The ultimate objective is to recommend some best practice strategies for the government and employers to support and retain women throughout their career life and eliminate gender equality in the workforce.

1.4.2 Specific Objectives

The specific objectives which derived from the general objective are as follows:

(i) To examine the relationship between education level with Malaysian women career advancement.

(ii) To examine the relationship between organization culture and structure with Malaysian women career advancement.

(iii) To examine the relationship between family consideration with Malaysian women career advancement.

(iv) To examine the relationship between work-life imbalance with Malaysian women career advancement.

(v) To examine the relationship between glass ceiling effect with Malaysian women career advancement.

1.5 Research Questions

After identifying the research objectives that mentioned previously, the research questions to be answer in this research project are:

(i) How does education level in relation with Malaysian women career advancement?

(ii) How do organization culture and structure in relation with women career advancement?

(iii) How does family consideration in relation with Malaysian women career advancement?

(iv) How does work-life imbalance in relation with Malaysian women career advancement?

(v) How does glass ceiling effect in relation with Malaysian women career advancement?

1.6 Hypotheses of the Research

First Hypothesis

H_0: Education level is not related to Malaysian women career advancement.

H_1: Education level is significant and positively related to Malaysian women career advancement.

Second Hypothesis

H_0: Family consideration is not related to Malaysian women career advancement.

H_2: Family consideration is significant and positively related to Malaysian women career advancement.

Third Hypothesis

H_0: Organization culture and structure is not related to Malaysian women career advancement.

H_3: Organization culture and structure is significant and positively related to Malaysian women career advancement.

Fourth Hypothesis

H_0: Work-life imbalance is not related to Malaysian women career advancement.

H_4: Work-life imbalance is significant and positively related to Malaysian women career advancement.

Fifth Hypothesis

H_0: Glass ceiling effect is not related to Malaysian women career advancement.

H_5: Glass ceiling effect is significant and positively related to Malaysian women career advancement.

1.7 Significance of the Research

The result of the research will provide valuable insights for government, employers and market participates to identify the barriers of Malaysian women in advancing their career life and combat the challenges of promoting and retaining women in the workforce. It is important for women themselves to participate in the workforce and become a financially independent woman so they can take their own decisions without dependent upon others for money. In addition, financially dependent women are good financial support for family. They are also contributing financially to the

society and economy. Moreover, they can help in social causes and boost national's GDP by earning actively (Urvashi, 2012).

Malaysian women are bringing home more income than ever before, it is important to focus on the implications of women as primary or co-breadwinner for families and workforce. Thus, it is critical for government to continue to find ways to support dual-income families. By recognizing the power of womenomics, the government should implement some practices to attract and retain women to participate in the workforce. In that way, the goal of 10th Malaysian Plan to increase women workforce to 55% in 2015 is achievable (TalentCorp and ACCA, 2013).

Malaysian women are most active in the workforce at the age of twenties. Their participation rate in the workforce begins to reduce once they enter a new stage of life. As a result, women in management roles are outnumbered by their male peers. The low participation of women in the workforce considered as a form of brain drain. This is because only 11% of women who advance to management role remaining in the workforce. In contract, Hong Kong, Singapore and Taiwan are able to remain 20% of women in the workforce (Staffing Industry Analysts, 2013). Indeed, the companies are not doing enough to retain the women in the workforce (Turner, 2012). The findings of this research will be valuable for the employers to implement gender diversity and inclusion practices to increase the participation rate of women in the workforce. The employers will find these results useful to provide a supportive of women-friendly workplace. By enlarging and enriching women's talent pool, the vision of Malaysia to become a high income nation by 2020 is achievable.

1.8 Conclusion

Chapter one establishes the overview of this business research, it clarifies the background and the issues of Malaysian women career advancement. The objectives, questions and significance of the research have clarified in this chapter, the hypotheses also has been established as well. On next chapter, the past researchers' studies will be discussed, theoretical framework and hypotheses development will be determined for the study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

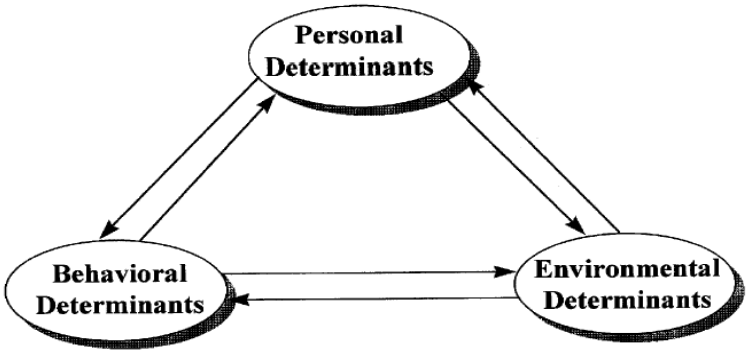
In order to provide some foundation background and basis for the research project, literature reviews of the past studies done by some researchers will be focus in this chapter. It shows the theories support the research project and served as guidance to the development of hypotheses. The first section will be the review of the variables on this topic. Next, a proposed framework will be developed from the research objectives and research questions. In the last section, hypotheses on each of the components will be developed and be tested to review the relationship towards Malaysian women career advancement.

2.1 Review of the Literatures

2.1.1 Social Cognitive Career Theory (SCCT) in Women Career Advancement

Women career advancement is more complex than men due to some internal and external barriers such as women's education level, family commitment and organizational culture which restrict on women's career choices (Coogan & Chen, 2007). This research begins with discussions of the barriers in relation to women career advancement and relevance to SCCT as it links to women career needs. According to Morris, Shoffner and Newsome (2009), SCCT is a model developed by Lent, Brown and Hackett in 1994 for career advancement. In this theory, personal determinants (self-efficacy) combine with perceived environmental determinants (barriers and supports) lead to behavioral determinants (career behavior, interest and goal) (refer to Figure 2.1). Self-efficacy is a belief on an individual's ability to achieve a specific goal. Perceived barrier and supports will either assist or obstruct an individual to accomplish his or her task. Self-efficacy of working women has a positive relationship with perceived barriers and supports. Therefore, it is important to identify the sources of supports and barriers of women career in order to provide the women with opportunity to increase self-efficacy and outcome expectations (Ali & Manke, 2014).

Figure 2.1: Social Cognitive Theory and Applications



Note. From *Social Cognitive Theory and Applications*. (1999). Retrieved May 30, 2014, from http://socialcognitivetheoryandapplications.yolasite.com/

Some researchers used SCCT in their study of women career advancement. Coogan et al. (2007) reviewed some study from SCCT theory to conclude with some suggestions to address the particular needs of women pertaining in their career life. The researchers also found that women's career advancement is affected by personal, environment and social factor which caused barriers for women to develop their career. In Wright, Perrone-McGovern, Boo and White's study (2012) suggested that career supports and barriers play a critical role in affecting self-efficacy of women, the women perceived career barriers are negatively related in career decision making. The researchers had identify the women's career supports and barriers based on SCCT model and develop strategies to assist the women to deal with the identified barriers. In the study from Flores and O'Brien (2002) also examined the influence of personal and social factors on women's career interest, goal and performance. The findings of the study were consistent with SCCT which imply career interest directly affect career goal and self-efficacy affect career goal through career interest.

2.1.2 Career Advancement

Maskell-Pretz and Hopkins (1997) defines barrier as a factor, situation or event that prevent or control one's access to making process. Career advancement is defined by Newman (as cited in Subramaniam & Arumugam, 2013a) as the consequences of socio-psychological, human capital and systematic factor. Swanson and Woitke (1997) said barrier can be describe as the conflict between the ability of women and their achievement, the barrier also could explain the inhibition of women's career advancement. Hence, it is clear that the effects of the presence of barriers and support on women's career advancement outcomes are always studied together as they are mirror reflection of each other.

Majority of the Malaysian university graduates are women, there is a lot of needed talent has been wasted due to some unnecessary barriers faced by qualified women when they pursue their career. It is important that the employers recognize the valuable resource that represent by women in administrative and management roles then use them effectively. Furthermore, women at mid-life are differ from women at earlier and later career stages. Women at mid-life have established their career but seek further advancement. Some women have married or have children so they will face some challenges with work-life issues such as choices about how to allocate their time in career management and work-life balance. Women are slowly moving into managerial and leadership role in greater numbers. The trend of increasing number of working women in global workforce continues to attract women at the preparation stage (university education, particularly undergraduate and postgraduate in business studies) to further pursue career demonstrating upward mobility (Burke & Mattis, 2005).

2.1.3 Barriers of Women Career Advancement

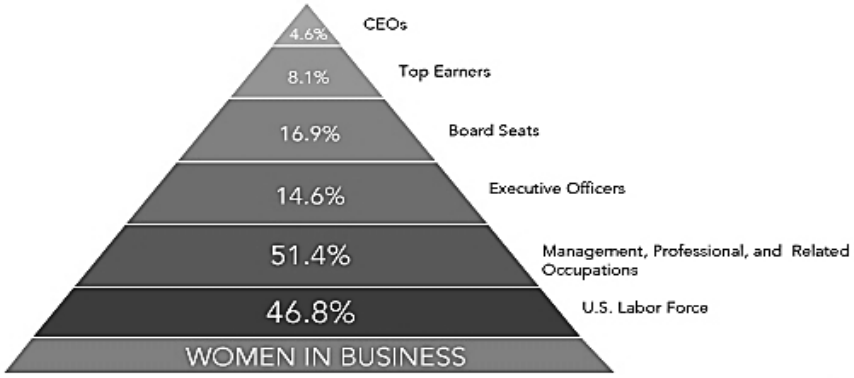
Brown and Barbosa (as cited in Domenico & Jones, 2006) said there are significant barriers in the women career advancement progress, it is happens throughout women's life stage such as schooling, working and give birth, they become complex over time. Swanson et al. (1997) acknowledged barriers can be overcome by identifying the type of barriers and individual personality. According to Powell (as cited in Simpson, 2004), there are two types of career barriers, first barrier is 'person-centered' which include personal character, traits and behaviors that are not well-fit in managerial roles. Second barrier is 'situation-centered' which refer to the obstruction within the work and social-cultural environment. In this research, the 'person-centered' barriers to career advancement refer to women's education level, whereas the 'situation-centered' barriers refer to the organization culture and structure, the family consideration, work-life imbalance and glass ceiling effect.

2.1.4 Glass Ceiling Effect

Knutson and Schmidgall (as cited in Zhong, 2006) indicated the glass ceiling is one of the barriers to women carrier advancement, it refers to invisible barriers that prevent qualified women from developing to their full potential within their company. It is a tendency of women to be over represented in the junior level but under represented at senior level in a company. It has resulted an adverse effect on the morale and economy of any organization (Pillay, 2005). Although the number of working women is increasing in the workforce but the number of women in senior level remain low while the leadership skill of women as effective as men.

Catalyst Inc. (2014), a non-profit organization in US illustrated the glass ceiling in a management pyramid of women workforce (refer to Figure 2.1). There are 46.8% of US labor force consists of women, 51.4% of women are in management and professional level and do not move on to become part of the 14.3% of the executive officers. Most of them stay in the current jobs or leave from the workforce. Similarly, the number of women gets smaller as they get move up to the management ladder. According to the survey by McKinsey and Co (as cited in Tiang, 2013), 52% of the entry-level professional are women but by the time they get into senior management level, they comprise only 11% of the workforce. The number becomes even smaller-7% at the CEO and board level.

Figure 2.1: Management Pyramid of Women Workforce



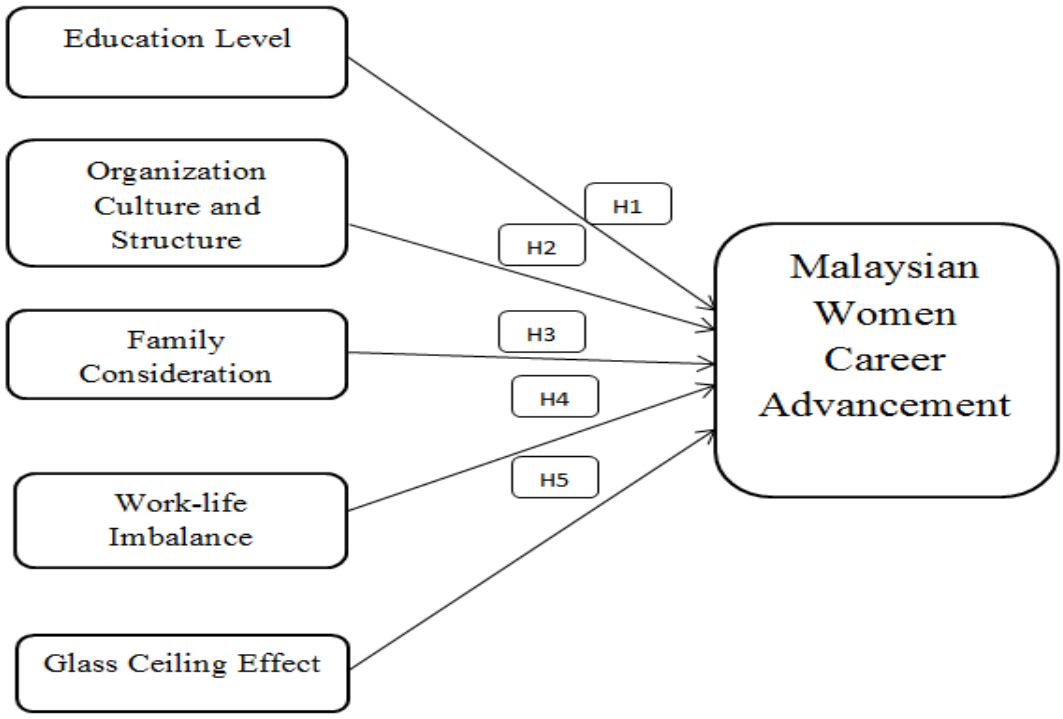
Note. From Catalyst Inc. (2014). *U.S. women in business: Management pyramid*. Retrieved March 3, 2014, from http://www.catalyst.org/knowledge/us-women-business-0

According to Lunn (2007), the barriers to women career advancement in Malaysian high education industry are more explicit. Many of the women get opportunity to move into the line management level early in their careers but they hardly get promoted beyond Dean. According to Omar (as cited in Lunn, 2007), women hardly

get promoted to middle management level in academic industry because it tends to be political appointment rather than academic achievement. Besides that, Mohamad study's (as cited in Lunn, 2007) stated that although the women wish to have a policy of gender equity but this rule is invalidated by the religious system that privileges a male-centric outlook. Hence, it has an adverse effect on the morale and economy of any organization.

2.2 Conceptual Framework

Figure 2.2: Conceptual Model of the Barriers to Malaysian Career Advancement



Note. Developed for this research

The model above shows the proposed of conceptual framework that serve as the foundation to continue in this research study. The developed of this framework is based on the research objectives and questions on this study. This framework exhibit the relationship between the independent variables (left side) with dependent variable (right side) which use to examine the relationship between education level, organization culture and structure, family considerations, work-life imbalance and glass ceiling effect with Malaysian women career advancement. The earlier section has discussed about the dependent and independent variables whereas the development of hypotheses will be exhibited in the next section.

2.3 Hypotheses Development

2.3.1 Education Level

According to Abdullah et al. (2008), Malaysian women in rural area are still following their traditional cultural value as women are expected to be as a wife and mother. In fact, they have lower educational level so they are less likely to be employed. Lack of qualification (low education level) hindering them to progress further in career. In Wentling's study (as cited in Subramaniam, Arumugam & Abu Bakar Akeel, 2013b) found that the career advancement of women to senior roles depends on their education level and the advancement opportunities.

Har and Chong (2014) said according to a finding from Department of Statistics Malaysia, higher enrollment rate of women in university will help to improve the women's participation rate in the workforce. However, the higher the enrollment rate in secondary school, the lower the women participation rate in the workforce. This is because the women will leave the workforce once they have married with children as they tend to be full-time housewives. The women with diploma or degree qualification are exception, they may return to the workforce even though they have married with children.

Nieva, Gutek and Schiffler's research (as cited in Domenico et al., 2006) found that highly educated women are more likely to engage in employment than lower educated women. This is because they have higher expectation in the changing roles and more interested in professional careers. The researchers also indicated that highly educated women tend to associate in continuous employment and extend their participation rate in workforce. Additionally, high academic achievement recognizes to be a part of employee selection in some organizations especially for fresh graduate who have no working experience (Ernst & Young Global Limited, 2012).

Becker's study (as cited in Zhong, 2006) showed educational attainment is a main contributor in career advancement and job mobility where a women with bachelor's degree is advantaged in her career progress. Another finding from Sparrowe and Iverson (1999) was that, despite the high education level held, some women perceived slow career advancement due to lack of related training and skill. Thus, proper training and development are viewed as an evidence of being valued. In Eldridge, Park, Phillips and Williams's (2006) study also found that education, training and experience in the related area are important in women's career

achievement. Interpersonal skill, managerial skill and confidence are drivers of success besides highly-educated.

The Malaysia Economic Monitor Report for November 2012 (as cited in World Bank Group, 2012a) showed that higher education level has a positive and significant impact on women's workforce participation. The women with post-secondary and tertiary level are very active in labor market across all age groups. The researcher also mentioned the women with lower education levels not only exit the workforce after marriage and do not return but they also refrain from joining the workforce in the first place due to high incidence of underemployment and low wage work.

Most of the women who came from a good social-economic background and highly-educated are benefited in their career life. Nevertheless, the female entrepreneurs who have not received a high education are difference in terms of personality and psychological characteristics. They started up their business with a strong enthusiasm for success. They faced obstacles at the early stage of their career but they did not give up and continue to work hard until their ambition is achieved (Sepehri, Sattari & Rashvanlouei, 2010). In order to succeed in career advancement, academic achievement is required and financial ability is important in attaining education. Nowadays, it is not a difficulty for women to attain higher education. The rural women are more depended on the family who provide financial and emotional support to them. The urban women will seek for scholarships and loans to help themselves in their progress (Abdullah et al., 2008).

In order to further study the relationship between education level with career advancement, this study proposed that:

H1: Education level is significant and positively related to Malaysian women career advancement.

2.3.2 Family Consideration

Marriage is strongly associated with low level of women participation in workforce, reflecting women have difficulty in balancing work with family obligations (World Bank Group, 2012a). The married women have the lowest participation in the workforce, most of them engaged in housework such as taking care their children. Besides that, there is lack of affordable and high quality childcare options outside and even when their child attends kindergarten or primary school, many women find it difficult to return back to workforce due to relatively short school hours. Women managers who have family are encountered with more challenges in balancing their work and family responsibilities. This is because the responsibility of childcare is still place on mother, which putting added responsibility on working women that is seldom confronted by men (Amaratunga et al., 2008).

