



## Challenges to Break Corporate Glass Ceiling: What Malaysian IT Women Employees Perceive?

**Jaya Malini Perumal,**

Network Engineering Adviser, Dell Global Business Center, Malaysia

**Omkar Dastane**

Senior Lecturer cum Head - Center for Postgraduate Studies,  
School of Accounting and Business Management, FTMS Global, Malaysia

### **Abstract:**

*Malaysian women workforce has been undergoing crisis where the number of female employees become thinner as they climb up the corporate ladder especially in IT sector (TalentCorp, 2013). In conjunction with this, the objective of this research is set to identify the perceived cultural challenges faced by women employees to progress in their career in IT sector in Malaysia. Five highly mentioned challenges were selected from literature review and cultural models to be investigated. Cultural stereotype (Hofstede, 2010), gender inequality (Hofstede, 2010), low self-esteem (Instone & Bunker, 1983), gender gap in mentoring (Universal Integrated Framework, 2007) and family-work life conflict (Voydanoff, 2005) are the challenges investigated in this study which are also defined as the independent variables of this research whereas, career progress plays a role as the dependent variable. Quantitative research method along with the positivist research paradigm is adopted and questionnaire is used as an instrument to collect data among 140 female employees from a leading private IT MNC organizations located in Cyberjaya, Malaysia. Data analysis is conducted using Statistical Package for Social Sciences (SPSS) software version 21. The key result of this paper has met the objective of this study where all the independent variables seem to have a significant relationship with the career progress of women employees. Perceived cultural challenges from most impacting to least impacting are as followed: Gender gap in mentoring, Low self-esteem, Gender inequality, Family work life conflict and followed by cultural stereotype*

**Keywords:** *Cultural stereotype, Gender inequality, glass ceiling, wage-gap, mentoring gap, family-work conflict, women leadership, career progress*

### **1. Introduction**

Malaysian workforce has been undergoing a significant change and this has resulted in huge leadership transformation where the roles and status of Malaysian women have also gone through a revolution (UNDP, 2003). As stated the report, education and career opportunities have made Malaysian women today as well educated, developed and be a part of the top management in many sectors like private and public and even political decision making process in the building and developing of the nation. However, women in Malaysia are not showing up in career world though they make up half of our country's population and more than 60 % of local university enrolment (TalentCorp, 2013). Even if they turn up in labour force participation, as we move up the corporate ladder, the number of women shrinks. Therefore, the main aim of the research is to identify the perceived cultural challenges faced by women in IT industry to reach up to the higher management position in Malaysia. Many policies and initiatives have been undertaken in Malaysia, but closing the gap remains a challenge for many organizations.

Many researches have been conducted in many other countries concerning women participation in workforce and also senior management positions. Research was done in Brazil, explores on the causes of women being underrepresented in senior management and law and corporate governance involved (Alexandre & Angela, 2014). Most of the empirical research on the male-female wage gap concludes that the pay difference is largely related to the fact that women are less likely found in higher paying jobs than men (Blau and Ferber, 1987; Cain, 1986). It's been argued that women faced glass ceilings within the organizations that prevent women from advancement to higher job levels (Win Henriette, 1996). One of the study which looks at the distribution of men and women with regards to the job level, concludes that women have to meet tougher promotion criteria than men (Jones & Makepeace, 1996). However there were very less studies done in Malaysia which investigates the gender barrier on women in corporate world. Among the minimal number of researches done in Malaysia, a study was conducted on leadership effectiveness of Malaysian managers focusing on the effect of gender (Moey, 2008). There was no study done focusing on what are the barriers or glass ceiling of Malaysian women which preventing them from progressing in corporate world especially reaching the top level. A similar study was conducted among women in United States and the findings suggest that 50% of the women leaders perceive barriers that prevent women entering management position (Dean et al., 2009).