According to the findings from the survey of TalentCorp and ACCA (2013), the main reason of Malaysia women exit from the workforce was to raise a family because there are limited alternatives for working mothers to consider in taking care their children. The rising cost of maids and childcare centers, long and inflexible working hours and lack of support from the employers are also the reasons that they leaving from the workforce. According to Abdullah et al. (2008), women have strong commitment on family responsibility especially in many Asian countries. They are more stressful due to having role of conflict between work and family.

According to a research done by Funston and Quach (2008), women are being underrepresented in senior management level in Australia was mainly due to family commitments. Women are expected to be the main care providers to fulfill the family needs. Therefore, family commitment has an impact on a women's ability to achieve her career goals. The researchers also found there is lack of sharing responsibility role in parental care between husband and wife. Sometimes, women have to make difficult decision such as remain single or childless in comparison with the men in order to success in career advancement because they remain the main caregiver of the family (Subramaniam et al., 2013b)

According to Sepehri et al. (2010), women always faced obstruction in employment and promotion opportunities due to their conflict role between work and family. Hochscid and Machung (as cited in Sepehri et al., 2010) found that only 20% of the men in dual-income families take on equal housework with their partner. The women have multiple roles to deal with their work and family, this has resulted the conflict arise between their social role of worker and their expected social role of wife and mother. In addition, the women may never achieve the parity of need and deserve compare with men due to additional responsibilities at home (Subramaniam et al., 2013a).

In Mallon and Cassell's study (1999) found that women having difficulty in seeking for promotions in some industries due to the requirement of long working hours. The opportunities for promotion is also seems not worthy for women because they have to sacrifice the quality time spend with their families. According to Jacobs (2012), many new mothers find it difficult to focus on their work once they get back from maternity

leave. There is no one take care of their child unless the company has a good child support system where they can keep working with peace of mind.

Nevertheless, some women remain in the workforce because their parents assist to take care for their child with the reason of trust and kinship. They also hire servant to help in household responsibility so they can spend more time at work (World Bank Group, 2012a). Besides that, careful planning is important for dual-career couples to deal with domestic pressures. Some women get help from the husband to carry out the housework where both are sharing the family responsibilities (Abu Bakar, 2012). Indeed, the support of husband and family is important in maintaining dual career relationship and balancing the women's role in family and work life (Lunn, 2007).

In order to further study the relationship between family consideration with career advancement, this study proposed that:

H2: Family consideration is significant and positively related to Malaysian women career advancement.

2.3.3 Organization Culture and Structure

Sepheri et al. (2010) said there is a link between organizational culture with the managerial roles and gender. Most of the organizations in the 20th century have been rerun by men, while women are in low-level positions with little autonomy. Thus, the organization culture have been shaped by men, there is a commonplace associates in the minds of people between males' traits and managerial ability. Male-dominated

organizations also lead to perception that men are the appropriate spokesperson and decision-maker. According to Funston et al. (2008), the ‘men’s club’ still exists in some organizations, the men are more likely to have a mentor and have more opportunities for promotion. As a result, there is isolation for women promoted into managerial level within many organizations.

In Cockburn’s study (as cited in Pillay, 2005) stated that the male-denominated organizations are not intended to closer the wage gap and diversify their workforce by moving women from low-paying occupations into higher level jobs. Due to greater use of informal networking, men tend to be promoted faster than women, while women just rely on formal promotion procedure. The training opportunity is also offer more to men than women in terms of managerial development (Subramaniam et al. 2013a)

According to Vianen and Fischer (2002), the women seem less ambitious than men to progress to management level, the organizations should change the organization culture by trying to motivate women with higher paid and recognition. The researchers concluded that the processes of selection and lack of female role models are the causes of the slow advancement of women to top management level. Besides that, there is an obstacle for women to develop their career in a ‘men’s club’ culture. This is because they experience resistance in information sharing and development of relationships (Simpson, 2004).

The Law Society (2010) describes the legal profession as cultural masculinity because the male mindset and culture of the profession is very entrenched and it does not help women, only men. The news of marriage, child-birth or even engagement

would be indicating lack of commitment in the workplace. Furthermore, there are lacks of positive women role models in their profession. They identified most of the women in senior roles achieved the status at a significant cost to their personal lives. Therefore, it did not inspire the young profession to advance further.

Chakrabarty's research (as cited in Abdullah et al., 2008) found that female managers are less acceptable in the male-dominated culture. There are some organizations are practicing job segmentation where men are normally be employed under decision-making departments whereas women are placed in supporting departments. In addition, opportunity of growth for women were restricted in some organizations, there is an earning gap between men and women with similar job level or educations and experiences. This has resulted high turnover rates and less senior-roles of women (Domenico et al., 2006)

However, In Eagle and Johnson's study (as cited in Zhong, 2006) stated the management styles between women and men are not much different, the organizations culture are no longer in male-denominated nowadays and women in senior-roles have adapted their behavior to correspond to traditional male-dominated culture. Additionally, the female leaders always get cooperation and respect from colleagues. There is also increasing of women leader in corporations nowadays due to increasing of acceptance and recognition of women in leadership (Amaratunga, Haigh, Ginige & Thurairajah, 2008).

In order to further study the relationship between organization culture and structure with career advancement, this study proposed that:

H3: Organization culture and structure is significant and positively related to Malaysian women career advancement.

2.3.4 Work-life Imbalance

According to the survey from TalentCorp and ACCA (as cited in Jayabalan, 2013), one of the main reasons of Malaysian women leave the workforce is lack of work-life balance. Long working hours take up their whole day, it may seem normal when they are single but it is inappropriate when they are married and have children. In fact, working women tend to spend more hours for house work than men even though the time devoted to work is equal with men. It is difficult for working women to allocate the time and energy on family and work equally in order to perform well in both roles (Lim, Tan & Chan, 2013).

There is also inequality between the needs of family with the supports offered by the workplace. The organizations and government are not doing enough to help working women. Although flexible working hours has introduced by the government under Employment Act of 1955 (Amended in 1998) but many organizations still do not facilitate flexi hours and part-time works. The part-timers are always at a disadvantage such as they are place in junior level, their benefits are not recognized and no chances for promotion (Abdullah et al, 2008). Since the organizations treat family and work as completely different aspect, it has been a difficulty for working women to balance their multiple commitments (Amaratunga et al., 2008)

In Kaur's study (as cited in Subramaniam, 2011) found that many married women leave from the workforce because of inflexible working hours and unable to balance work and home career. In fact, there is no better alternative for these women with children to withdraw from the workforce. They are looking for flexi working arrangement because it enables them to make necessary adjustments to the changing condition. Such flexibility can help them in balancing work and personal commitments while fulfilling company's needs. According to Pacilli (as cited in Subramaniam, 2011), mothers will retain in the workforce if more part-time jobs are available.

According to a research from Storrie (2012), 85% of fathers and 90% of mothers reported a work-family conflict; 86% of women said the main reason of leaving the workforce is lack of flexibility within the organization. On the other hand, Gen Y women tend to think ahead and choose a company which will offer flexibility for them, that is important for them when they have childcare or eldercare responsibilities in future. Besides that, the lack of opportunities to implement flexible working practices was seen as a significant barrier to women being able to advance their career (The Law Society, 2010). Flexible working becomes a necessity for many women around the middle phase of their career, especially married women with children. The researcher also stated there is a significant loss of profession talent due to inflexible work practices. This loss of talent can benefit competitors who offer greater flexibility at all position level.

In contrast with work-life imbalance as career barrier for women, some women are more emphasize on work-life balance and job satisfaction than men in their career path. These women are less willing than men to sacrifice their time and energy to pursue higher position (Simpson, 2004). The women who do not have any family

commitments and dependents did not view work-life imbalance as a barrier for career advancement (Amaratunga et al., 2008). According to Abdullah et al. (2008), if the supporting system from organizations and government are properly implemented, the working women are able to deal with dual-role conflicts and they also can be motivated to advance their career.

In order to further study the relationship between work-life imbalance with career advancement, this study proposed that:

H4: Work-life imbalance is significant and positively related to Malaysian women career advancement.

2.3.5 Glass Ceiling Effect

According to Sepehri et al. (2010), there are some explanations for women fail to advance to senior managerial level. Most organizations have been created by men and they have some prejudices block women from laddering to senior positions. Some prejudices refer to describe stereotypical characteristic of women such as emotionalism and limited stress resistance as negative leadership qualities. As a result, the masculine traits are generally regarded as more suitable for management. There are lacks of diversity awareness, diversity initiatives and leadership training to promote women enters into management level. These deficiencies from the aspect of organization disadvantage women in terms of advancing their career (Simpson, 2004).

In addition, Brownell, Diaz and Umbreit (as cited in Zhong, 2006) indicated that the challenges of women face in progressing to the senior roles include the old boy network, poor career planning and unhelpful boss. The advancement towards higher level is difficult for women manager because the glass-ceiling still exists. It implies that the organizational barriers which beyond personal control as the most significant barrier towards women's upward progression (Subramaniam, 2013a).

The male-dominated working environment and an inequitable working culture prejudiced against women cited as main reason for women to leave from workplace. There is an inequality opportunity and the process for leadership development is not solid and transparent at all. It implicates women's perception of unfair selection and gender penalization compared to their men colleagues (TalentCorp & ACCA, 2013). According to Jaromilla (as cited in Pillay, 2005), the glass ceiling was created when a society made women believe they should be home taking care of the family. This has changed tremendously whilst women are being encouraged to pursue higher education and compete with the men for the highest positions in a fairer way. Although there is an increase of highly educated women but the problem has not been resolved. Man are still ruling the companies and protecting their power with well-managed 'glass-ceiling'.

Some women often found that the men still prefer to work with male colleagues even though they are treated with respect. The casual interaction between men seems make them more comfortable together (Eldridge et al., 2006). Besides that, gender stereotyping happens when the organization assigns the task with decision making to the men and women assist to carry out. This can result in dissatisfaction in work and ultimately affect their career advancement opportunities (Amaratunga et al., 2008).

However, there are some changes to the organizational culture nowadays with the law of anti-discrimination and equal opportunity and gender equality. Culture change was associated with reduced career barriers and has a significant effect on the success of women leaders in any industry (Amaratunga et al., 2008). In PWC of Malaysia, 64% of manager, 41% of directors and 36% of partners are women. There is no specific policy to add women in senior positions, just every employee is given equal opportunities (Jacobs, 2012). Besides that, Ernst & Young Malaysia provides education, mentoring and networking opportunities to assist women succeed as professionals and leaders. In Securities Commission Malaysia, the women in senior roles act as role model and mentors to motivate the younger counterparts to climb up to the career ladder (TalentCorp & ACCA, 2013).

In order to further study the relationship between glass ceiling effect with career advancement, this study proposed that:

H5: The glass ceiling effect is significant and positively related to Malaysian women career advancement.

2.4 Conclusion

Chapter two delivers a thorough overview and understanding of this business research. The relationship between the dependent variable with each independent variable is interpreted in the hypotheses form. All the five hypotheses will be tested based on the

respond from the sample with proper research methodology which will be discussed in the next chapter.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter clarifies the methods of obtaining necessary data to examine the hypotheses highlighted in Chapter two. The sections will be discuss in this chapter include design of research, methods of data collection, design of sampling, instruments of research, construct measurement, measurement scales, data processing and methods to analyze the data.

3.1 Research Design

A research design provides a guideline to carry out the research. Refer to the rule of parsimony (as cited in Hair, Money, Samouel & Page, 2007), the researcher should select a design which provides appropriate information on the research questions and

hypotheses. Additionally, the design should allow the researcher to complete the task efficiently. The foundation phase of the basic research process is complete once the researcher has finalized the study design (Hair et al., 2007).

In this research, quantitative approach will be conducted to measure the factors that would hinder Malaysian women career advancement. Quantitative approaches provide objectivity and general knowledge to test the hypotheses by applying statistic measurement. The numbers are used directly by the respondents to represent characteristic of something, the researcher's view does not affect the hypotheses test and the questionnaire was also adopted from the past research (Hair et al., 2007).

Descriptive and inferential statistics will be used to conduct the data analysis for this research. The histogram and diagram derived by descriptive statistics from the Statistical Package for Social Science (SPSS) help the researcher to understand and analyze the data more easily. Inferential statistics are used to explain hypotheses and assist the researcher to make assumptions about the population from a sample (Hair et al., 2007). Besides that, descriptive research is conducted to acquire the data that describes the variables of this study. Cross-sectional study is used in this research where data are collected from target population at a given point in time and summarized statistically.

3.2 Data Collection Methods

There are various sources of data and methods to collect the data for the purpose of analyzing the hypotheses and solving the research questions. The technique of collecting data is a critical section in every type of research (Sekaran & Bougie, 2010). It is also essential to ensure the sources of information and the methods of data collection are appropriate so that the research project is conducted effectively. In order to meet the research's objective efficiently, the researcher has collected both primary and secondary data.

3.2.1 Primary Data

Primary data means first-hand information acquired by the researcher on the variables examining for this study (Sekaran et al., 2010). In this business research, the researcher collected the primary data by the use of personally administrated questionnaire and mail questionnaires. The benefits of using personally administrated questionnaire are researcher able to collect all the completed questionnaires from respondents within a short time frame and the respondents also can clarify the questions on the spot if they encounter any problem. The benefit of using mail questionnaires is it covers wider geographical area at lowest cost. Additionally, the respondents also can complete it at their convenience at anywhere and anytime. In order to achieve a better response rate, the researcher kept the questions brief and do follow-up for the survey.

3.2.2 Secondary Data

Secondary data means second-hand information which acquired from sources that already existed and it is indispensable for most of the research. There are several sources of secondary data used in this study which include books, organizations' booklets, statistical abstracts and published journal and articles from the internet. The main advantages of seeking secondary data resources are huge saving of time and cost in acquiring information (Hair et al., 2014).

3.3 Sampling Design

Sampling refers to the procedure in choosing a suitable number of the right element from the population. The sample represents the larger population and it is used to make judgment about that population (Crossman, 2010b). Through studying the sample and understanding the sample's characteristics, the researcher able to generalize such characteristics to the population element (Sekaran et al., 2010). The sampling processes include:

3.3.1 Target Population

The scope of the study is important in defining the target population, the target population is the group of elements related to the research objective (Hair et al., 2007).

The aim of this research is to understand and examine the barriers faced by Malaysian women to progress in their career path. Thus, the target population of this study will be the Malaysian working women who aged between 20-60 years old. The surveys were conducted from 10th June to 10th July 2014 which took approximately 1 month duration. Besides that, Convenience sampling is conducted where the subjects are selected by researcher due to their ease accessibility and proximity to the researcher.

3.3.2 Sampling Location

The sampling is focus on Klang Valley area. This is because there are more working women in urban area so it can obtain greater accurate result. Some of the questionnaires will also be distributed to the respondents in North and South of Peninsular Malaysia to seek for broader respondent base.

3.3.3 Sampling Elements

The women who are working currently in Malaysia are targeted because they can provide the relevant information based on their knowledge and experiences. They also can let the researcher know what are the barriers and challenges that they faced along their career life. Additionally, they can provide the reasons on low participation rate of women in Malaysian workforce and the issues contribute to gender inequality in the workforce.

3.3.4 Sampling Technique

There are two types of sampling techniques which can use in a research study, which are probability and non-probability methods. Non-probability method has been used for selecting the sampling in this research. With non-probability sampling, the selection of elements in a sample is based on the decision of the researcher. In fact, not every element of the target population has an equal probability of being selected into the sample but a skillful selection process should results a reasonable 'representative' sample (Hair et al., 2007). Non-probability sample may be the most practical way to reach general public women for this research. This is because they would provide the researcher relevant information to answer the research questions and meet research objectives ultimately.

Convenience sampling under non-probability sampling is selected in this research, this technique is used to collect information from the target respondents who are readily available to participate in the survey and who can provide the information required for the research (Sekaran et al., 2010). By using convenience sampling, it allows the researcher to reach the large number of target respondents quickly, efficiently and economically. There is also no selection bias because the target respondents are from different group of age and race which representing the multicultural of Malaysia.

3.3.5 Sampling Size

It is vital to establish the representativeness of the sample for generalization with an appropriate sample size (Sekaran et al., 2010). The sample size consists of 150 working women by considering the constraint of cost and time. 190 sets of questionnaires have been distributed to the target population in Klang Valley, North and South of Peninsular Malaysia. The actual response rate is 78.95% after taken follow-up action. Roscoe (as cited in Sekaran et al., 2010) proposes the rules of thumb for determining sample size include sample sizes within 30 to 500 are appropriate for most research and the sample size should be at least 10 times larger than the number of variables for multivariate research. The sample size of 150 for this research has fulfilled these rules of thumb.

Besides that, a total of 20 pilot test sample has been carried out before distribute a formal survey to the target population. It is critical to do a pilot study to test the market and gather feedback from the respondents for the purpose of improving quality and efficiency of the survey. The respondents might also help to identify any difficulty or unclear matter within the questionnaire.

3.4 Research Instrument

The research instruments used in this research are personally administered questionnaires and mail questionnaires. Personally administered questionnaires is

easy to conduct and less expensive and consume less time, a questionnaire is given to the respondents and complete it by themselves then collect back by the researcher on the same day. Mail questionnaire is also another convenient data collection mechanism where the respondent can complete the questionnaire at their own time and place and returning of questionnaire is follow-up by the researcher. The questionnaire was adopted from the past researchers based on the literature reviewed with the aim of investigate the relationship of education level, family consideration, organization culture and structure, work-life imbalance and glass ceiling effect with women's career advancement.

3.4.1 The Purpose of Using Questionnaire

Questionnaire is a common method of collecting data because researcher can easily access the needed data and the questionnaire responses are easily coded. This method is useful to reach large respondents in different geographical area as well (Sekaran et al., 2010). Questionnaires are normally used to collect factual information relating to respondents' behavior and circumstances. It is also useful in looking at the opinions of working women relating to a particular issue- low participation rate of women in Malaysian workforce.

3.4.2 Questionnaire Design

Close-ended questions are used whereby the items in the questionnaire are in multiple choice and 5-points Likert scale. The respondents are able to make fast decisions by choosing among the several alternatives in the form of closed-ended questions

(Sekaran et al., 2010). In this research, the questionnaires are separated into 2 sections: Section A (Demographic profile) and Section B (General opinion).

Section A records demographic or personal information of the respondent. In this section, the respondents require to choose from multiple choice questions which regard to their age, marital status, education level and job position in the company. Section B is designed in a form of 5-point Likert scale measurement questions. It allows the respondents to indicate their own level of satisfaction for a particular issue or title of the subject matters. The Likert scale is also design to assess the degree of intensity that the respondents agree or disagree with the statements. The Likert scale range from 1 to 5 (1=strongly disagree and 5=strongly agree) (Sekaran et al., 2010).

3.4.3 Pilot Test

Before conducting the pilot study, the researcher has pre-tested the questionnaire by showing the questionnaire to supervisor to check the appropriateness, sufficiency and validity of the questions. Pilot testing is conducted only after any needed revise has made. Pilot testing also involves the respondents from every age and race subcategory. It is an established practice to ensure every respondent fully understood the questions and they have no problem with the wording and measurement.

The researcher has distributed 20 sets of questionnaires to UTAR course mates and colleagues. The main purpose of pilot testing is to identify problems with the items, methods and measurement on questionnaire. Furthermore, the reactions of respondents can be evaluated during pilot testing. It can discover the participants'

acceptability to the question asked. If the respondents perceive the use of certain word or phrase as offensive, an amendment will be made to suit in the local culture context. The pilot testing will also give the idea about the level of corporation is likely to get from the respondent. It also can indicate the time taken for respondents to complete the questionnaire and it is not recommended to have too long questionnaires. Pre-testing also help in putting questions in proper sequence, doing appropriate translation and structuring the answers.

3.5 Construct Measurement

3.5.1 Origin of Construct

The sources of the construct used in this business research are adopted from different researchers, journals and articles which show as table below:

Table 3.1: Origin of Construct in this Research

Construct	**Example of measurement items**	**Sources**
Career Advancement (4 items)	1. I have insufficient opportunity for career advancement in my company. 2. Women face some barriers to career advancement in every industry.	1. Kow, Kwah, Lee, Lee and Lim (2012) 2. Zhong (2006)

	3. There are lesser women leaders than men leaders in my company. 4. Self-improvement is essential for career advancement in related industry.	3. Subramaniam et al. (2013a)
Education Level (4 items)	1. A woman must have certain requirement of education level in order to get promoted to managerial level. 2. High education level indicates higher opportunity for promotion. 3. My company has set a specific requirement for education achievement in promoting a woman to management role. 4. Having additional certificates will enhance the chances for promotion.	1. Kow et al. (2012)
Family Consideration (4 items)	1. Having the roles of taking care of young children and senior parents are challenges to woman career advancement. 2. It is difficult to maintain the balance between managing family commitments and job responsibilities. 3. A woman usually chooses family care	1. Kow et al. (2012) 2. Subramaniam et al. (2013b)

	than career promotion if there is a need to fulfill family commitment. 4. My commitment to my family members is a barrier for me to further advance my career.	
Organization Culture and Structure (4 items)	1. Women have to work more amount than male colleagues with similar qualifications and position. 2. Personnel are more likely to respect male manager than female manager. 3. Your current employer is making lesser effort to assist females to overcome their barriers to career advancements. 4. Your company believes that the men in management level are more committed than women in management level.	1. Pillay (2005) 2. Sepehri et al. (2010) 3. Subramaniam et al. (2013a).
Work-life Imbalance (4 items)	1. There is a challenge for women to balance career and personal life. 2. My time resources are not equally distributed between the work and home. 3. Due to job needs, I find it difficult to spend my times with my family sometimes.	1.Subramaniam et al. (2013b)

	4. There is no or less facility provided by my company to support work-life balance of employees.	
Glass Ceiling Effect (4 items)	1. There are lack of female roles and mentors in my company. 2. There is a lack of equal career advancement opportunities for women. 3. Chances for more advancement in women career are lesser when woman are aging. 4. Women cannot demonstrate their managerial competency because they always have been appointed in a junior position.	1. Pillay (2005) 2. Sepehri et al. (2010)

Note. Developed for this research

3.5.2 Data Scale of Measurement

There are 4 types of data scales measurement: nominal, ordinal, interval and ratio. The degree of sophistication on scale increases gradually as the scale move from nominal to ratio. In this study, the Section A of the questionnaire which consists of 6 questions is designed based on nominal scale and ordinal scale. The researcher uses the nominal scale to assign subjects to every category or group and no respondent

would fall into third category (Sekaran et al., 2010). Section A records the age, race, marital status, number of children of the respondents, education level and occupation class of the respondents. Regarding to the variable of age, respondents can be group into 4 categories: 20-30, 31-40, 41-50 and 51 and above. These 4 groups will be assigned to the code number of 1, 2, 3 and 4. These numbers represent a simple and convenient label with no real value.

On the other hand, the Section B of the questionnaire which consists of 24 questions is designed based on interval scale. Interval scale is also involves assigning numbers to reflect how strongly the respondents agree or disagree with the construct statements. 5-points of Likert scale which range from strongly disagree (1) to strongly agree (5) are used to assess the variables (refer to Table 3.2). The value of the Likert scale can be sum up to measure the participants' overall response.

Table 3.2: Summary of the Variables and 5-points of Likert Scale

Variables	**Likert Scale**
Dependent variable	1 - Strongly Disagree
Career advancement	2 - Disagree
	3 - Neutral
Independent variables	4 - Agree
Educational level	5 - Strongly Agree
Organization culture and structure	
Family consideration	
Work-life imbalance	
Glass ceiling effect	

Note: Developed for this research

3.6 Data Processing

When the questionnaires are collected back from the respondents, the researcher should do questionnaire checking once to ensure it is completed and acceptable for the study. After data are obtained through questionnaires, the researcher need to code, key in and edit the data. The researcher also has to set up a categorization plan before typing in the data. Besides that, the outliers, inconsistencies and missing errors have to be handled in a proper way (Sekaran et al., 2010). The process of data preparation is explained as below:

3.6.1 Questionnaires Checking

After collection of questionnaire has done, the first step to process the data is to check the questionnaires and eliminating the unacceptable questionnaires. This is because some questionnaires may incomplete and some respondents may answer all the questions with the same answers. Moreover, some participants may not qualify to respond in the study because the questionnaire may complete by another person so their answers are irrelevant to the study (Pink, 2010).

3.6.2 Data Coding

Data coding refers to allocate a number or a letter to the participants' response so that it can apply in statistical techniques. Demographic data such as age, marital status and

education level usually require coding. For example, the researcher may assigns “1” to single and “2” to married.

3.6.3 Data Entry

After data has been coded, they can be key-in to a database. The researcher can use SPSS Data Editor to enter, edit and view the content of the data file. It is important to assign a number to every questionnaire and enter into the database so that the researcher can compare the data in the database with the answers in the questionnaire (Sekaran et al., 2010).

3.6.4 Data Editing

After finishing keyed in the data, some data such as blank response and inconsistent data need to be edited. Data editing involves detecting and correcting illogical, inconsistent and missing data by using SPSS Version 21.

3.6.5 Data Transformation

Data transformation includes reverse scoring which use to perceive inequity measure then reverse back to the same meaning of a response. It is also necessary to do data transformation when a few of questions have been used to measure a single concept

and they have to combine into a single score by calculating the summated score (Sekaran et al., 2010).

3.6.6 Data Cleaning

Data cleaning is a procedure to review and correct the inconsistencies which arise from data that are out of range, contain extreme values or logically inconsistent. Out of range data usually is resulted from poor questionnaire design or faulty data entry. Extreme values arise when data is entered or transcribed out of the likelihood by the researcher. Logically inconsistent is more complicated as it may result from the respondents who provide untrue answer on the question (Pink, 2010).

3.7 Data Analysis

After completion of data processing, the researcher used SPSS software to analyze the data obtained in the research as it can assist the researcher to analyze the quantitative in an efficient and effective manner. The methods of data analysis used in this study include Descriptive Analysis, Pearson Correlation Analysis and Multiple Linear Regression.

3.7.1 Descriptive Analysis

Descriptive analysis is used to explain the characteristics of target population that being studying such as age, marital status and occupation. It is useful to summarize the data collection and present it in a more meaningful way by using graphs, charts and diagrams. Besides that, frequency distribution and the assess of central tendency like mod, mean and median are used by some researchers to measure and describe the statistics of descriptive summary of the study (Crossman, 2010a). In this study, a table will be drawing out to summarize the demographic information based on the survey questionnaires returned by the respondents.

3.7.2 Reliability Analysis

The 'goodness' of measure is established through the reliability of data. Reliability indicates stability and consistency (without bias) of various items in the instrument. Cronbach's alpha (α) is a reliability coefficient that assesses the strength of association among the items in a set (Sekaran et al., 2010). The closer the α to 1, the stronger the association of the items in the scale (refer to Table 1.3).

Table 3.3: Rule of Thumb of Cronbach's Alpha (α) Coefficient size

Cronbach's alpha (α)	Strength of association
< 0.6	Poor
0.6 to < 0.7	Moderate
0.7 to < 0.8	Good
0.8 to <0.9	Very good
0.9 to 1	Excellent

Note. Adapted from Hair, J. F., Money A. H., Samouel, P., & Page, M. (2007). *Research methods for business.* Chichester: John Wiley & Sons.

3.7.3 Inferential Analyses

Inferential analyses are used to make predictions and generalization about the population's characteristics from the research of a sample. SPSS software was employed to conduct Pearson Correlation Analysis and Multiple Regression Analysis in this research.

3.7.3.1 Pearson Correlation Analysis

It is appropriate to conduct Pearson Correlation Analysis for this research because both of the independent and dependent variables on this research questionnaire were in interval (metric) scale. The Pearson Correlation analysis will show the direction, significance and of association of the relationship between two variables (Sekaran et al., 2010). In this research, Pearson Correlation Analysis is used to measure the strength of association between the independent variables (education level,

organization culture and structure, family consideration, work-life imbalance and glass ceiling effect) with dependent variable (career advancement). The significance of the positive relationship between two or more variables is important for interpreting the result of the variables as well.

The correlation coefficient (r) measures the degree of the linear relationship between two variables. According to Saunders, Lewis and Thornhill (2012), if the r is closer to ±1, indicates strong positive or negative relationship between the two variables; if the r is close to 0, indicates weak relationship between the two variables (refer to Table 1.4). Besides that, the significance of the relationship between the two variables can identify the significance value (p-value) indicated in the output of the analysis. If the p-value less than or equal to 0.05, indicates that there is a statistically significant correlations between the two variables; if the p-value is more than 0.05 means there is no significant correlations between the two variables (Saunders et al., 2012).

Table 3.4: Rule of Thumb about Correlation Coefficient (r)

Correlation coefficient (r)	Strength of association
± 0.81 - ± 1.00	Very strong
± 0.61 - ± 0.80	Strong
± 0.35 - ± 0.60	Moderate
± 0.21 - ± 0.34	Weak
± 0 - ± 0.20	None

Note. Adapted from Saunders, M., Lewis P., & Thornhill, A. (2012). *Research methods for business students* (6th ed.). England: Pearson.

3.7.3.2 Multiple Regression Analysis

Multiple Linear Regression is widely applied in social science researches. It uses when there are several independent variables expected to influence a single dependent variable in a same regression equation (Hair et al., 2007). It also provides the best predictor of the multiple variables (StarSoft Inc., 2000). The objective of this analysis is to measure the degree of the linear relationship between the independent variables with dependent variable (Sekaran et al., 2010). The relationship of independent variables and dependent variable in this research can be express in an equation:

$C = a + b1E + b2F + b3O + b4W + b5G$

Where,

C= Career advancement

a= Constant value, the value of Y when X= 0

E= Education level

F= Family consideration

O= Organization culture and structure

W= Work-life imbalance

G= Glass ceiling effect

In this study, the interpretation of the multivariate analysis will be based on 3 perspectives: the importance of the independent variables, the types of relationship found and interrelationships among the independent variables (Saunders et al., 2012).

This analysis can use to assess the direction either positive or negative relationship for each independent variable. The relative importance of each independent variable also can be determined in the same assessment. The researcher also can assess the uniqueness of the relationship between independent variables with dependent variables as the assumed relationship is in a linear regression based on the correlations among the independent and dependent variables. Furthermore, the analysis provides insight how the independent variables affect the dependent variable. These interrelationships are important for the other researchers to make business decision to produce optimal prediction.

3.8 Conclusion

This chapter begins with explaining the method of research design then development of questionnaire until the method of data analysis. The techniques of data analysis will be performed in the next chapter in order to interpret the result from the statistical output. The reports on the results are linked with the research questions and hypotheses of this study. All the result will be showed in table or chart form to assure easy reading.

CHAPTER FOUR

RESEARCH RESULT

4.0 Introduction

This chapter will demonstrate, analyze and interpret the results of the findings from this research. There are several statistical test have been used to analyze the relationship between women career advancement with education level, family consideration, organization culture and structure, work-life imbalance and glass ceiling effect. The test used in the analyses included Multicollinearity Test, Reliability Test, Validity Test, Descriptive Analysis and Inferential Analysis.

4.1 Multicollinearity Test

Multicollinearity is a problem when the independent variables in a multiple regression model have high correlation among themselves. This is because it makes

the prediction of regression coefficient unreliable (Hair, Black, Babin, Anderson, & Tatham, 2006). There are two methods to test the multicollinearity of the independent variables- Bivariate Correlation Analysis and Tolerance with Variance Inflation Factor (VIF). According to Hair et al. (2007), the researcher should remove one of the highly correlated variables if the correlations more than +/-0.70 because it indicates a problem with multicollinearity. It will also indicates multicollinearity problem if the Tolerance value smaller than 0.10 while the VIF value higher than 5.0 (Hair et al, 2007).

Table 4.1 Multicollinearity Test

	AVG_EL	AVG_FC	AVG_OC	AVG_WL	AVG_GC
AVG_EL	1	0.259	0.371	0.377	0.273
Sig	-	0.001	0.000	0.000	0.001
AVG_FC	0.259	1	0.391	0.500	0.332
Sig	0.001	-	0.000	0.000	0.000
AVG_OC	0.371	0.391	1	0.414	0.675
Sig	0.000	0.000	-	0.000	0.000
AVG_WL	0.377	0.500	0.414	1	0.371
Sig	0.000	0.000	0.000	-	0.000
AVG_GC	0.273	0.332	0.675	0.371	1
Sig	0.001	0.000	0.000	0.000	-

Note. Developed for this research

Table 4.2 Collinearity Statistics

Construct	Tolerance value	VIF value
Education level	0.801	1.248
Family consideration	0.707	1.414
Organization culture and structure	0.480	2.082
Work-life imbalance	0.650	1.539
Glass ceiling effect	0.533	1.878

Note. Developed for this research

Based on Table 4.1, the inter-correlations among all independent variables is between 0.273 and 0.675, lower than 0.70. Based on Table 4.2, the range of Tolerance value is between 0.480 and 0.801, higher than 0.10 whereas the range of VIF value is between 1.248 and 2.082, lower than 5.0. Therefore, there is no multicollinearity problem among the independent variables based on the Bivariate Correlation Analysis and Tolerance with VIF value.

4.2 Scale Measurement

Reliability Test and Validity Test have been used to examine the goodness-of-fit of the measurement model. It is the most fundamental approach to test the hypotheses after specified model has been specified, sufficient data has been collected and analysis techniques have been made.

4.2.1 Reliability Test

Reliability assess whether a variable is consistent in what it is intend to measure. The most common measurement of reliability is applying Cronbach's alpha to measure internal consistency of the variables in a summated scale. According to the rules-of-thumb stated on Hair et al., (2006), a Cronbach's alpha with min 0.7 considered as a good strength of association. However, a lower alpha is acceptable if the item within the variable is essential in examining the research objectives.

Table 4.3 The Reliability of Constructs

Constructs	No. of items	Cronbach's Alpha
Career advancement	4	0.697
Education level	4	0.706
Family consideration	4	0.653
Organization culture and structure	4	0.814
Work-life imbalance	4	0.669
Glass ceiling effect	4	0.821

Note. Developed for this research

Based on Table 4.3, the value of Cronbach's alpha of career advancement is 0.697; education level is 0.706; family consideration is 0.653; organization culture and structure is 0.814; work-life imbalance is 0.669 and glass ceiling effect is 0.821. There are three constructs had Cronbach's alpha more than 0.7 and another three constructs slightly lower than 0.7. According to Hair et al. (2007), an alpha range from 0.6 to 0.7 is acceptable as the strength of association is moderate. Thus, all the

items can be combined to measure the barriers of Malaysian women career advancement.

4.2.2 Validity Test

It is important to ensure the set of research's construct is appropriately represents the concept of the study where there is no existence of systematic or non-random error (Hair, Black, Babin, & Anderson, 2010). According to Hair et al. (2010), validity should be assessed in terms of two forms validity- convergent validity and discriminant validity. Convergent validity is a measure where two measures of the same concept are highly correlated whereas the discriminant validity is a measure where two conceptually similar concepts are different. Factor Analysis has carried out as well to assess the validity of the set of construct by examining the Factor loading, Eigenvalue (Ev) and Kaiser-Meyer-Olkin (KMO) with reliability of the factors.

Table 4.4 Factor Analysis Result

Factors	Items	Factor loading	KMO	Ev	Reliability
1. Career advancement	1. I have insufficient opportunity for career advancement in my company.	0.743	0.735	2.097	0.697
	2. Women face some barriers to career advancement in every industry.	0.749			
	3. There are lesser women managers than men leaders in my company.	0.733			

	4. Self-improvement is essential for career advancement in related industry.	0.669			
2. Education level	1. A women must have certain requirement of education level in order to get promoted to managerial level.	0.794	0.674	2.141	0.706
	2. High education level indicates higher opportunity for promotion.	0.639			
	3. My company has set a specific requirement for education achievement in promoting a woman to management role.	0.803			
	4. Having additional certificates will enhance the chances for promotion.	0.676			
3. Family consideration	1. Having the roles of taking care of young children and senior parents are challenges to woman career advancement.	0.747	0.693	1.967	0.653
	2. It is difficult to maintain the balance between managing family commitments and job responsibilities.	0.724			
	3. A woman usually chooses family care than career promotion if there is a need to fulfill family commitment.	0.577			
	4. My commitment to my family members is a barrier for me to advance my career.	0.743			

4. Organization culture & structure	1. Women have to work more amount than male colleagues with similar qualifications and position.	0.797	0.792	2.573	0.814
	2. Personnel are more likely to respect male manager than female manager.	0.800			
	3. Your current employer is making lesser effort to assist females to overcome their barriers to career advancements.	0.765			
	4. Your company believes that the men in management level are more committed than women in management level.	0.844			
5. Work-life imbalance	1. There is a challenge for women to balance career and personal life.	0.652	0.672	2.015	0.669
	2. My time resources are not equally distributed between the work and home.	0.818			
	3. Due to job needs, I find it difficult to spend my times with my family sometimes.	0.740			
	4. There is no or less facility provided by my company to support work-life balance of employees.	0.611			
6. Glass ceiling effect	1. There are lack of female roles and mentors in my company.	0.776	0.763	2.612	0.821

	2. There is a lack of equal career advancement opportunities for women.	0.855			
	3. Chances for more advancement in women career are lesser when woman are aging.	0.763			
	4. Women cannot demonstrate their managerial competency because they always have been appointed in a junior position.	0.835			

Note. Developed for this research

Referring to the Table 4.4, the correlation metric result show the KMO values of the all the 6 factors are between 0.672 and 0.792, which are greater than 0.60 indicating that sufficient items are predicted by each variable. Moreover, the Bartlett's Tests for all the variables were statistically significant as $p < 0.05$ (refer to Appendix 4.4), implied that the variables are correlated highly enough to support the factorability of the correlation matrix. Both of the results show the factor analysis was appropriate.