This research topic is essential to be carried out because low presence of women in senior level in corporate world especially in IT sector is proven statistically. Based on the survey conducted by TalentCorp-PwC (2013) among the public listed companies, only 8.6% women make up to the board level, 24% of women in top management position and the rest are employed by male in respective category. In the era of globalization, economic liberation, fast growing ICT and cyber community, gender imbalance in the ICT industry is existence. (Allen et al, 2004; Aynsley, 2015; Blickle et al, 2009; Boeing, 2013). The idea as ICT is a male dominated industry characterized by masculine language and modes of operation is evident from the literature (Crittenden, 2001; Ferrario, 1994; Glover, 2007; Gregory, 2003). Proposition of women in the IT related job are relatively low and even if there are, they decide to leave because they feel marginalized and isolated (Eilee, 2006). Women are under-utilized and this is a biggest challenge for Malaysia labor force. There are high numbers of talented women stand ready to use their professional expertise in career life but at the same time they are dramatically underrepresented in positions of leadership in this country.

Research questions corresponding to the objectives are does cultural stereotype influences women's career progression? Does gender inequality influences women's career progression? Does family work conflict influences women's career progression? Does gender gap influences women's career progression? Does cultural stereotype influences women's career progression?

## 2. Literature Review

Dean et al (2009) carried on a study with the objective to discover the roles of women in leadership positions and test the connection between leadership styles of women to wards organizational effectiveness. Research findings from this study concludes that, women are surveyed to face obstacles which prevents them from entering management positions. The common barriers surveyed are biasness in selection process, workplace relationship, family-life demands, globalization and relocation and life-cycle conflicts. It is cited in many articles that, there is link between barriers such as discrimination, family-life demands, prejudice and stereotyping and women's advancement to top management in the workplace were statistically significant, confirming prior expectations and complementing previous studies (Baker, 2003; Helfat, et al., 2006; Hewlett, 2002; Wellington, et al., 2003). Win Groot (1996) carried on a study to analyze the glass ceiling or dead end of job promotions among men and women. Conclusion of the study was, employers don't select women for jobs that offer advancement. Researches indicate that, women have less opportunity for promotion in an organization than men. Distribution of men and women with regards to job level shows that, women have to face tough promotion criteria then men.

Juliet (2007) conducted a study in United Kingdom with the objective of examining the independent variable which is the challenges of diversity in the Information and communication technology (ICT) sector, with particular focus on women, older workers and migrant workers. Similar observation was made in Malaysia with regard to Korean expats (Dastane & Lee, 2016). There is a growing need for skilled employees in ICT sector which is a pushing factor for diversity in ICT. Despite achieving well in mathematics, science, and technology subjects at school, women do not go on to enter ICT work in large numbers. Research concludes that women and girls have little awareness of the potential variety of ICT work, particularly its applied aspects (Valenduc et al 2004; Webster 2006). Juliet (2007) suggests that equality has not been sufficient for women in workplace, neither numerically or in seniority. Women seem to be not quick enough accepting and respond to the challenges offered by the employers. A handful of studies has been carried out in Malaysia in relates to gender, leadership and management. Some among those studies have been reviewed in this thesis to be a guideline. Noor (2012) carried out a survey in Malaysia from management sector and the objective was to investigate the representation rate of Malaysian women in management and analyze the underlying obstacles in their career progress. Conclusion from this studies shows that, lack of organizational political awareness among women is the major barrier preventing women from succeeding in corporate life. A study in Zimbabwe was conducted by Alice (2013); the Research objective is to discourse on the impact of culture and gender on women in management and leadership positions. Research has shown that gender is one of the important criteria that determined an employee's position at the work place (Adler, 1994, Priola, 2004).

### 2.1. Critical Review of Theories

Organization is mainly driven by human capital which functions as an engine that drives the organizational functions. When an organization progresses forward, proposition of people grew and it requires theme to manage and run other factors of production. This means that individuals are likely to be drawn from different 'sources' such as geographical, social cultural and political. They also perceived to have inevitable differences in ethnicity, religion, race, gender, size, personalities, physical abilities, age, and sexual

orientation (Mazur, 2010). Diversity management has been defined as “enabling every member of work force to perform to his or her potential” (Thomas, 1990). Mismanaged diversity can cause obstacle for organization’s progress and therefore diversity is perceived as “double-edge sword” (Storey, S, 2014). According to Dastane and Watson (2015) diversity elements gender and ethnicity has a significant positive impact on employees’ satisfaction. According to Hofstede (1980), there are many cultural related issues which hold back women from participating in top management and these issues are closely related to view of the society on a female and male. The term “glass ceiling” is a term originally coined by Hymowitz & Schellhardt (1986) refers to the invisible barrier preventing women from ascending into top corporate leadership positions.

Many studies highlight that having both family and career can affect women’s performance and career growth (Voydanoff, 2004). There are many organizations who are reluctant to employ or sustain working mothers (Gatrell, 2005). Mothers are perceived to be less performing and less motivated due to their family obligations (Voydanoff, 2004). Due to this they receive less promotion, opportunity and less pay (Keene and Reynolds, 2005). House hold and other care related commitments such as child care, cleaning service and day care has been found as being even more sex-based with women doing the majority (Bennetts, 2007). Working women basically have to juggle roles between a mother, housewives, home-makers and managers at work. This become a great challenge for them to balance their role and progress at work and also manages the family with minimum family-work conflict (Clark, 2000). Handling family-work conflict is very difficult for women with young children especially when they try to balance their role as the primary caregiver at family and with additional responsibility at work (Lopez- Claros and Zahidi, 2005).

Research on career mentoring by Ragins and Cotton (1999) may be another element to be looked at when comes to women’s career path and progress and argument is that gender is a consideration in adult-adult mentoring relationships because females, as a group, have less power and confront more sexism than males and, consequently, female mentees might be perceived as needing more protection than male mentees. Studies and research on gender differences in career mentoring are very few. Nonetheless, several studies have shown that male mentors tend to provide more instrumental and technical career support, whereas female mentorships are more often characterized by a greater degree of emotional support (Ragins and cotton, 1999). Self-esteem of women plays a high role in her career progression and promotion especially in male dominated filed like science and technology. Low self-esteem can severely limit the performance of a women and her career development. Unstable self-esteem can cause women to look fragile, vulnerable feelings of immediate self-worth that are influenced by perceived self-relevant events that are either externally provided such as compliment or insult (Kernis et al. 1989).

Women are underestimated as less talented to lead and this is what known as Gender Stereotype. In other words, stereotypes refer to thoughts about a social group; which may not correspond to reality (Matlin, 2008). Women in our society are commonly nurturing, likeable, affectionate, soft-spoken, warm, selfless, gentle and compassionate rather ambitious, aggressive, dominant, strong, individualistic and independent (Butler, 1976). Therefore, according to the stereotype, the characteristics of women are opposite to what is required to be a leader (Klenke, 1996). This further is supported by Koenig et al. (2011) meta-analysis of the "think managers, think male", the association also revealed some factors that moderated the strength of the diversity. In addition, Robertson et al. (2011) highlighted that in all areas, the male character was favored over the female character for both options. This type of perception causes women to be marginalized when come to promotion and appraisal.

## 2.2. Conceptual Framework

Based on the literature reviewed, a new conceptual model has been formed to support this research on this matter. The challenges then classified into two groups where the external factors related to the organization and management system and internal factors refers to the individual and their surroundings.

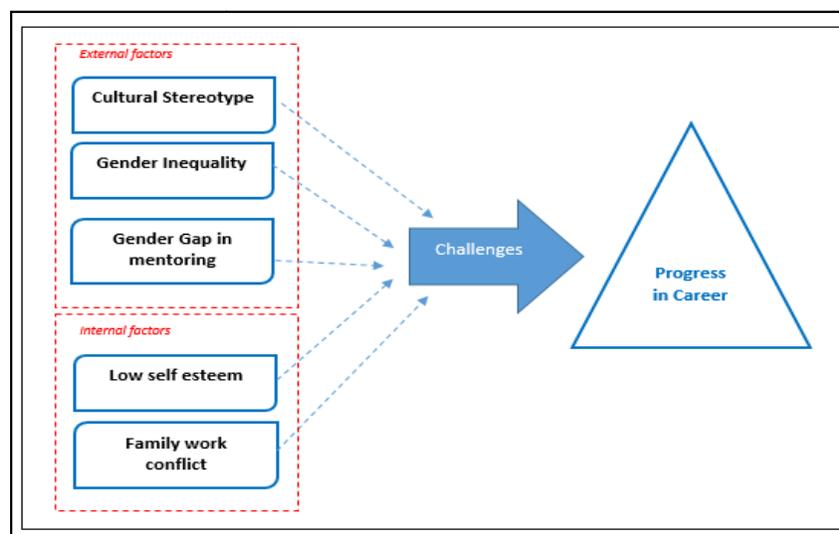


Figure 1: Proposed Conceptual framework

- H1: Cultural stereotype has a direct relationship and significant impact on women’s career progression.
- H2: Gender inequality has a direct relationship and significant impacts on women’s career progression.
- H3: Family work conflict has a direct relationship and significant impacts on women’s career progression.
- H4: Low self-esteem among women has a direct relationship and significant impacts on women’s career progression.
- H5: Gender gap in mentoring has a direct relationship and significant impact on women’s career progression.