Besides that, all the factors had Eigenvalue greater than 1.0 which range between 1.967 and 2.612, indicating the factors explain more information than a single item would have explained (Leech, Barrett, & Morgan, 2005). The factor loading for all the items are range between 0.577 and 0.844. According to Hair et al. (2006), factor loading greater than 0.45 are considered necessary for practical significance based on the sample size of 150 of this research. According to the details of the result in Table 4.4, the set of the factors is under convergent validity where the item is positively correlated with other items of the same factor. The scores of the factors are highly

correlated and it indicated that validity is evident (Hair et al, 2007). It can conclude that the goodness of measures is established through of satisfactory of reliability and validity tests.

4.3 Descriptive Analysis

Descriptive analysis is used to describe the data and information that have been collected from the respondents for the research purpose (Hebl, 2008). The researcher will use the frequency statistics to describe the demographic profile of respondents and descriptive statistics such as mean, mode, maximum, minimum and standard deviations to interpret the data for dependent variables and independent variables.

4.3.1 Respondent Demographic Profile

Section A of the questionnaire is about the demographic profile of the respondents. The profile is divided into six categories- age, race, marital status, no. of children, highest education level and job position. The details of the respondents' demographic profile were show in Table 4.5. There are 150 of female respondents involved in the survey. They are from Klang Valley area, North and South of the Peninsular Malaysia. The respondents are also divided into four age groups. Referred to Table 4.5, there are 52 (34.7%) respondents who aged from 21 to 30 years old; 39 (26%) respondents who aged from 31 to 40 years old; 30 (20%) respondents who aged from 41 to 50 years old and 29 (19.3%) respondents who aged between 51 years old and above.

Majority of the respondents are Chinese which consists of 79 (52.7%) respondents, followed by Malay 41 (27.3%) and Indian 30 (20%). There are more Chinese respondents because a part of respondents is from University Tunku Abdul Rahman (UTAR) which most of the students are Chinese. Additionally, most of the organizations in Klang Valley have a predominately Chinese population. In terms of marital status, 70 (46.7%) respondents are single whereas 80 (56.3%) are married. Furthermore, 84 (56%) respondents have no child; 22 (14.7%) respondent have 1 child; 24 (16%) respondents have 2 children and only 6 (13.3%) respondents have 3 children and above.

Many organizations require a minimum education qualification at degree level and hence, most of the Malaysian graduated with a degree due to the popularization of the education system in Malaysia. Majority of the respondents are bachelor degree holder which constitute of 73 (48.7%) respondents, followed by 37 (24.7%) respondents are diploma or certificate holder; 22 (14.7%) respondents are SPM holder; 12 (8%) respondents are master degree holder and 6 (4%) respondents are others qualification holder. In terms of job position, the highest level rate is senior executive which consists of 51 (34%) respondents, followed by officer or executives with 27 (24.7%) respondents; others job level with 29 (19.3%) respondents; manager level with 27 (18%) respondents and clerical with 6 (4%) respondents.

Table 4.5 The demographic profile of respondents

Profile		Frequency	Cumulative frequency	Percentage (%)	Cumulative Percentage (%)
Age (years old)	21-30	52	52	34.7	34.7
	31-40	39	91	26.0	60.7
	41-50	30	121	20.0	80.7
	51 & above	29	150	19.3	100.0
Race	Malay	41	41	27.3	27.3
	Chinese	79	120	52.7	80
	India	30	150	20	100.0
Marital status	Single	70	70	46.7	46.7
	Married	80	150	53.3	100.0
No. of children	0	84	84	56.0	56.0
	1	22	106	14.7	70.7
	2	24	130	16.0	86.7
	3 & above	20	150	13.3	100.0
Highest Education level	SPM	22	22	14.7	14.7
	Diploma/Certificate	37	59	24.7	39.3
	Bachelor degree	73	132	48.7	88.0
	Master degree	12	144	8.0	96.0
	Others	6	150	4.0	100.0
Job position	Clerical	6	6	4.0	4.0
	Officer/executive	37	43	24.7	28.7
	Senior executive	51	94	34.0	62.7
	Manager	27	121	18.0	80.7
	Others	29	150	19.3	100.0

Note. Developed for this research

4.3.2 Central Tendencies of Measurement Construct

Section B of the questionnaire provided information about various constructs that perceived as the barriers to women career advancement in Malaysia. The examined barriers under this research are education level, family consideration, organization culture and structure, work-life imbalance and glass ceiling effect. The descriptive analysis of central tendencies for the various constructs will identify the most 'average' and 'frequent' of item in the construct and the pattern of the distribution value. It is useful for making comparison among the items within a particular construct (Watt & Berg, 2002).

4.3.2.1 Career Advancement (CA)

Table 4.6 Central Tendencies for Career Advancement

	CA1	CA2	CA3	CA4
Mean	3.69	3.66	3.71	3.67
Mode	4	4	4	4
Standard division	0.785	0.758	0.824	0.746
Variance	0.617	0.575	0.678	0.557
Skewness	-0.746	-0.464	-0.575	-0.269
Kurtosis	1.120	0.007	0.661	-0.118
Minimum	1	2	1	2
Maximum	5	5	5	5

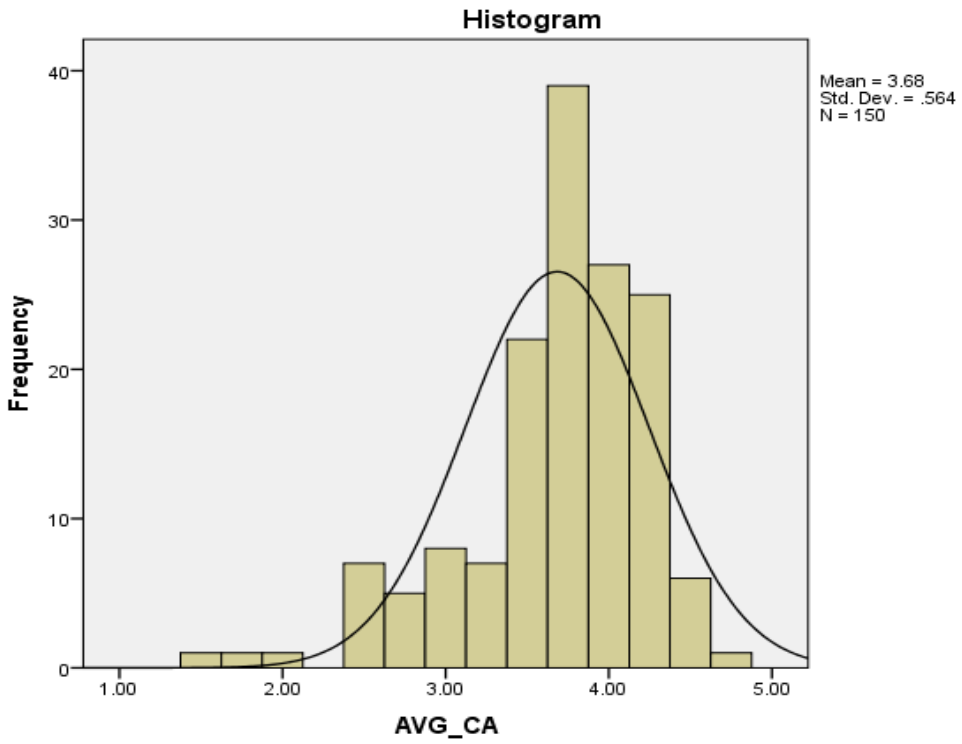
Statement:

CA1	I have insufficient opportunity for career advancement in my company.
CA2	Women face some barriers to career advancement in every industry.
CA3	There are lesser women managers than men leaders in my company.
CA4	Self-improvement is essential for career advancement in related industry.

Note. Developed for this research

Based on Table 4.6, the mean scores for all four items are ranged from 3.66 to 3.71. CA3 scored the highest mean among the items with mean = 3.71, followed by CA1 with mean = 3.69; CA4 with mean = 3.67 and CA2 with mean = 3.66. The minimum score for item 1 and 3 is 1 whereas item 2 and 4 is 4. The maximum score for all four items is 5. Most of the respondents tend to agree the statements of career advancement as the mode for all four items is 4. The CA3 scored the highest standard division with 0.824 whereas CA4 scored the lowest standard division with 0.746.

Figure 4.1 Normal Distribution Curve for Career Advancement



Note. Developed for this research

Referred to Figure 4.1, the bell shaped curve is portrayed on the histogram, the construct of education level is said to be normally distributed.

4.3.2.2 Education Level (EL)

Table 4.7 Central Tendencies for Education Level

	EL1	EL2	EL3	EL4
Mean	3.63	3.33	3.54	3.99
Mode	4	4	4	4
Standard division	0.807	0.855	0.902	0.723
Variance	0.652	0.731	0.815	0.523
Skewness	-0.381	-0.359	-0.621	-0.735
Kurtosis	0.129	-0.389	0.113	1.014
Minimum	1	1	1	2
Maximum	5	5	5	5

Statement:

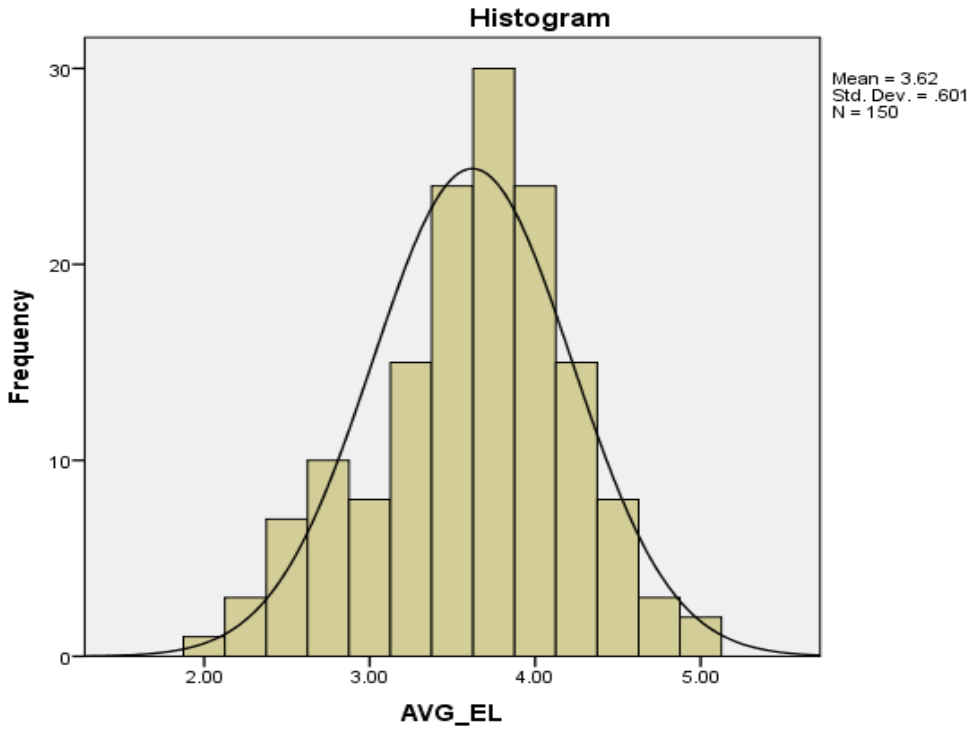
EL1	A woman must have certain requirement of education level in order to get promoted to managerial level.
EL2	High education level indicates higher opportunity for promotion.
EL3	My company has set a specific requirement for education achievement in promoting a woman to management role.
EL4	Having additional certificates will enhance the chances for promotion.

Note. Developed for this research

Based on Table 4.7, the mean scores for all four items are ranged from 3.33 to 3.55. EL4 scored the highest mean among the items with mean = 3.99, followed by EL3

with mean = 3.52; EL1 with mean = 3.63 and EL2 with mean = 3.33. The minimum score for all four items is 1 while the maximum score for all the items is 4. Most of the respondents tend to agree the statements of education level as the mode for all four items is 4. The EL3 scored the highest standard division with 0.902 whereas EL4 scored the lowest standard division with 0.723.

Figure 4.2 Normal Distribution Curve for Education Level



Note. Developed for this research

Referred to Figure 4.2, the bell shaped curve is portrayed on the histogram, the construct of education level is said to be normally distributed.

4.3.2.3 Family Consideration (FC)

Table 4.8 Central Tendencies for Family Commitment

	FC1	FC2	FC3	FC4
Mean	3.21	3.72	3.61	3.09
Mode	3	4	4	3
Standard division	0.957	0.852	0.858	0.904
Variance	0.917	0.726	0.735	0.818
Skewness	-0.426	-0.811	-0.067	-0.393
Kurtosis	-0.191	0.719	-0.623	-0.175
Minimum	1	1	2	1
Maximum	5	5	5	5

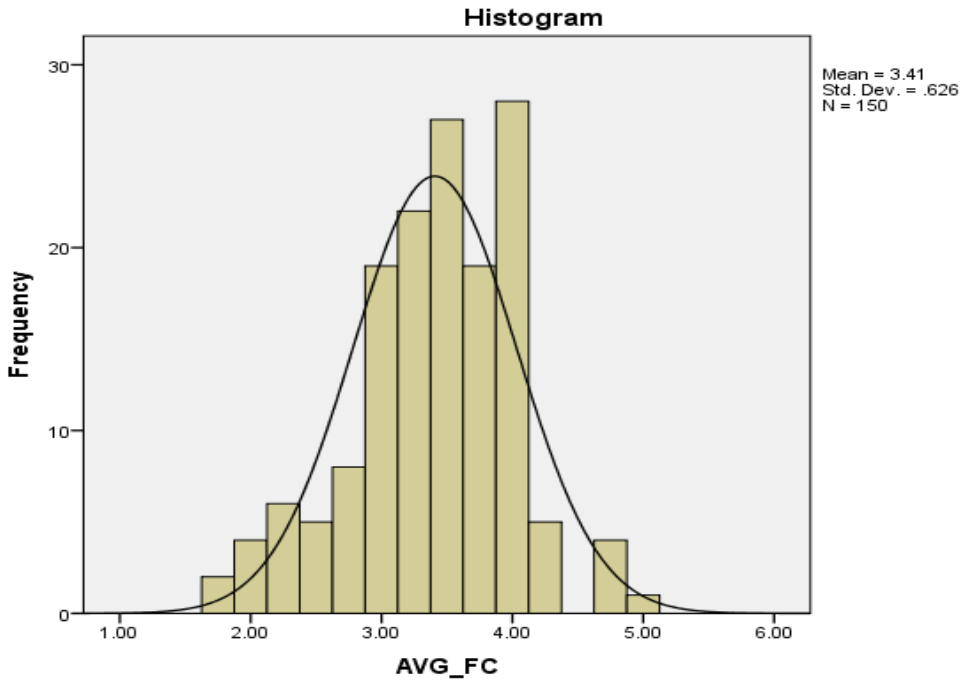
Statement:

FC1	Having the roles of taking care of young children and senior parents are challenges to woman career advancement.
FC2	It is difficult to maintain the balance between managing family commitments and job responsibilities.
FC3	A woman usually chooses family care than career promotion if there is a need to fulfill family commitment.
FC4	My commitment to my family members is a barrier for me to further advance my career.

Note. Developed for this research

Based on Table 4.8, the mean scores for all four items are ranged from 3.09 to 3.72. FC2 scored the highest mean among the items with mean = 3.72, followed by FC3 with mean = 3.61; FC1 with mean = 3.21 and FC4 with mean = 3.09. The minimum score for all four items is 1 while the maximum score for all the items is 4. The mode for FC1 and FC4 is 3 while the mode FC2 and FC3 is 4. The FC1 scored the highest standard division with 0.957 whereas FC2 scored the lowest standard division with 0.852.

Figure 4.3 Normal Distribution Curve for Family Consideration



Note. Developed for this research

Referred to Figure 4.2, the bell shaped curve is portrayed on the histogram, the construct of education level is said to be normally distributed.

4.3.2.4 Organization Culture and Structure (OC)

Table 4.9 Central Tendencies for Organization Culture and Structure

	OC1	OC2	OC3	OC4
Mean	3.21	3.04	3.09	2.89
Mode	4	3	4	3
Standard division	0.864	0.940	0.912	0.909
Variance	0.746	0.884	0.831	0.826
Skewness	-0.619	-0.080	-0.335	-0.045
Kurtosis	-0.283	-0.592	-0.632	-0.304
Minimum	1	1	1	1
Maximum	5	5	5	5

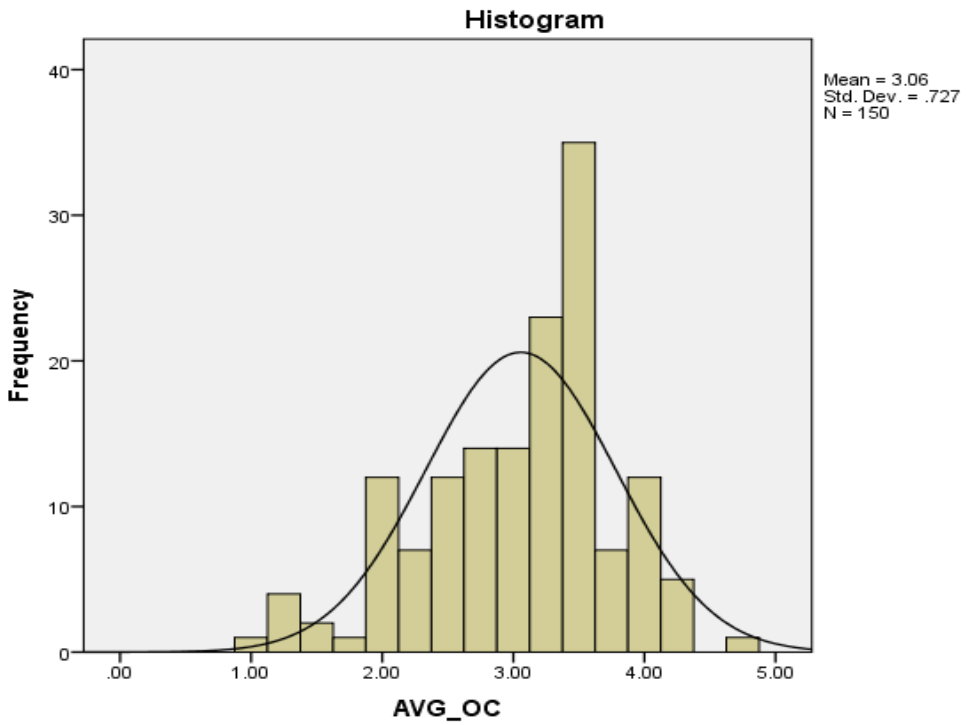
Statement:

OC1	Women have to work more amount than male colleagues with similar qualifications and position.
OC2	Personnel are more likely to respect male manager than female manager.
OC3	Your current employer is making lesser effort to assist females to overcome their barriers to career advancements.
OC4	Your company believes that the men in management level are more committed than women in management level.