**3. Methodology**

This explanatory research undertakes quantitative primary data collection technique. Data is collected through self-administered questionnaire method. 150 potential female employees (respondents) selected using convenience sampling were approached and physical questionnaire was distributed to them. The data collected from questionnaire distribution, is analyzed using Statistical Package for Social Sciences (SPSS) software 21. The analysis techniques involve descriptive analysis, frequency analysis and correlation analysis.

<b>Sample size</b>	140 female from IT corporate industry (irrespective of race, religion, age and marital status)
<b>Population</b>	Overall female employees in IT sector in Malaysia.
<b>Sampling technique</b>	Convenience sampling
<b>Reason for sample size</b>	140 female employee is a manageable size of sample compared to the number of total female employees in the organization. Female employees from managerial and non-managerial group were carefully selected for questionnaire distribution.

*Table 1: Sampling details*

**4. Results of the Study**

*4.1. Descriptive Analysis*

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
<b>Mean_Gender_Inequality</b>	140	2.2	3	2.6029	0.19636	0.064	0.205	-0.241	0.407
<b>Mean_Mentoring_gap</b>	140	4.2	4.6	4.4171	0.13027	-0.086	0.205	-0.624	0.407
<b>Mean_Family_conflict</b>	140	1.8	4.2	2.3657	0.64727	2.306	0.205	3.971	0.407
<b>Mean_Self_Esteem</b>	140	3.8	4	3.9029	0.10032	-0.058	0.205	-2.026	0.407
<b>Mean_Stereotype</b>	140	1.8	4.2	3.2857	0.98774	-0.318	0.205	-1.765	0.407
<b>Mean_Progress</b>	140	2.4	3.4	3.1029	0.31416	-0.987	0.205	0.004	0.407
<b>Valid N (listwise)</b>	140								

*Table 2: Descriptive Statistics*

For this research, descriptive statistic is used to analyze the MEAN and STANDARD DEVIATION of the data involved. Mean value is the most appropriate value to use to make comparison. Among the five independent variable impacting women’s career progress, the mean value of mentoring-gap\_MEAN is the highest value (MEAN= 4.42| std.Dev=0.13) among all. This means that, women in IT sector feels that they need more closer mentoring to be able to perform better in their job and further progress themselves. The Second highest mean value is scored by the Stereotype\_MEAN (MEAN= 4.31| std.Dev=0.18). It shows that many employee’s do second the perception that stereotype is visible in their environment. The third highest value is, self-esteem (MEAN= 3.90| std.Dev=0.10), majority of the staffs are having low self-esteem thus not able to push themselves to deliver an outstanding performance so that they get promoted to next level. For the other remaining variables it follows the sequence as below, Family\_Conflict\_MEAN (MEAN= 2.63| std.Dev=0.18) and lastly Gender\_Inequality\_MEAN (MEAN= 2.50| std.Dev=0.10). MEAN value is the most suitable to measure the ration value of a set of data to represent which variables has the most and least preferable among the data set (Thompson, 2009).

#### 4.2. Frequency Analysis

Frequency analysis was done based on the participant demographics data collected among 140 female respondents. Age, Race, Job Position or designation, Marital Status, Number of kids, Education level and Experience in IT industry are the demographic details which were successfully collected. Table below presents the frequencies of each category respectively.

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21-30	78	55.7	55.7	55.7
	31-40	43	30.7	30.7	86.4
	41-above	19	13.6	13.6	100.0
	Total	140	100.0	100.0	
Marital Status					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	62	64.3	64.3	64.3
	Married	76	35.7	35.7	100.0
	Divorcee	2	1.4	1.4	100.0
	Total	140	100.0	100.0	
Num Kids					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	86	61.4	61.4	61.4
	1	18	12.9	12.9	74.3
	2	29	20.7	20.7	95.0
	3	7	5.0	5.0	100.00
	Total	140	100.0	100.0	
Job Position					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Analyst	54	38.6	38.6	38.6
	Sr.Analyst	35	25.0	25.0	63.6
	Advisor	18	12.9	12.9	76.4
	Sr.Advisor	15	10.7	10.7	87.1
	Manager I, II	18	12.9	12.9	100.0
	Total	140	100.0	100.0	
Education level					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Diploma	20	14.3	14.3	14.3
	Degree	94	67.1	67.1	81.4
	Masters or Higher	26	18.6	18.6	100.0
	Total	140	100.0	100.0	
IT Experience					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 5years	53	37.9	37.9	37.9
	5-10 years	60	42.9	42.9	80.7
	>10years	27	19.3	19.3	100.0
	Total	140	100.0	100.0	

Table 3: Frequency by Age

Out of 140 respondents, 55.7% of them were from age group of 21-30 which includes the fresh graduates and collage leavers, where as 30.7% are from middle age group where most of them are married and with family commitments. Lastly, 13.6% of them are from 41 years and above. This pattern supports the perception that, as the age group increases, the number of female employees in IT sector seems to be lesser. As displayed in above table, 44.3% of respondents are single, 54.3% are married with family commitments and 1.4% of them are divorcee who can be single mothers with or without kids. Anyhow, majority of the respondents are those having family commitments. 61.4% are ladies with no children, rest of the 38.6% of them have 1 to 3 kids or more. The result of the study shows both women with or without kids have the same perception when comes to challenges in IT industry because women are the main care takers of family members even if they do not have children.

Majority of the women employee in IT sector are educated and holds a professional degree, and only 14.3% of them are educated up till diploma level and 18.6% are master's degree holder or higher. This shows that, although women are equally educated as men, the perceived cultural challenges defined in the objective of this study do exist among them. Frequency analysis done based on the IT experience among the female employee's shows that 19.3% females have more than 10 years of experience in IT sector, 42.9% of them have more than 5 years of IT experience, and 37.9% who have less than 5 years of experience. Even this statistics support the perception that, as years passes female employees do move out of IT industry due to many reasons. This research is to identify if the reason for them to leave could be the challenges highlighted in the objective of this studies

#### 4.3. Correlation Analysis

The table below shows the correlation analysis result generated on all the variables to determine Pearson's Correlation coefficients with 2-tailed signification test. Career progression of women in IT industry is challenged by Independent variables like Stereotype (Stereotype\_MEAN), Gender inequality (Gender\_Inequality\_MEAN), Gender gap in mentoring (Mentor\_Gap\_MEAN), Family-work life conflict (Family\_Conflict\_MEAN) and low self-esteem (Self\_Esteem\_MEAN). The correlation values show the influences of the above mentioned independent variables against the single dependent variable which is the career progress (Progress\_MEAN). The result of correlation coefficients values are presented in table below. Jackson, S. (2009) defines a scale which can be used as guidance to interpretation of coefficient correlation values and its strength.

Correlations							
		Stereotype _MEAN	Gender_I nequality _MEAN	Mentor_ MEAN	Self_Estee m_MEAN	Family_ MEAN	Progress_ MEAN
Stereotype_M EAN	Pearson Correlat ion	1	.382**	.295**	-.382**	.623**	-.582**
	Sig. (2- tailed)		.000	.000	.000	.000	.000
	N	140	140	140	140	140	140
Gender_Inequ ality_MEAN	Pearson Correlat ion	.382**	1	.927**	-1.000	-.664**	-.758**
	Sig. (2- tailed)	.000		.000	.000	.000	.000
	N	140	140	140	140	140	140
Mentor_MEA N	Pearson Correlat ion	.295**	.927**	1	-.927**	-.518**	-.702**
	Sig. (2- tailed)	.000	.000		.000	.000	.000
	N	140	140	140	140	140	140
Self_Esteem_ MEAN	Pearson Correlat ion	-.382**	-.1.000	.927**	1	-.664**	.758**
	Sig. (2- tailed)	.000	.000	.000		.000	.000
	N	140	140	140	140	140	140
Family_MEA N	Pearson Correlat ion	.623**	.664**	.518**	-.664	1	-.831**
	Sig. (2- tailed)	.000	.000	.000	.000		.000
	N	140	140	140	140	140	140
Progress_ME AN	Pearson Correlat ion	.582**	-.758**	-.702**	.758**	.831**	1
	Sig. (2- tailed)	.000	.000	.000	.000	.000	
	N	140	140	140	140	140	140