Note. Developed for this research

Referred to Table 4.9, the mean scores for all four items are ranged from 2.89 to 3.21. OC1 scored the highest mean among the items with mean = 3.21, followed by OC3 with mean = 3.09; OC2 with mean = 3.04 and OC4 with mean = 2.89. The minimum score for all four items is 1 while the maximum score for all the items is 5. The mode for OC1 and OC3 is 4 while the mode OC2 and OC4 is 3. The OC2 scored the highest standard division with 0.940 whereas OC1 scored the lowest standard division with 0.840.

Figure 4.4 Normal Distribution Curve for Organization Culture and Structure



Note. Developed for this research

Referred to Figure 4.3, the bell shaped curve is portrayed on the histogram, the construct of organization culture and structure is said to be normally distributed.

4.3.2.5 Work-life Imbalance (WL)

Table 4.10 Central Tendencies for Work-life Imbalance

	WL1	WL2	WL3	WL4
Mean	3.60	3.49	3.47	3.59
Mode	4	4	4	4
Standard division	0.811	0.857	0.887	0.761
Variance	0.658	0.735	0.787	0.578
Skewness	-1.056	-0.671	-0.774	-0.367
Kurtosis	1.584	0.588	0.522	-0.165
Minimum	1	1	1	2
Maximum	5	5	5	5

Statement:

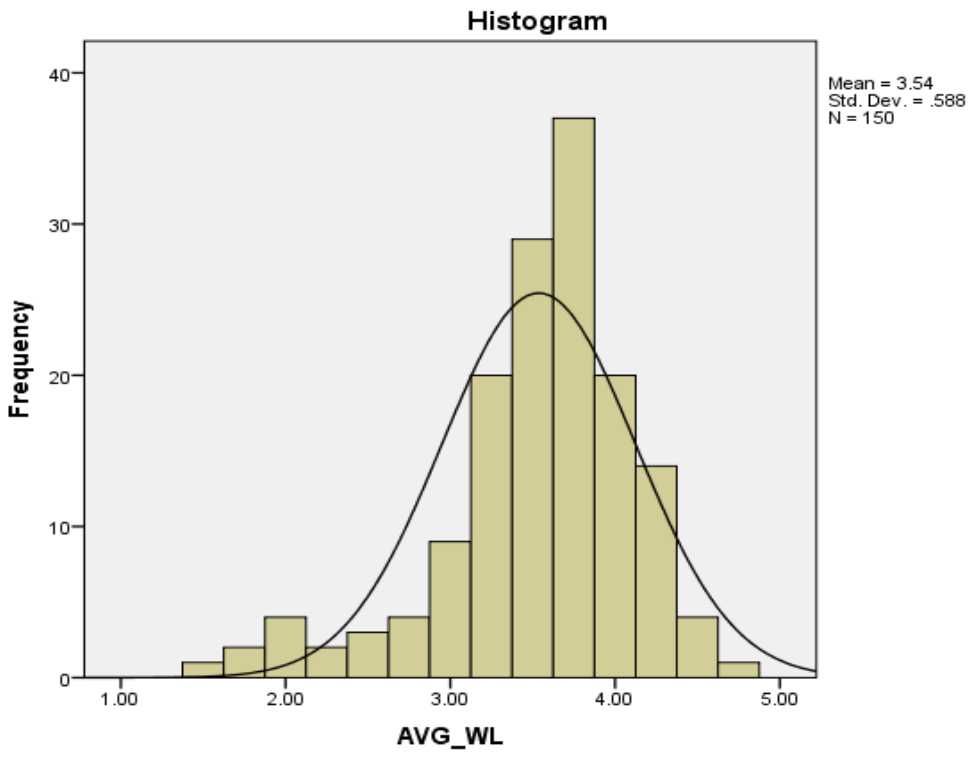
WL1	There is a challenge for women to balance career and personal life.
WL2	My time resources are not equally distributed between the work and home.
WL3	Due to job needs, I find it difficult to spend my times with my family sometimes.
WL4	There is no or less facility provided by my company to support work-life balance of employees.

Note. Developed for this research

Based on Table 4.10, the mean scores for all four items are ranged from 3.47 to 3.60. WL1 scored the highest mean among the items with mean = 3.60, followed by WL4

with mean = 3.59; WL2 with mean = 3.49 and WL3 with mean = 3.47. The minimum score for all four items is 1 while the maximum score for all the items is 5. Most of the respondents tend to agree the statements of work-life imbalance as mode for all items is 4. The WL3 scored the highest standard division with 0.887 whereas WL4 scored the lowest standard division with 0.761.

Figure 4.5 Normal Distribution Curve for Work-life Imbalance



Note. Developed for this research

Referred to Figure 4.5, the bell shaped curve is portrayed on the histogram, the construct of work-life imbalance is said to be normally distributed.

4.3.2.6 Glass Ceiling Effect (GC)

Table 4.11 Central Tendencies for Glass Ceiling Effect

	GC1	GC2	GC3	GC4
Mean	2.76	2.88	3.44	2.72
Mode	2	2	4	2
Standard division	0.953	0.962	1.020	0.942
Variance	0.908	0.925	1.040	0.888
Skewness	0.311	0.198	-0.547	0.149
Kurtosis	-0.702	-0.641	-0.474	-0.991
Minimum	1	1	1	1
Maximum	5	5	5	5

Statement:

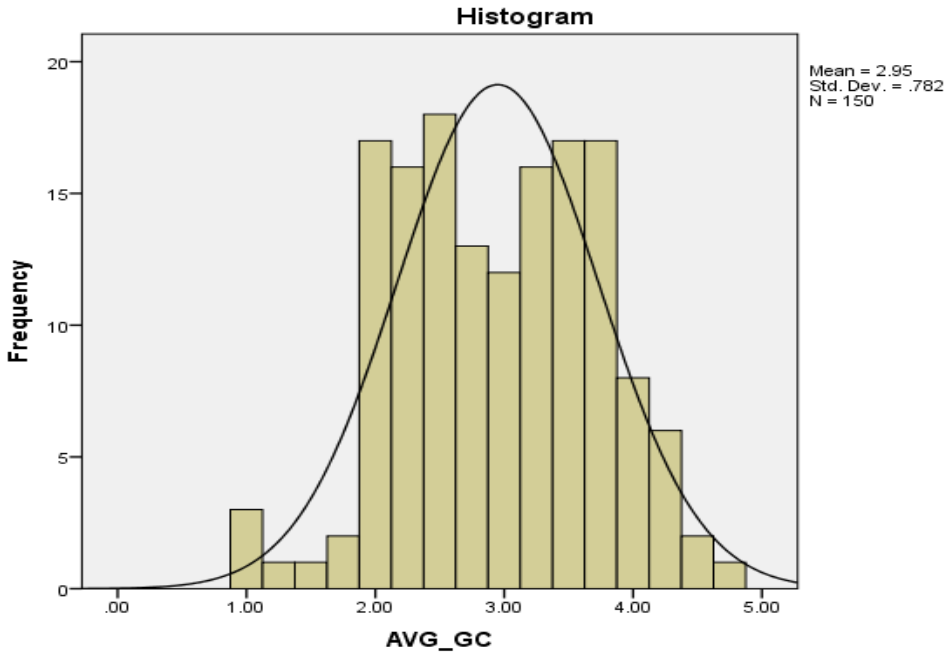
GC1	There are lack of female roles and mentors in my company.
GC2	There is a lack of equal career advancement opportunities for women.
GC3	Chances for more advancement in women career are lesser when woman are aging.
GC4	Women cannot demonstrate their managerial competency because they always have been appointed in a junior position.

Note. Developed for this research

Based on Table 4.11, the mean scores for all four items are ranged from 2.72 to 3.44. GC3 scored the highest mean among the items with mean = 3.44, followed by GC2

with mean = 2.88; GC1 with mean = 2.76 and GC4 with mean = 2.72. The minimum score for all four items is 1 while the maximum score for all the items is 5. Most of the respondents tend to disagree with the statements of glass ceiling effect as the mode score for item 1, 2 and 4 is 2 but for item 3 is 4. The GC3 scored the highest standard division with 1.020 whereas GC4 scored the lowest standard division with 0.942.

Figure 4.6 Normal Distribution Curve for Glass Ceiling Effect



Note. Developed for this research

Referred to Figure 4.6, the bell shaped curve is portrayed on the histogram, the construct of glass ceiling effect is said to be normally distributed.

4.4 Inferential Analyses

The researcher used inferential analyses to test the hypotheses of this study. The inferential statistics that used for this study are Pearson Correlation Analysis and Multiple Regression Analysis.

4.4.1 Pearson Correlation Analysis

Pearson Correlation Analysis measures the linear association between the independent variables with the dependent variable in this study. The results of Correlation Matrix were illustrated in Table 4.12. According to Table 4.12, all the associations have positive signs indicating all the constructs have positive relationship with career advancement. Basically all the variables show moderate correlations ranging from 0.506 to 0.618.

Organization culture and structure have the strongest positive relationship towards the career advancement with $r = 0.618$, followed by family consideration with $r = 0.604$; work-life imbalance with $r = 0.578$; glass ceiling effect with $r = 0.524$ and family consideration with $r = 0.506$. All the 2-tailed significance values between the independent variables with the dependent variables are 0.000 ($p < 0.01$). Therefore, there was a significant, positive and moderate correlation among the six variables.

Table 4.12 Pearson Correlation Matrix

Correlations

		AVG_CA	AVG_EL	AVG_FC	AVG_OC	AVG_WL	AVG_GC
AVG_CA	Pearson Correlation	1	.604**	.506**	.618**	.578**	.524**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
AVG_EL	Pearson Correlation	.604**	1	.259**	.371**	.377**	.273**
	Sig. (2-tailed)	.000		.001	.000	.000	.001
AVG_FC	Pearson Correlation	.506**	.259**	1	.391**	.500**	.332**
	Sig. (2-tailed)	.000	.001		.000	.000	.000
AVG_OC	Pearson Correlation	.618**	.371**	.391**	1	.414**	.675**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
AVG_WL	Pearson Correlation	.578**	.377**	.500**	.414**	1	.371**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
AVG_GC	Pearson Correlation	.524**	.273**	.332**	.675**	.371**	1
	Sig. (2-tailed)	.000	.001	.000	.000	.000	

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

Where,

N = 150

CA= Career Advancement

EL= Education Level

FC= Family Consideration

OC= Organization Culture and Structure

WL= Work-life Imbalance

GC= Glass Ceiling Effect

Note. Developed for this research

4.4.2 Multiple Linear Regression Analysis

The result of Multiple Linear Regression is an equation that indicates the best prediction of a dependent variable from the whole set of independent variable. The forced entry regression method was used where all the variables are entered into the model simultaneously to measure the relationship between the whole set of predictors with the dependent variables (Coakes, 2013). Multiple Regression Analysis was conducted to examine the five hypotheses in this research. The results of the analysis were illustrated in Table 4.13 to 4.15.

4.4.2.1 The strength of Relationship Test

Table 4.13 The Result of Strength of Relationship between EL, FC, OC, WL and GC towards CA

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.801[a]	.641	.629	.34350

a. Predictors: (Constant), AVG_GC, AVG_EL, AVG_FC, AVG_WL, AVG_OC

b. Dependent Variable: AVG_CA

Note. Developed for this research

Based on Table 4.13, the R Square for the regression model is 0.641, there are 64.1% of the variance in career advancement can be predicted from education level, family consideration, organization culture and structure, work-life imbalance and glass ceiling effect. This is consistent with the Pearson Correlation's results which show all the variables have moderate correlations ranging from 0.506 to 0.618. The moderate percentage indicates that the model is relatively acceptable in predicting the barriers of women career advancement in Malaysia.

Table 4.14 The Result of Significance F-Test

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.343	5	6.069	51.433	.000[b]
	Residual	16.991	144	.118		
	Total	47.333	149			

a. Dependent Variable: AVG_CA

b. Predictors: (Constant), AVG_GC, AVG_EL, AVG_FC, AVG_WL, AVG_OC

Note. Developed for this research

F-Test was conducted to test the overall significance of the construct model in this research. The ANOVA table shows that F (5,144) = 51.433 and significance value is 0.000 ($p < 0.05$). This indicates that the combination of the constructs significantly predicted women career advancement in Malaysia in overall.

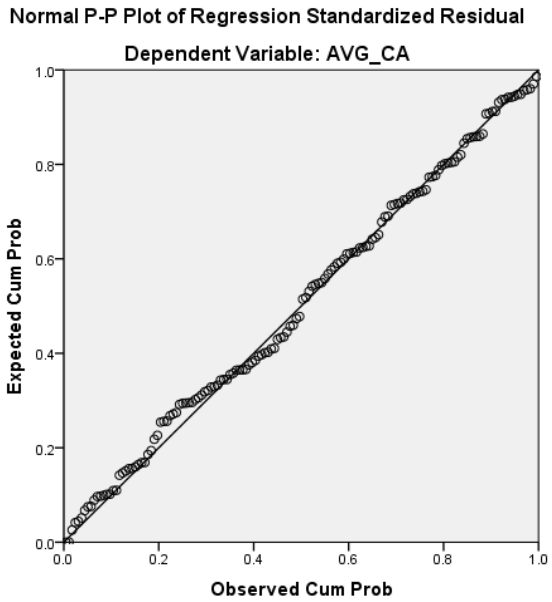
4.4.2.2 The Nature of Relationship Test

Table 4.15 The Nature of Relationship between EL, FC, OC, WL and GC towards CA

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.389	.218		1.782	.077
	AVG_EL	.333	.052	.355	6.367	.000
	AVG_FC	.154	.053	.170	2.870	.005
	AVG_OC	.191	.056	.247	3.425	.001
	AVG_WL	.201	.059	.210	3.392	.001
	AVG GC	.091	.049	.127	1.850	.066

Note. Developed for this research

Figure 4.7 PP-Plot of Average of Dependent Variable



Note. Developed for this research

Based on Figure 4.7, the PP-plot illustrates the estimated equation as Y = 0.389 + 0.333 EL + 0.154 FC + 0.191 OC + 0.201 WL + 0.901 GC and the independent variables are linearity related to the dependent variable. According to Table 4.13, the following multiple linear regression equation was formed for this research:

Career Advancement = 0.389 + 0.333 Education Level + 0.154 Family Consideration + 0.191 Organization Culture and Structure + 0.201 Work-life Imbalance + 0.901 Glass ceiling effect.

Form the equation above, all the five independent variables are positively related with the dependent variable. This study shows that as education level increases by 1 unit

value, women career advance increase by 0.333 while other independent variables remain constant. While the family consideration increases by 1 unit value, the barriers of women career advancement increase by 0.154 and other independent variables stay constant. Furthermore, organization culture and structure increases by 1 unit value, the barriers of women career advancement increase by 0.191 while other independent variables remain constant. Meanwhile, the work-life imbalance increases by 1 unit value, the barriers of women career advancement increase by 0.201 while other independent variables stay constant.

Based on the result of Table 4.15, the highest standardized coefficients value is education level with $\beta = 0.355$. This is followed by organization culture and structure with $\beta = 0.247$; work-life imbalance with $\beta = 0.210$ and family consideration with $\beta = 0.170$. As a result, education level is the strongest predictor of the barriers of women career advancement, followed by organization culture and structure, work-life imbalance and family consideration.

4.5 Test of significance

First hypothesis

H1: Education level is significant and positively related to Malaysian women career advancement.

According to Table 4.15, the education level has a significance value of 0.000 where p value is less than 0.05. Therefore, there is an evidence to support H1 is correct,

education level is significant and positively related to Malaysian women career advancement.

Second hypothesis

H2: Family consideration is significant and positively related to Malaysian women career advancement.

Referred to Table 4.15, the family consideration has a significance value of 0.005 where p value is less than 0.05. Therefore, there is an evidence to support H2 is correct, family consideration is significant and positively related to Malaysian women career advancement.

Third hypothesis

H3: Organization culture and structure is significant and positively related to Malaysian women career advancement.

Based on Table 4.15, the organization culture and structure has a significance value of 0.001 where p value is less than 0.05. Therefore, there is an evidence to support H3 is correct, organization culture and structure is significant and positively related to Malaysian women career advancement.

Fourth hypothesis

H4: Work-life imbalance is significant and positively related to Malaysian women career advancement.

According to Table 4.15, the significance value of work-life imbalance is 0.001 where p value is less than 0.05. Therefore, there is an evidence to support H4 is correct, work-life imbalance is significant and positively related to Malaysian women career advancement.

Fifth Hypothesis

H5: Glass ceiling effect is significant and positively related to Malaysian women career advancement.

Based on Table 4.15, the glass ceiling effect has a significance value of 0.066, where p value is more than 0.05. Therefore, there is no evidence to support H5, glass ceiling is not significantly related to Malaysian women career advancement.

4.6 Conclusion

In this chapter, multicollinearity test, reliability test and validity test have been conducted to assess the goodness of data. Descriptive analysis has been carried out to analyze the characteristic of respondents and central tendencies of independent variables. In addition, inferential analyses have been conducted to measure the relationship of independent variables with dependent variable and test the hypotheses. Throughout the research findings, four out of five hypotheses were supported. Education level has the most powerful influence on the women career advancement, followed by organization culture and structure, work-life imbalance and family

consideration. The summary of the statistical analyses, theoretical and managerial implication, limitation of the study and recommendation will be discussed in the next chapter.

CHAPTER FIVE

DISCUSSION AND CONCLUSION

5.0 Introduction

In this chapter, a thorough discussion about the cause and effect of the study will be performed based on the overall findings in the previous chapter. The summary of descriptive analysis and inferential analyses will be presented in the first section. Next, the answer of research question will be provided for the hypotheses testing. The major findings are also discussed in the context of Malaysia on current issues. Furthermore, theoretical and managerial implication will be presented to provide valuable insight for government, corporations and employers to address the issue of women career advancement in Malaysia. Lastly, recommendation will be discussed to solve the limitation of this research.

5.1 Summary of Statistical Analyses

The summary of the overall result which generated from SPSS will be presented in this section. This section has categorized into three subsections- descriptive analysis, scale measurement and inferential analyses. The summary of respondents' demographic profile will be delivered under descriptive analysis; the summary of reliability and validity test will be provided under scale measurement and the summary of Pearson Correlation and Multiple Linear Regression will be showed under inferential analyses.