Table 4: Pearson's Correlation coefficients

The relationship between random variables cannot be explained or represented in an equality. Normally, there is various tendencies for variables to either track each other or move in opposite directions (Janke and Tinsley, 2005). The leanings may somehow be linear and the values of the correlation coefficient ( $r$ ) ranges from -1 (negative linear) to 1 (positive linear). For random variables X and Y, correlation coefficient range is between  $-1 \leq r \leq 1$ . Significant (2-tailed) values generated tell us if there is a statistically significant correlation between the two selected variables. For this study, the Sig(2-Tailed) value is 0.01, which means if the result is smaller than 0.01, then there is a significant relationship (correlation) between the two variables and vice versa. Apart from that, the value N represents the number of samples or populations involved in a study.

- H1: Cultural stereotype has a direct relationship and significant impact on women's career progression.

As per the correlation coefficient values generated from SPSS software with the data collected for this study, Cultural stereotype against women represented by variable, Stereotype has a correlation coefficient score of ,  $r = -0.582$  and significant (2-tailed) which is the  $p$  value of 0.000. The values measures three main characteristic of the relationship between the variable cultural stereotype and career progress

*If the relationship is statistically significant linear relationship: Yes*  
*Strength of the linear relationship:  $r = -0.582$*   
*The direction of the linear relationship: **negative linear relationship***

Correlation coefficient scale cited by Jackson (2009) supports that, there is statistical evidence proves that there is a negative linear relationship between cultural stereotypes against women's career progress. The correlation between these two variable is significant because the  $p$  value = 0.000 is < than 0.01. Correlation coefficient  $r = -0.582$ , indicates a moderate strength correlation but corresponds to a decreasing relationship. With this we can conclude that, people's perception of the higher the cultural stereotype, the lower the career progress among the female employee's in the organization can be accepted. As supported by the literature, gender-based stereotypes are the typical barriers preventing women from moving up to senior position (Oakley, 2000). This links well to the objective of this study which is to test if cultural stereotype against women exists in IT sectors in organization in Malaysia. There for, hypothesis number one (**H1**) is accepted in these studies.

- H2: Gender inequality has a direct relationship and significant impacts on women's career progression.

The next hypothesis to be tested in this study is the relationship of Gender inequality against the career progress of women in IT sector. As a result from the collected data, correlation coefficient generated by SPSS for the variable Gender inequality against career progress is,  $r = -0.758$  and significant (2-tailed) value of,  $p = 0.000$ .

*If the relationship is statistically significant linear relationship: Yes*  
*Strength of the linear relationship:  $r = -0.758$*   
*The direction of the linear relationship: **negative linear relationship***

Based on the scale cited in Jackson (2009), correlation coefficient value of,  $r = -0.758$  shows there is a strong linear relationship between gender inequality and career progress of women and  $p$  value = 0.00 (<0.001) indicates there is a significant relationship between the variables. The negative sign shows that the relation is in reverse logic, where when the influences of gender inequality are high, the career progress will decrease. Some authors support that discrimination in hiring process occurs where employers assign women to lower-paying jobs delineated as "women's work" (GREGORY, 2003). Gender discrimination laws apply to both men and women equally but women are often the victim (Gregory, 2003). Although there are many laws and acts in Malaysia to safeguard women's rights when rights comes to women's employment, maternity protection and social protection, the act of unfair treatment against women is still visible. SUHAKAM is a body which monitors the implementation of "Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)." SUHAKAM has requested to government to amend the article 8 (2) the federal constitution of domestic laws in Malaysia to insert CEDAW as a part of it (SUHAKAM, 2010). Numerous authors have cited and supported the existence of gender inequality at work place work and this is conjunction with one of the objective of this study to determine if gender inequality is a barrier for women to progress in their career. Thus, hypothesis two (**H2**), is accepted in this research study.

- H3: Family work conflict has a direct relationship and significant impacts on women's career progression.

The third hypothesis of this research is to determine if family work life conflict does play a role as a barrier in women's career progress. The correlation coefficient value generated by SPSS statistic tool for family work life conflict is,  $r = -0.702$  and significant (2-tailed) value is  $p = 0.000$ .