5.1.1 Descriptive Analysis

In short, 190 sets of questionnaires have been distributed to the target population in Klang Valley, North and South of Peninsular Malaysia. 150 sets of questionnaire were collected where the actual response rate is 78.95%. Many respondents were under the age group of 21-30 years old with 34.7%, followed by 21-40 years old and 41-50 years old with 26% and 20% respectively. The smallest age group is 51 years old and above with 19% only. The respondents constitute of three main races in Malaysia- Malay, Chinese and Indian. Most of them are Chinese which consists of 52.7%, Malay consists of 27.3% and Indian consists of 20%. In terms of marital status, the married respondents were slightly higher than single respondents where 53.3% versus 46.7%. Besides that, majority of the respondents have no child which constitute of 56% and only 13.3% have 3 children & above. In terms of highest education level, most of the respondents with 48.7% hold a Bachelor Degree. The lowest percentage for education level is under the category of 'others' such as Advance Diploma, ACCA and ICSA, with 4% only. Furthermore, the highest

proportion for job position level is senior executive with 34% whereas the lowest proportion is clerical with 4% only.

5.1.2 Scale Measurement

Scale measurement is used to assess the reliability and validity of the model in this research. The reliabilities of the constructs are measured by Cronbach's alpha. Out of the 6 constructs with 4 items for each construct, glass ceiling effect scored the highest Cronbach's alpha with a value of 0.821. This is followed by education level with 0.706, career advancement with 0.697, work-life imbalance with 0.669 and family consideration scored the lowest Cronbach's alpha value of 0.653. All the constructs appear to have good internal reliability because all Cronbach's alpha values are higher than 0.65.

On the other hand, the validities of the constructs are measured by using Factor Analysis which generated factor loading, KMO value and Eigenvalue. The factor loadings for all the items are greater than 0.45 for 150 sample size. The KMO values for all the constructs are greater than 0.6 and the Eigenvalue for all the constructs are greater than 1.0 as well. The research model is considered valid as the set of factors is under convergent validity where the items within same construct are highly correlated. In summary, the degree of the research model is satisfactory in reliability and validity test.

5.1.3 Inferential Analyses

5.1.3.1 Pearson Correlation Analysis

Pearson Correlation Analysis has been used to measure the association and relationship among the 6 variables. The outcome of Pearson Correlation Matrix shows all the independent variables are significant ($p < 0.01$) and positively related to career advancement. Organization culture and structure has the strongest association with career advancement where $r = 0.618$. Meanwhile, family consideration has the weakest association with career advancement where $r = 0.506$. In summary, there was a significant, positive and moderate correlation among the six variables.

5.1.3.2 Multiple Regression Analysis

The R Square for the multiple regression model is 0.641, meaning there are 64.1% of the variance in career advancement can be predicted from education level, family consideration, organization culture and structure, work-life imbalance and glass ceiling effect. The F value is 51.433 with significance value of 0.000 ($p < 0.05$), indicating the overall construct model is significant at predicating women career advancement in Malaysia. All the independent variables are significant and positively related with the dependent variable, except the glass ceiling effect has non-significant relationship with the dependent variable. As a result, the following regression equation was formed for this research:

$$CA = 0.389 + 0.333\ EL + 0.154\ FC + 0.191\ OC + 0.201\ WL + 0.901\ GC$$

Where,

CA= Career Advancement
EL= Education Level
FC= Family Consideration
OC= Organization Culture and Structure
WL= Work-life Imbalance
GC= Glass Ceiling Effect

Form the equation above, all the five independent variables are positively related with the dependent variable. This study shows that as education level increases by 1 unit value, women career advance increase by 0.333 while other independent variables remain constant. While the family consideration increases by 1 unit value, the barriers of women career advancement increase by 0.154 and other independent variables stay constant. Furthermore, organization culture and structure increases by 1 unit value, the barriers of women career advancement increase by 0.191 while other independent variables remain constant. Meanwhile, the work-life imbalance increases by 1 unit value, the barriers of women career advancement increase by 0.201 while other independent variables stay constant.

In addition, referred to the result of Table 4.15, the standardized coefficients value indicates education level is the strongest predictor of the barriers of women career advancement with $\beta = 0.355$; second predictor is organization culture and structure with $\beta = 0.247$; third predictor is work-life imbalance with $\beta = 0.210$ and the last predictor is family consideration with $\beta = 0.170$.

5.2 Discussion on Major Findings

The main objective of this business research is to examine the relationship between the determinants of barriers towards Malaysian women career advancement. The summary of the result for hypotheses testing shows in Table 5.1 as below.

Table 5.1 Summary of the Result of Hypotheses Testing

Hypotheses	**Significance value**	**Decision**
H1: Education level is significant and positively related to Malaysian women career advancement.	p = 0.000 (p < 0.05)	H1 is supported
H2: Family consideration is significant and positively related to Malaysian women career advancement.	p = 0.005 (p < 0.05)	H2 is supported
H3: Organization culture and structure is significant and positively related to Malaysian women career advancement.	p = 0.001 (p < 0.05)	H3 is supported
H4: Work-life imbalance is significant and positively related to Malaysian women career advancement.	p = 0.001 (p < 0.05)	H4 is supported
H5: Glass ceiling effect is significant and positively related to Malaysian women career advancement.	p = 0.066 (p > 0.05)	H5 is rejected

Note: Developed for this research

5.2.1 First Result

Research objective 1: To examine the relationship between education level with Malaysian women career advancement.

H1: Education level is significant and positively related to Malaysian women career advancement.

Based on the result in Table 5.1, it shows the education level has a significant and positive relationship towards career advancement with $p = 0.000$ ($p < 0.05$). Education level is also the strongest predictor of the barriers of women career advancement. Therefore, it is proven that education level is one of the barriers to Malaysian women career advancement. This result is supported by the past research from Abdullah et al. (2008) and Subramaniam et al. (2013b) where the authors agree that women with lower education are less likely to be employed and promoted especially for those who may have an opportunity to progress to senior role. This is because advancement opportunity is depends on their education level besides working experience, interpersonal and managerial skill. Moreover, lack of related training and hard or soft skill will also limit women to develop their career. Therefore, lack of qualification in terms education level hindering them to progress further in career.

In addition, a higher enrollment rate of women in university will help to improve the women's participation rate in Malaysian workforce. This is supported by Malaysia Economic Monitor Report (as cited in World Bank Group, 2012a), the women with lower education level will exit from the workforce after marriage due to high incidence of underemployment and low wage work. This can imply that the higher the women education level, the higher the women participation rate in the workforce.

The women who hold at least a diploma or degree (tertiary level) have greater job opportunity and they will retain in the workforce even though after marriage with children (Har & Chong, 2014).

Besides that, many organizations set a minimum requirement of educational level achievement for recruitment. High academic achievement recognized is one of the important criteria of employee selection in some organizations especially for fresh graduate who have no working experience (Ernst & Young Global Limited, 2012). Furthermore, according to Domenico et al. (2006), highly educated women are more likely to engage in continuous employment and advance their career path. This is because they have higher expectation in the changing roles and more interested in professional careers. Thus, a women's education level is a valid predictor of the number of her employment years in the workforce.

5.2.2 Second Result

Research objective 2: To examine the relationship between family consideration with Malaysian women career advancement.

H2: Family consideration is significant and positively related to Malaysian women career advancement.

Referred to the result on Table 5.1, it shows the family consideration has a significant and positive relationship towards career advancement with $p = 0.005$ ($p < 0.05$). Family consideration is also the fourth predictor of the barriers of women career advancement. Therefore, it is proven that family consideration is one of the barriers to

Malaysian women career advancement. This result is supported by the research from World Bank Group (2012a); TalentCorp & ACCA (2013) and Jacobs (2012), the main reason of Malaysian women exit from the workforce was to raise a family due to rising cost of maids and childcare centers, long and inflexible working hours and lack of support system from the government and company. They find it difficult to focus on their job as they are the main caregiver of the family. Therefore, family consideration is one of the factors hindering the women to return to workforce as women have strong commitment on family responsibilities.

Besides that, women are being underrepresented in management level in Malaysia corporations which was also mainly due to family commitment. This is supported by the literature from Funston et al. (2008); Sepehri et al. (2010) and (Subramaniam et al., 2013a), women always faced difficulty in decision making on employment and promotion opportunities due to their conflict role between work and family. Sometimes, they also have to sacrifice the quality time spend with their families in order to get promoted and achieve their career goals. The authors also found that there is lack of sharing responsibility role in parental care and housework between husband and wife. The women have multiple roles to deal with their work and family, this has resulted the conflict arise between their role as a wife and mother. Therefore, the women are more prone to career stress then men due to their multiple roles which associated with work-family conflicts.

5.2.3 Third Result

Research objective 3: To examine the relationship between organization culture and structure with Malaysian women career advancement.

H3: Organization culture and structure is significant and positively related to Malaysian women career advancement.

The result in Table 5.1 shows the organization culture and structure has a significant and positive relationship towards career advancement with $p = 0.001$ ($p < 0.05$). Organization culture and structure is also the second significant predictor of the barriers of women career advancement. Thus, it is proven that the 'men's-club' culture is very entrenched and obstructive, hence hindering women to advance their career. This result is supported by the literature from Funston et al. (2008); The Law Society (2010) and Sepheri et al. (2010) stated the male-dominated culture still exists in some organizations and lead to perception that the men are more likely to have a leadership, managerial and decision-making ability. Moreover, the male mindset and masculine culture indicating women are lack of commitment in the workplace as they are enjoying more employee benefits.

In addition, opportunity of growth for women were restricted in masculinity culture organizations, this is supported by Domenico et al. (2006); Abdullah et al. (2008); Pillay (2005) and Simpson (2004) indicated that there is an earning gap between men and women with similar job level or education and experiences. The organizations are not intended to close the wage gap and diversify their workforce by moving women from low-paying occupations into higher level jobs. Moreover, there are some organizations are practicing job segmentation where men are normally be employed

under decision-making departments whereas women are placed in supporting departments. There is an obstacle for women to develop their career in a ‘men’s club’ culture because they experience resistance in information sharing and development of relationships. The unfriendly environment in male-dominated culture has resulted high turnover rates of women and lack of female role models within the organizations.

5.2.4 Fourth Result

Research objective 4: To examine the relationship between work-life imbalance with Malaysian women career advancement.

H4: Work-life imbalance is significant and positively related to Malaysian women career advancement.

According to the result in Table 5.1, it shows the work-life imbalance has a significant and positive relationship towards career advancement with $p = 0.001$ ($p < 0.05$). Work-life imbalance is also the third predictor of the barriers of women career advancement. Therefore, it is proven that women perceived work-life imbalance as obstacles in their career advancement process. This result is supported by the studies from Lim et al. (2013) and Amaratunga et al. (2008) indicated that working women are having difficulty in devoting their time equally in work and family in order to perform well in both roles. This is because they spend more times in house work then men even though the time devoted to work is equal with men. Long working hours take up their whole day, it is a challenge for working women to balance their multiple commitments.

The findings of the literature from Abdullah et al. (2008); Subramaniam (2011) and Storrie (2012) reveal that lack of flexible working hours is the main cause of the women leaving from the workforce and inhibits women's career aspirations. This can implies that the government and organizations are not doing enough to assist working women. As a result, there is a great loss of women talent due to inflexible work practices. Many organizations still do not facilitate flexi hours and part-time works even though flexibility is a necessity for many women around the middle phase of their career, especially married women with children. This is because flexi working arrangement helps them in balancing work and personal commitments while fulfilling company's needs. Therefore, work-life imbalance was seen as a significant barrier to women being able to advance their career path.

5.2.5 Fifth Result

Research objective 5: To examine the relationship between glass ceiling effect with Malaysian women career advancement.

H5: Glass ceiling effect is significant and positively related to Malaysian women career advancement.

Referred to Table 5.1, it shows the glass ceiling effect has no significant relationship towards career advancement with $p = 0.066$ ($p > 0.05$). The women did not perceive glass ceiling effect exists within their organization and hence, glass ceiling effect is not considered a barrier to Malaysian women career advancement. This result is supported by Amaratunga et al. (2008) indicated that there are some changes to the organizational culture nowadays. The perception of career barrier has changed after the implementation of anti-discrimination, equal opportunity and gender equality

policy in some organizations. This implies that there are higher acceptance of women in leadership roles and recognition of women as leader in every industry.

According to Jacobs (2012), there is no existence of glass ceiling effect in PWC and no specific policy to add women in senior positions as well, just every employee is given equal opportunities whilst majority of the female employees and seniors are female. Narayanan (2013) also stated that IBM has implemented some training programs to groom future women leaders. Their efforts indicate the importance of women in IBM's workforce and retain the female talents. In the study of TalentCorp and ACCA (2013) stated Ernst & Young Malaysia facilitates women career development by providing education, mentoring and networking opportunities to assist women succeed as professionals and leaders. Generally, there are increasing number of organizations exercise culture change and create workforce diversification to encourage women to be more confidence and ambition to climb up the career ladder.

5.3 Implications of the Research

The findings and result of this research provide some implications for the academicians, practitioners and other researchers. The implications can be categorized into theoretical implications and managerial implications.

5.3.1 Theoretical Implications

Many researchers have done the study on the barriers to women career advancement in other countries, there is limited study on this topic in the local context. Thus, this study can be the reference to academicians and researchers to develop a comprehensive model for Malaysian women's career advancement study. This research is based on SCCT in examining the relationship between the determinants of barriers with women's career advancements. Therefore, the academicians and researchers can use SCCT to develop a relevant model on career advancement theory for women. This is because women's career advancement is affected by personal, environment and social factor which caused barriers for women to develop their career. It is important to identify the sources of supports and barriers of women career in order to meet women's career needs, and provide the women with opportunity to increase self-efficacy and outcome expectations.

In addition, this research also provides empirical evidence to further support the determinant of barriers which identified from past studies. Based on the findings on this research, education level, family consideration, organization culture and structure and work-life imbalance are significant and positively related to career advancement. In contrast, glass ceiling effect is not significantly related to career advancement. This result is also supported by the past studies where the women did not perceive glass ceiling effect exists within their organization. Apart from that, the result of this study also shows that education level is the strongest predictor of the barriers of women career advancement. It may be a guideline for future academicians and researchers to conduct more in-depth study on this area.

5.3.1 Managerial Implications

It is important for government and employers to understand the barriers to women career advancement in order to facilitate a favorable environment to attract and retain women in Malaysian workforce. Based on the results of this research, the government and employers can create a family-friendly environment for working women to overcome the barriers faced by them such as:

5.3.1.1 Provide childcare support

Family consideration is one of the biggest challenge faced by the working women nowadays, there is lack of reliable, affordable and accessible childcare center in Malaysia. The employers could facilitate the employees with family by setting up onsite childcare center since it is supported by the government through the 2013 Double Tax Incentives (TalentCorp & ACCA, 2013). Therefore, the working women able to focus on their work while knowing their child is on safe hands. Besides that, the increasing cost of hiring maid is also another issue linked to childcare, the government could solve this matter by reviewing the minimum wages set in this industry and subsidizing the cost of maid.

5.3.1.2 Provide skill training

Education level is the strongest predictor of the barriers to women career advancement. Therefore, the government should organize some short courses such as

computer skill, business skill and technical skill for women who lack of employment qualification. The employers should encourage the women to advance their career into management field by providing training program to develop their leadership skill. Indeed, Malaysia is evolving into knowledge-based economy and there is increasing of higher-value jobs created. Thus, the government and employers should collaborate to deliver some intensive programs as women must be up-skilled to fill up these jobs. (Abdullah et al., 2008).

5.3.1.3 Implement flexible working arrangement

The women also perceive work-life imbalance as the factor of hindering them to progress further and hence the employers should implement flexible working arrangement. It should includes flexi hours where the employee able to adjust her start and finish work time at the required core hours. It also can be remote working where the employee can work from home other in office. Besides that, it also can involve part time employment with entitlement of employee benefit on a pro-rata basis. Flexible working arrangement benefits the employee as it allows employees to balance their work performance and personal life quality more effectively. It also benefits the employer as it is cost saving and improve employee engagement with flexibility at work ("Flexible Work Arrangement," 2013).

5.3.1.4 Provide employees benefits for women

The employers should also increase the maternity leave from 60 days to 90 days and the government should regulate it into employment act (Jacobs, 2012). The employers

are also encouraged to provide other benefits such as nursing room, medical benefit and insurance coverage for female employees. This could enhance employees' loyalty and improve retention rate for female talents as the employer is being more responsive to the working mother's needs.

5.3.1.5 Implement diversity and inclusion policy

Organization culture and structure is the second strongest predictor of the barriers of women career advancement. The organizations should adopt best practices on diversity and inclusion by implementing equal opportunity culture combined with a solid and transparent process for leadership development. For example, ensuring the senior women acts as a role model to juniors, providing specific development program for women to reach leadership roles, encouraging the male leaders to champion gender diversity issues. Additionally, the government should influence organization behavior by introducing the requirement of reporting on gender diversity as part of corporate governance, which same as mandatory reporting on Corporate Social Responsibility (CSR) (TalentCorp & ACCA, 2013).

5.4 Limitations of This Research

There are a few limitations on this research which may affect result of the study. Nevertheless, recommendation will be suggested for the future researchers.

Firstly, the small sample size of 150 is one of the limitations of this study. It is unlikely to be the representative of the whole population of working women in

Malaysia. This research was not cover the whole geographical area in Malaysia which includes East Malaysia. Besides that, the Malay and Indian respondents consists of 27.3% and 20% respectively, majority of the respondents are Chinese. In consequence, the research's result may not represent the defined population of Malaysian women. Moreover, the small sample size also limits the statistical analysis methods applied in data collection. The factoring analysis and Multiple Regression analysis requires a large sample size to produce an accurate result.

Secondly, non-probability of convenience sampling was chosen for data collection by considering the objective of the study, time and budget available. The researcher used subjective methods such as personal experience and convenience to select the elements in the sample. The likelihood of sample being representative is low, the probability of any elements of the population being chosen is also unknown. Consequently, the results of the study were lack of generalizability. It is also often lack of credibility as sampling bias may occur where the selected sample may not truly represent the general population.

Thirdly, this research only measures the effect of five variables- education level, family consideration, organization culture and structure, work-life imbalance and glass ceiling effect that affect the women career advancement in Malaysia. There are other important factors affect women's career advancement which cause from internal personal and external environment such as lack of working experiences, harassment at workplace and lack of career progression opportunities.

Lastly, there is lack of secondary sources for the study of the barriers to women's career advancement in Malaysia's context. Most of the literature reviews in this

research were based on foreign context. It is also hard to gain access to some extensive secondary sources such as Emerald Group Publishing as a high fee is required. Hence, it is a challenge to find related journal in Malaysia's context to support the results of this study.

5.5 Recommendations for Future Research

Based on the limitations mentioned above, some suggestions can be considered by future researchers to produce a more reliable data and in-depth research to examine the barriers to women career advancement.

According to the Roscoe's rule of thumb (as cited in Sekaran et al., 2010), the maximum sample size of 500 is appropriate for most of the research. By enlarging the sample size to 500, the chances of the elements being selected increases and hence, more segments of the population are likely to be represented. The determination of sample size should also depend on the sampling design, types of variables, budget and time available. Besides that, it is recommend having balance respondents among all races, covering wider geographical area across Malaysia and take into consideration on different cultural aspects including lower income earners and less educated women in the rural area for future research. This is important to ensure the generated results able to represent the views from the general population in Malaysia.

Apart from that, it is also recommended to use probability sampling method for data collection such as simple random, systematic and cluster sampling. The probability of the elements are being selected is known and hence, the sample is more representative. It also enables the researcher to make generalization about the population with a specified degree of confidence.

According to the model summary (Table 4.13) from multiple regression analysis, there are 64.1% of the variance in career advancement can be predicted from the determinants of this research, 35.9% could be affected by other factors such as harassment at work, inequality in the workforce, inflexible work arrangements, lack of mentors and lack of working experiences. Future researchers should examine more variables to get better determinants and higher value predicted by the model.

In addition, future research should measure the effect of respondents' demographic profile such as age level and job position on women's career advancement. The future researchers can examine whether any significant difference between responses from respondents of different demographic profile. This will resulted in a better explanation on the characteristic of the sample more comprehensively towards the barriers to women career advancement.

5.6 Conclusion

In conclusion, the results of this study reveal that the barriers such as education level, family consideration, organization culture and structure and work-life imbalance are significant and positively related to women career advancement in Malaysia. Education level is found to have the strongest predictor of the barriers of women career advancement. In contrast, there is not enough evidence to support the positive relationship between glass ceiling effect with women's career advancement. From the theoretical and managerial perspective, understanding the barriers of women career advancement is important to solve the issue of low participation rate of women in Malaysian workforce. The limitations and recommendations have been identified and suggested for future researchers to conduct more in-depth study on similar topic. It is necessary to continue studying on the factors influence on women career advancement as women constitute more than half of the population in Malaysia. Indeed, it is essential to remove the barriers faced by the women in their career path as women have been important contributors to the nation's economic and social development. Today, women are recognized for the knowledge, skills, competence and experience that they bring to corporations. Therefore, this issue has to be seen as a national development policy and embrace through a cultural change across the whole society.

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Appendix A

Research Questionnaire

UNIVERSITI TUNKU ABDUL RAHMAN (UTAR)
FACULTY OF ACCOUNTANCY AND MANAGEMENT (FAM)
MASTER OF BUSINESS ADMINSTRATION

A Study on the Barriers to Malaysian Women Career Advancement

Dear Respondents,

I am a student from University Tunku Abdul Rahman (UTAR), postgraduate of Master of Business Administration (MBA). I am conducting a research project on the topic as stated above and I appreciate your cooperation for completing this survey. The purpose of this survey is to identify the barriers and challenges faced by women in advancing their career life and understand how these barriers could be eliminated or negotiated.

This survey is divided into 2 sections: Section A (Demographic profile) and Section B (General opinion). There are 30 questions in total and may take approximately 15 minutes to complete. Your participation is highly appreciated and much needed for this research purposes.

The questionnaire is anonymous and your responses will be used for this research purpose only. All personal information shall be treated as strictly private and confidential. If there is any enquire about the questionnaire, please do not hesitate to contact me at:

Name	Ler Tche Hui
Student ID	13UKM01769
Contact number	012-3390288
Email address	jervene11@yahoo.com

Section A

Please provide your personal information by placing a tick (✓) in the bracket.

1 Age
- ( ) 21-30 years old
- ( ) 31-40 years old
- ( ) 41-50 years old
- ( ) 51 years old & above

2 Race
- ( ) Malay
- ( ) Chinese
- ( ) Indian
- ( ) Others

3 Marital status
- ( ) Single
- ( ) Married

4 No. of children
- ( ) 0
- ( ) 1
- ( ) 2
- ( ) 3 & above

5 Highest education level
- ( ) SPM
- ( ) Diploma/Certificate
- ( ) Bachelor Degree
- ( ) Master Degree
- ( ) Others, please specify _____

6 Current position

( ) Clerical
( ) Officer/Executive
( ) Senior Executive
( ) Manager
( ) Others, please specify _____

Section B

The following set of statements related to the barriers to women career advancement. Please circle the suitable box to indicate whether you agree or disagree with the statement.

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

Career Advancement	**SD**	**D**	**N**	**A**	**SA**
1. I have insufficient opportunity for career advancement in my company.	1	2	3	4	5
2. Females face some barriers to career advancement in every industry.	1	2	3	4	5
3. There are lesser female leaders than male managers in my company.	1	2	3	4	5
4. Self-improvement in essential for career advancement in related industry.	1	2	3	4	5

Education Level	**SD**	**D**	**N**	**A**	**SA**
5. A woman must have certain requirement of education level in order to get promoted to managerial level	1	2	3	4	5
6. My company has set a specific requirement for education achievement in promoting a woman to managerial role.	1	2	3	4	5
7. High education level indicates higher opportunity for promotion.	1	2	3	4	5
8. Having additional certificates will enhance the chances for promotion.	1	2	3	4	5

Family Consideration	**SD**	**D**	**N**	**A**	**SA**
9. Having the roles of taking care of young children and senior parents are challenges to woman career advancement.	1	2	3	4	5
10. It is difficult to maintain the balance between managing family commitments and job responsibilities.	1	2	3	4	5
11. A woman usually chooses family care than career promotion if there is a need to fulfill family commitment.	1	2	3	4	5
12. My commitment to my family members is a barrier for me to further advance my career.	1	2	3	4	5

Organization Culture and Structure	**SD**	**D**	**N**	**A**	**SA**
13. Women have to work more amount than male colleagues with similar qualifications and position.	1	2	3	4	5
14. Personnel are more likely to respect male manager than female manager.	1	2	3	4	5
15. Your current employer is making lesser effort to assist females to overcome their barriers to career advancements.	1	2	3	4	5
16. Your company believes that the men in management level are more committed than women in management level.	1	2	3	4	5

Work-life Imbalance	**SD**	**D**	**N**	**A**	**SA**
17. There is a challenge for women to balance career and personal life.	1	2	3	4	5
18. My time resources are not equally distributed between the work and home.	1	2	3	4	5
19. Due to job needs, I find it difficult to spend my times with my family sometimes.	1	2	3	4	5
20. There is no or less facility provided by my company to support work-life balance of employees.	1	2	3	4	5

Glass Ceiling Effect

Definition: There is a ‘glass-ceiling’ blocking woman to advance into senior roles.

	SD	D	N	A	SA
21. There are lack of female roles and mentors in my company.	1	2	3	4	5
22. There is a lack of equal career advancement opportunities for women.	1	2	3	4	5
23. Chances for more advancement in women career are lesser when woman are aging.	1	2	3	4	5
24. Women cannot demonstrate their managerial competency because they always been appointed in a junior position.	1	2	3	4	5

Appendix B

Research Statistics Output

Appendix 4.1 Multicollinearity Test

Correlations

		AVG_EL	AVG_FC	AVG_OC	AVG_WL	AVG_GC
AVG_EL	Pearson Correlation	1	.259**	.371**	.377**	.273**
	Sig. (2-tailed)		.001	.000	.000	.001
	N	150	150	150	150	150
AVG_FC	Pearson Correlation	.259**	1	.391**	.500**	.332**
	Sig. (2-tailed)	.001		.000	.000	.000
	N	150	150	150	150	150
AVG_OC	Pearson Correlation	.371**	.391**	1	.414**	.675**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	150	150	150	150	150
AVG_WL	Pearson Correlation	.377**	.500**	.414**	1	.371**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	150	150	150	150	150
AVG_GC	Pearson Correlation	.273**	.332**	.675**	.371**	1
	Sig. (2-tailed)	.001	.000	.000	.000	
	N	150	150	150	150	150

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

Appendix 4.2 Collinearity Statistics

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AVG_EL	.801	1.248
	AVG_FC	.707	1.414
	AVG_OC	.480	2.082
	AVG_WL	.650	1.539
	AVG_GC	.533	1.878

a. Dependent Variable: AVG_CA

Appendix 4.3 Reliability Analysis

a) Career Advancement

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.697	.697	4

Item Statistics

	Mean	Std. Deviation	N
CA_1	3.69	.785	150
CA_2	3.66	.758	150
CA_3	3.71	.824	150
CA_4	3.67	.746	150

b) Education Level

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.706	.706	4

Item Statistics

	Mean	Std. Deviation	N
EL_1	3.63	.807	150
EL_2	3.33	.855	150
EL_3	3.54	.902	150
EL_4	3.99	.723	150

c) Family Consideration

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.653	.651	4

Item Statistics

	Mean	Std. Deviation	N
FC_1	3.21	.957	150
FC_2	3.72	.852	150
FC_3	3.61	.858	150
FC_4	3.09	.904	150

d) Organization Culture and Structure

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.814	.815	4

Item Statistics

	Mean	Std. Deviation	N
OC_1	3.21	.864	150
OC_2	3.04	.940	150
OC_3	3.09	.912	150
OC_4	2.89	.909	150

e) Work-life Imbalance

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.669	.666	4

Item Statistics

	Mean	Std. Deviation	N
WL_1	3.60	.811	150
WL_2	3.49	.857	150
WL_3	3.47	.887	150
WL_4	3.59	.761	150

f) Glass Ceiling Effect

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.821	.822	4

Item Statistics

	Mean	Std. Deviation	N
GC_1	2.76	.953	150
GC_2	2.88	.962	150
GC_3	3.44	1.020	150
GC_4	2.72	.942	150

Appendix 4.4 Factor Analysis

a) Career Advancement

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.735
Bartlett's Test of Sphericity	Approx. Chi-Square	94.499
	df	6
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.097	52.420	52.420	2.097	52.420	52.420
2	.717	17.934	70.354			
3	.640	16.008	86.362			
4	.546	13.638	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component
	1
CA_2	.749
CA_1	.743
CA_3	.733
CA_4	.669

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

b) Education Level

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.674
Bartlett's Test of Sphericity	Approx. Chi-Square	121.608
	df	6
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.141	53.519	53.519	2.141	53.519	53.519
2	.909	22.714	76.233			
3	.512	12.804	89.037			
4	.439	10.963	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component
	1
EL_3	.803
EL_1	.794
EL_4	.676
EL_2	.639

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

c) Family Consideration

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.693
Bartlett's Test of Sphericity	Approx. Chi-Square	78.888
	df	6
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.967	49.172	49.172	1.967	49.172	49.172
2	.835	20.873	70.045			
3	.655	16.366	86.411			
4	.544	13.589	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component
	1
FC_1	.747
FC_4	.743
FC_2	.724
FC_3	.577

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

d) Organization Culture and Structure

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.792
Bartlett's Test of Sphericity	Approx. Chi-Square	194.267
	df	6
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.573	64.327	64.327	2.573	64.327	64.327
2	.568	14.201	78.528			
3	.476	11.912	90.440			
4	.382	9.560	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component
	1
OC_4	.844
OC_2	.800
OC_1	.797
OC_3	.765

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

e) Work-life Imbalance

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.672
Bartlett's Test of Sphericity	Approx. Chi-Square	92.547
	df	6
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.015	50.368	50.368	2.015	50.368	50.368
2	.783	19.579	69.947			
3	.755	18.885	88.832			
4	.447	11.168	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component
	1
WL_2	.818
WL_3	.740
WL_1	.652
WL_4	.611

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

f) Glass Ceiling Effect

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.763
Bartlett's Test of Sphericity	Approx. Chi-Square	214.676
	df	6
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.612	65.306	65.306	2.612	65.306	65.306
2	.586	14.658	79.963			
3	.497	12.424	92.387			
4	.305	7.613	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component
	1
GC_2	.855
GC_4	.835
GC_1	.776
GC_3	.763

Extraction Method: Principal Component Analysis.

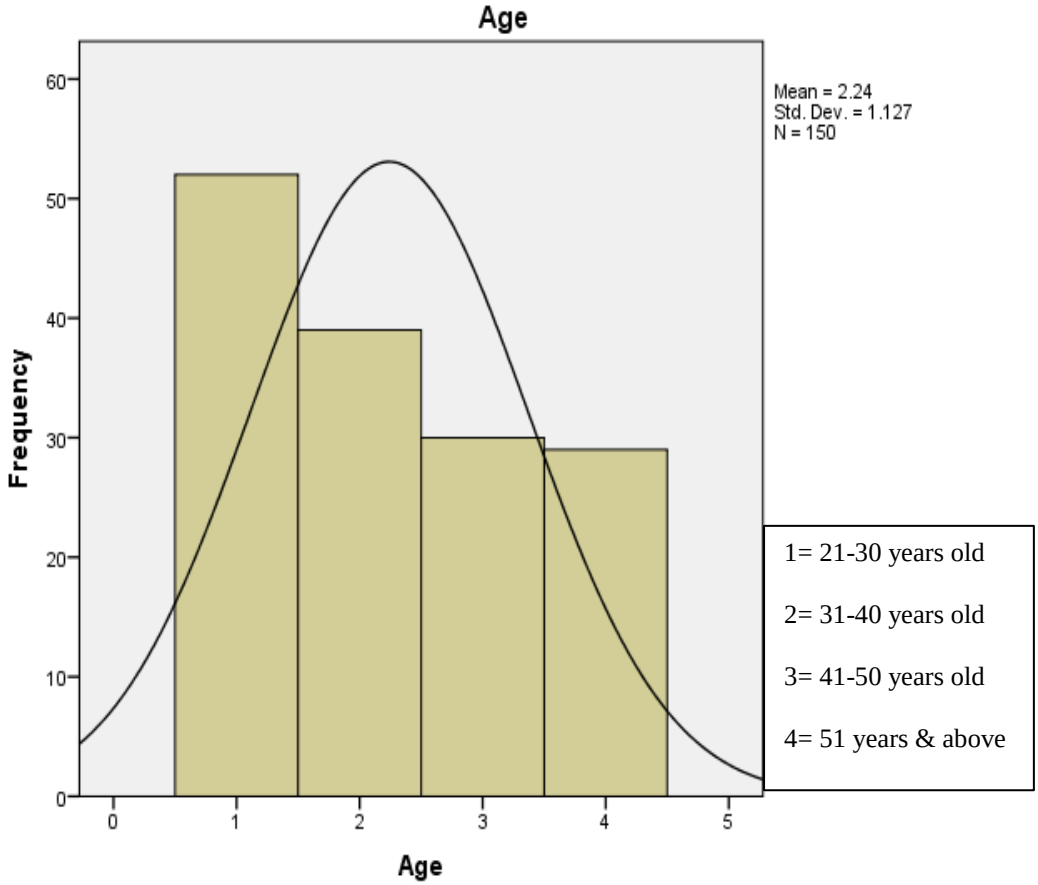
a. 1 components extracted.

Appendix 4.5 Descriptive Statistics

a) Age

Age

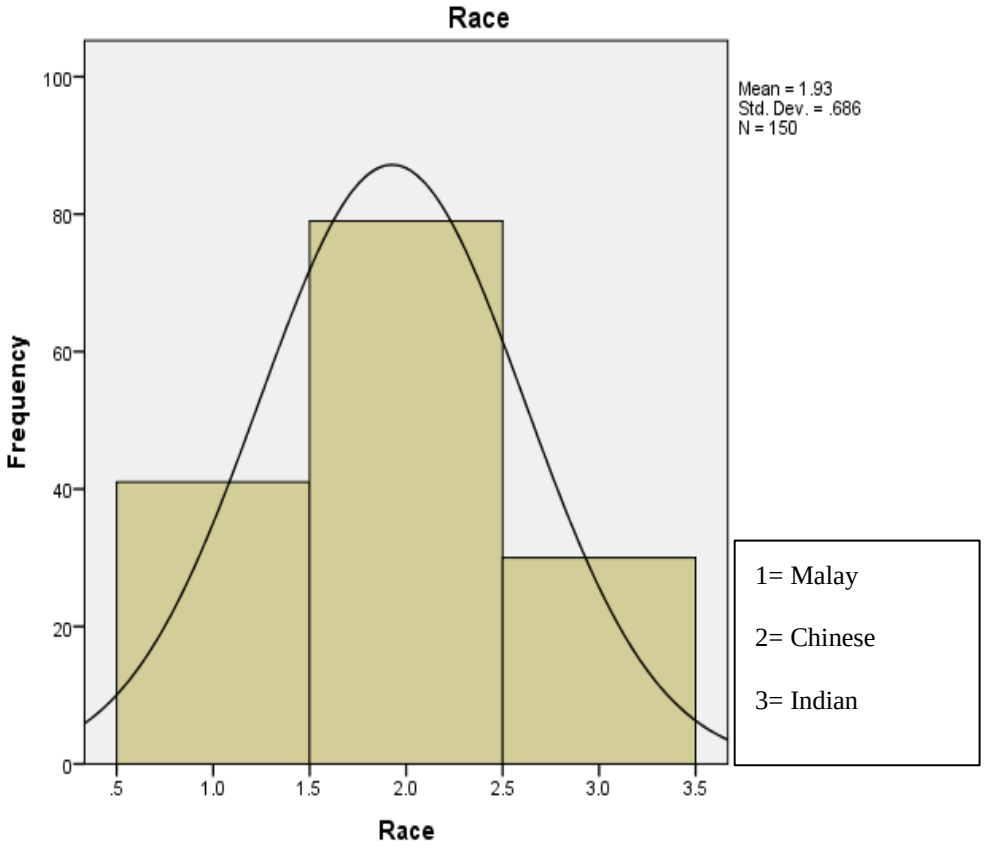
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21-30 years old	52	34.7	34.7	34.7
	31-40 years old	39	26.0	26.0	60.7
	41-50 years old	30	20.0	20.0	80.7
	51 years old & above	29	19.3	19.3	100.0
	Total	150	100.0	100.0	



b) Race

Race

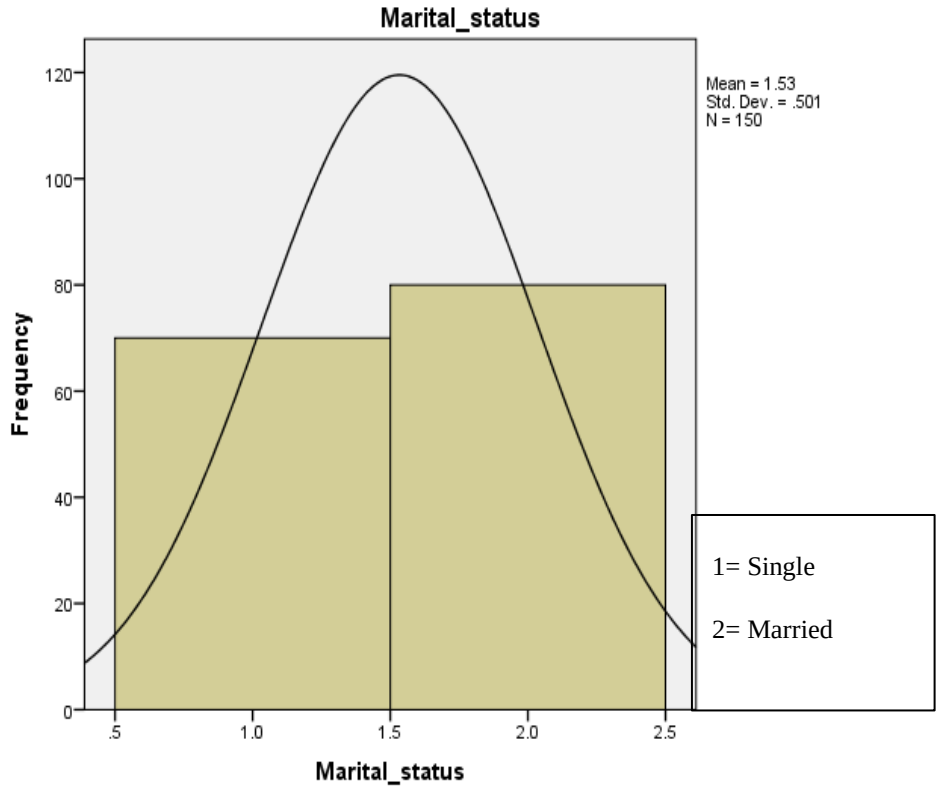
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malay	41	27.3	27.3	27.3
	Chinese	79	52.7	52.7	80.0
	Indian	30	20.0	20.0	100.0
	Total	150	100.0	100.0	



c) Marital status

Marital_status

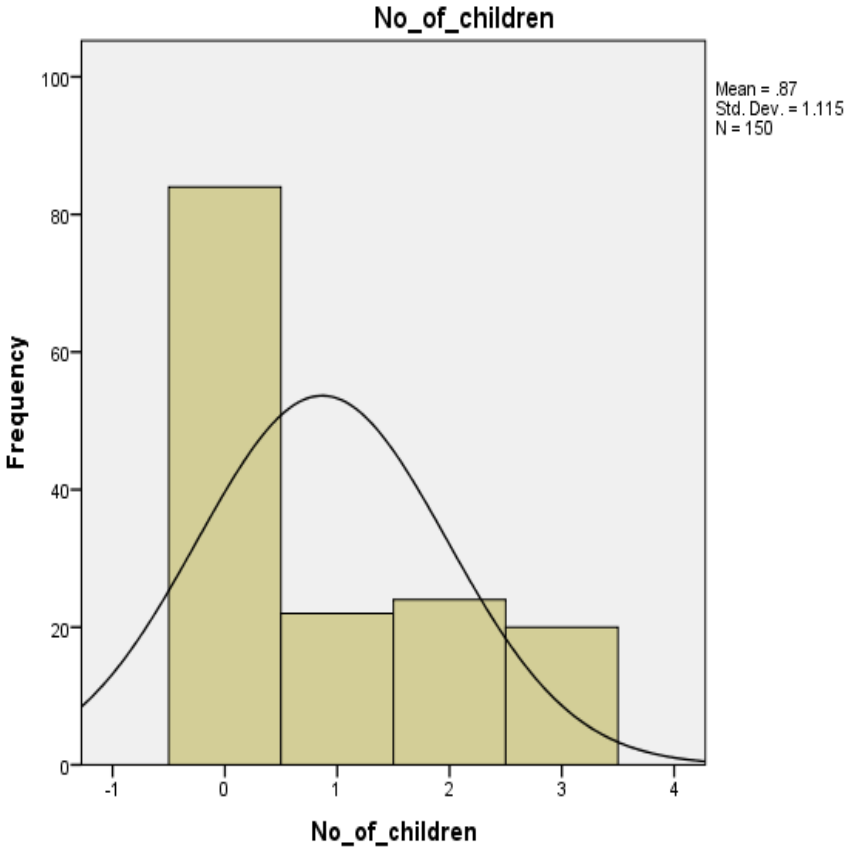
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	70	46.7	46.7	46.7
	Married	80	53.3	53.3	100.0
	Total	150	100.0	100.0	



d) No. of children

No_of_children

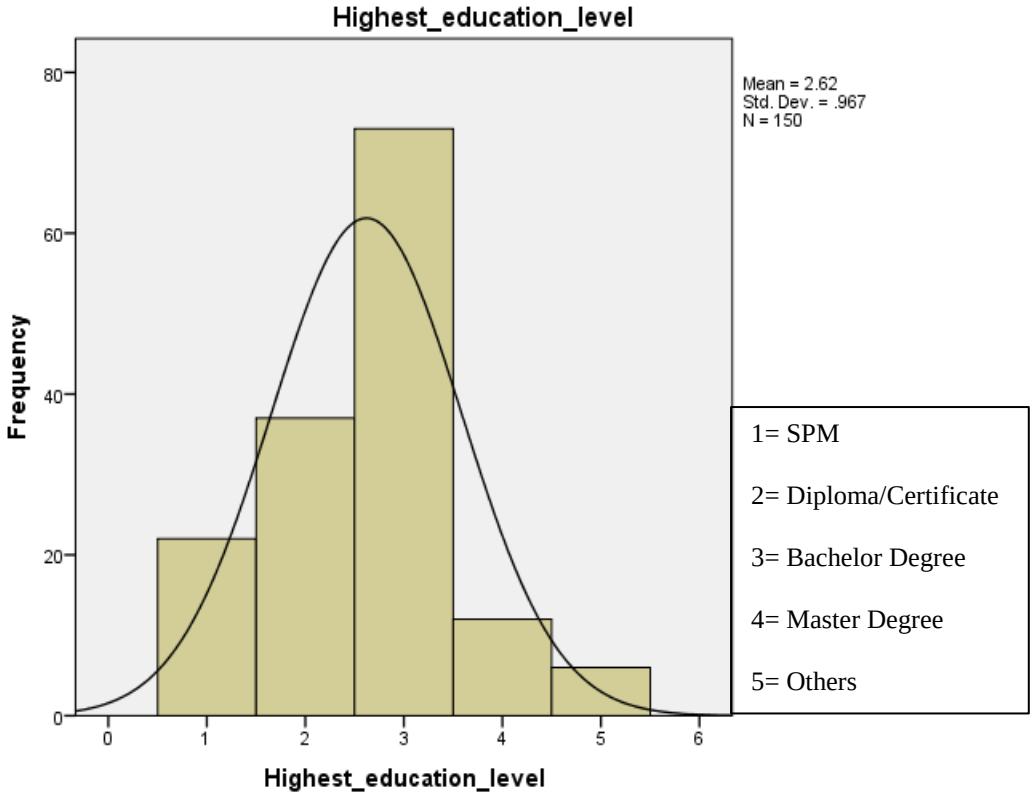
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	84	56.0	56.0	56.0
	1	22	14.7	14.7	70.7
	2	24	16.0	16.0	86.7
	3 & above	20	13.3	13.3	100.0
	Total	150	100.0	100.0	



e) Highest education level

Highest_education_level

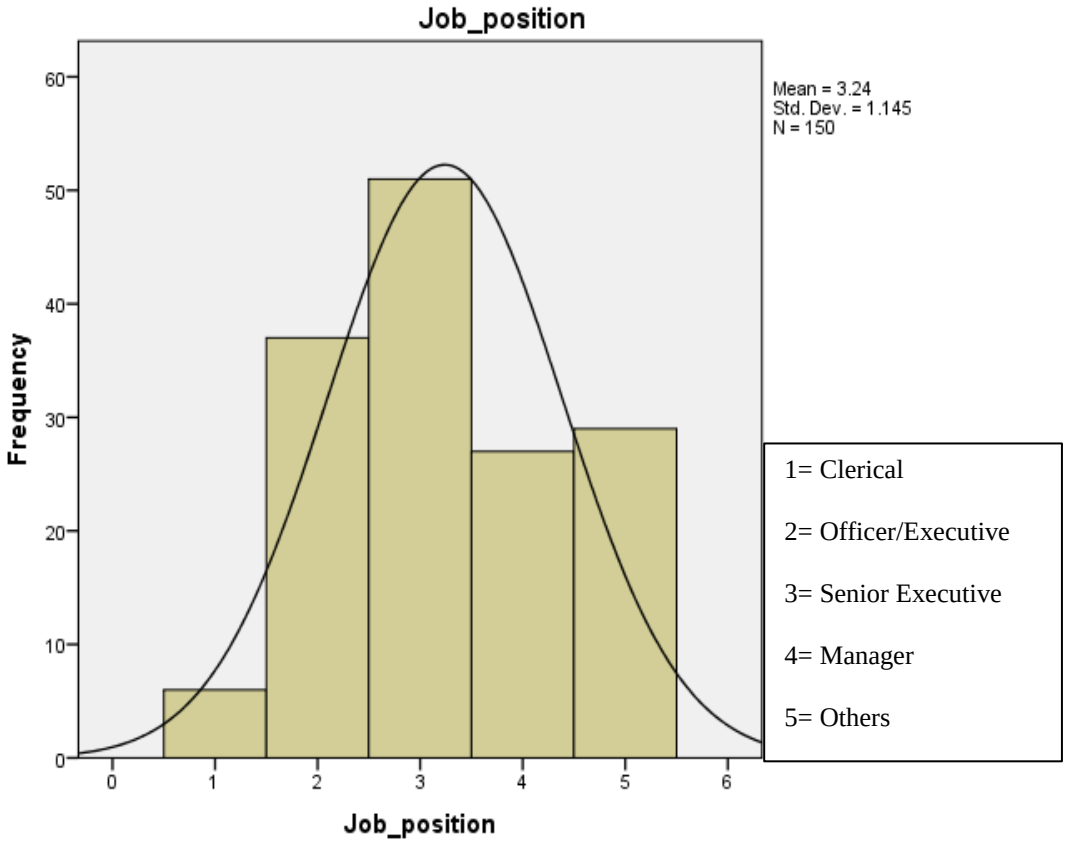
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SPM	22	14.7	14.7	14.7
	Diploma/Certificate	37	24.7	24.7	39.3
	Bachelor Degree	73	48.7	48.7	88.0
	Master Degree	12	8.0	8.0	96.0
	Others	6	4.0	4.0	100.0
	Total	150	100.0	100.0	



f) Job position level

Job_position

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Clerical	6	4.0	4.0	4.0
	Officer/Executive	37	24.7	24.7	28.7
	Senior Executive	51	34.0	34.0	62.7
	Manager	27	18.0	18.0	80.7
	Others	29	19.3	19.3	100.0
	Total	150	100.0	100.0	



Appendix 4.6 Central Tendencies for Career Advancement

Statistics

		CA_1	CA_2	CA_3	CA_4
N	Valid	150	150	150	150
	Missing	0	0	0	0
Mean		3.69	3.66	3.71	3.67
Median		4	4	4	4
Mode		4	4	4	4
Std. Deviation		0.785	0.758	0.824	0.746
Variance		0.617	0.575	0.678	0.557
Skewness		-0.746	-0.464	-0.575	-0.269
Kurtosis		1.12	0.007	0.661	-0.118
Minimum		1	2	1	2
Maximum		5	5	5	5
Percentiles	25	3	3	3	3
	50	4	4	4	4
	75	4	4	4	4

Appendix 4.7 Central Tendencies for Education Level

Statistics

		EL_1	EL_2	EL_3	EL_4
N	Valid	150	150	150	150
	Missing	0	0	0	0
Mean		3.63	3.33	3.54	3.99
Median		4	3	4	4
Mode		4	4	4	4
Std. Deviation		0.807	0.855	0.902	0.723
Variance		0.652	0.731	0.814	0.523
Skewness		-0.381	-0.359	-0.621	-0.735
Kurtosis		0.129	-0.389	0.113	1.014
Minimum		1	1	1	2
Maximum		5	5	5	5
Percentiles	25	3	3	3	4
	50	4	3	4	4
	75	4	4	4	4

Appendix 4.8 Central Tendencies for Family Consideration

		FC_1	FC_2	FC_3	FC_4
N	Valid	150	150	150	150
	Missing	0	0	0	0
Mean		3.21	3.72	3.61	3.09
Median		3.00	4.00	4.00	3.00
Mode		3[a]	4	4	3
Std. Deviation		.957	.852	.858	.904
Variance		.917	.726	.735	.818
Kurtosis		-0.191	0.719	-0.623	-0.175
Skewness		-0.426	-0.811	-0.067	-0.393
Minimum		1	1	2	1
Maximum		5	5	5	5

Appendix 4.9 Central Tendencies for Organization Culture and Structure

Statistics

		OC_1	OC_2	OC_3	OC_4
N	Valid	150	150	150	150
	Missing	0	0	0	0
Mean		3.21	3.04	3.09	2.89
Median		3.00	3.00	3.00	3.00
Mode		4	3	4	3
Std. Deviation		.864	.940	.912	.909
Variance		.746	.884	.831	.826
Kurtosis		-0.283	-0.592	-0.632	-0.304
Skewness		-0.619	-0.080	-0.335	-0.045
Minimum		1	1	1	1
Maximum		5	5	5	5

Appendix 4.10 Central Tendencies for Work-life Imbalance

Statistics

		WL_1	WL_2	WL_3	WL_4
N	Valid	150	150	150	150
	Missing	0	0	0	0
Mean		3.60	3.49	3.47	3.59
Median		4.00	4.00	4.00	4.00
Mode		4	4	4	4
Std. Deviation		.811	.857	.887	.761
Variance		.658	.735	.787	.578
Kurtosis		1.584	0.588	0.522	-0.165
Skewness		-1.056	-0.671	-0.774	-0.367
Minimum		1	1	1	2
Maximum		5	5	5	5

Appendix 4.11 Central Tendencies for Glass Ceiling Effect

Statistics

		GC_1	GC_2	GC_3	GC_4
N	Valid	150	150	150	150
	Missing	0	0	0	0
Mean		2.76	2.88	3.44	2.72
Median		3.00	3.00	4.00	3.00
Mode		2	2	4	2
Std. Deviation		.953	.962	1.020	.942
Variance		.908	.925	1.040	.888
Kurtosis		-0.702	-0.641	-0.474	-0.991
Skewness		0.311	0.198	-0.547	0.149
Minimum		1	1	1	1
Maximum		5	5	5	5

Appendix 4.12 Pearson Correlation Matrix

Correlations

		AVG_CA	AVG_EL	AVG_FC	AVG_OC	AVG_WL	AVG_GC
AVG_CA	Pearson Correlation	1	.604**	.506**	.618**	.578**	.524**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	150	150	150	150	150	150
AVG_EL	Pearson Correlation	.604**	1	.259**	.371**	.377**	.273**
	Sig. (2-tailed)	.000		.001	.000	.000	.001
	N	150	150	150	150	150	150
AVG_FC	Pearson Correlation	.506**	.259**	1	.391**	.500**	.332**
	Sig. (2-tailed)	.000	.001		.000	.000	.000
	N	150	150	150	150	150	150
AVG_OC	Pearson Correlation	.618**	.371**	.391**	1	.414**	.675**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	150	150	150	150	150	150
AVG_WL	Pearson Correlation	.578**	.377**	.500**	.414**	1	.371**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	150	150	150	150	150	150
AVG_GC	Pearson Correlation	.524**	.273**	.332**	.675**	.371**	1
	Sig. (2-tailed)	.000	.001	.000	.000	.000	
	N	150	150	150	150	150	150

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

Appendix 4.13 Multiple Regression Analysis (ENTER METHOD)

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.801[a]	.641	.629	.34350

a. Predictors: (Constant), AVG_GC, AVG_EL, AVG_FC, AVG_WL, AVG_OC

b. Dependent Variable: AVG_CA

ANOVA[a]

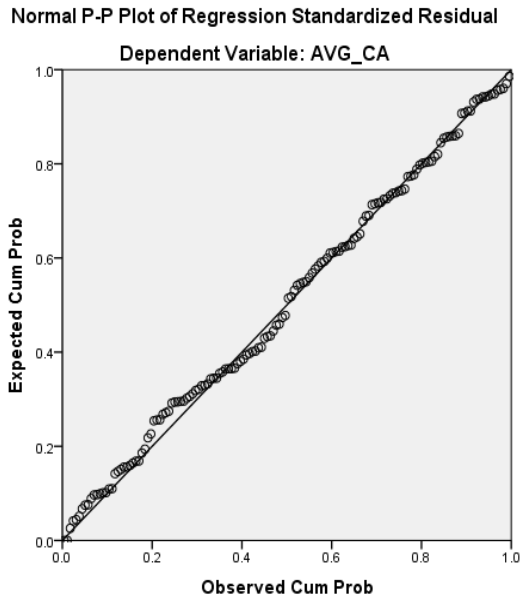
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.343	5	6.069	51.433	.000[b]
	Residual	16.991	144	.118		
	Total	47.333	149			

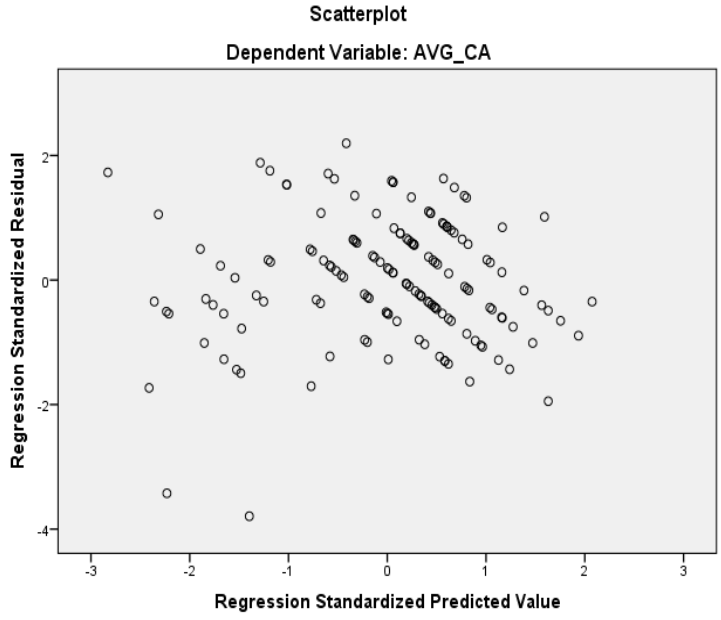
a. Dependent Variable: AVG_CA

b. Predictors: (Constant), AVG_GC, AVG_EL, AVG_FC, AVG_WL, AVG_OC

Model	Unstandardized Coefficients		Standar-dized Co-efficiens	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.389	.218		1.782	.077		
AVG_EL	.333	.052	.355	6.367	.000	.801	1.248
AVG_FC	.154	.053	.170	2.870	.005	.707	1.414
AVG_OC	.191	.056	.247	3.425	.001	.480	2.082
AVG_WL	.201	.059	.210	3.392	.001	.650	1.539
AVG_GC	.091	.049	.127	1.850	.066	.533	1.878

a. Dependent Variable: AVG_CA


Normal P-P Plot of Regression Standardized Residual
Dependent Variable: AVG_CA
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0


Scatterplot
Dependent Variable: AVG_CA
Regression Standardized Residual
Regression Standardized Predicted Value
2
0
-2
-4
-3
-2
-1
0
1
2
3