*If the relationship is statistically significant linear relationship: Yes*  
*Strength of the linear relationship:  $r = - 0.702$*   
*The direction of the linear relationship: **negative linear relationship***

The correlation coefficient value for this variable of family work life conflict against career progress is strongly linear relationship and significant because the  $p$  value is below 0.05. These variables have a reverse relationship and there for the  $r$  value is negative. This seconds the perception that when family work life conflict increases among female employees, it impacts their career progress and there for the progress decreases. Many authors have cited that, women faces more family work life conflict compared to men because in an orthodox view women are expected to be the care taker of the household and childcare. Hardship falls greater upon the single mothers because for them they do not have an option to share the responsibilities or the burden with their partner. Most of the women struggle managing time between work and family commitments and it leads them to overlook at either one of it. Pregnancy discrimination is another phenomenon occurs at some organization where pregnant women are treated less favorably. Females lose their chances to grow in career when they are in companies which doesn't practice maternity protection laws and perceive women employee as entity which causes extra cost such as paid maternity leave. Dopson (1996), found out from a survey that long working hours is a key factor of success in IT industries. Staying late in the office can be effective weapon for career success but female employees unable to fulfill this criteria due to family commitments. Mothers are perceived to be less motivated due to their family obligation (Voydanoff, 2004) and they are forced to choose between career and motherhood. This differs a little for childless women because they do not have the immediate family pressure. There for, based on the literature and the objective of this study, hypothesis number 3 (**H3**), is rational to be accepted.

- H4: Low self-esteem among women has a direct relationship and significant impacts on women's career progression.

The 4th hypothesis is to test the relationship between variables self-esteem against career progress and the correlation coefficient value recorded is  $r = 0.758$  and the significant (2-tailed) value of  $p = 0.000$ .

*If the relationship is statistically significant linear relationship: Yes*  
*Strength of the linear relationship:  $r = 0.758$*   
*The direction of the linear relationship: **Positive linear relationship***

The correlation coefficient value of 0.758 indicates strong linear relationship and the relationship is significant because the  $p$  value is smaller than 0.05. Unlike other variables, self-esteem variables have a positive correlation sign, which means it's a positive linear relationship. It means, when the self-esteem among the female employees increases, the career progress will also have hike and vice versa. From the research conducted, the result positively support the perception that low self-esteem among female employees is been a preventive factors for women to excel in their career life. 75.8 % of the women respondent agree that they have low self-esteem although they are highly talented in their job. As for some cases, women are very passionate and confident about their job function but they are often criticized as over confident or being too bossy or dominant. These criticism pulls their confident level down thus demotivated them. Women aspiration level drop by half after a short period of time in duty especially for those are in IT sector because majority of the co-workers are men. These findings are in line with the objective of this study, which is to survey if low self-esteem exists within women in IT industry and there for, hypothesis number 4 (**H4**) is sensible to be accepted in this studies. Perception of low self-esteem is seems to be a challenge for women in IT sector.

- H5: Gender gap in mentoring has a direct relationship and significant impact on women's career progression.

The final hypothesis is to test the relationship between gender gap in mentoring against women's career progress. From the data collected, the correlation coefficient value seems to be  $r = -0.831$  and significant (2-tailed) is  $p = 0.000$ .

*If the relationship is statistically significant linear relationship: Yes*  
*Strength of the linear relationship:  $r = - 0.831$*   
*The direction of the linear relationship: **negative linear relationship***

Again this is a negative linear relationship, which means when gender gap issue arises in mentoring among female employees; the career progress among female employees will be relatively slower. The correlation coefficient value of  $r = -0.831$  is pretty strong and the relationship is also significant because the  $p$  value is lesser than 0.005. Further adding to the evidence, being a female employee they expect for comfortable and conforming to gender expectations in providing support to mentees. Since the number of women's employees in IT sector decreases as they climb the corporate ladder (*as supported by the literature*), there are less senior mentees available to train the female new joiners. Less females in technology sector is not something new. As supported by the data collected from the questionnaire distribution, cross-gender mentoring is currently not happening or happening in very low rate among the employees at the moment. Thus, gender gap in mentoring is proven to be a perceived issue faced by the female employees in IT sector. There for, the last hypothesis (**H5**) is also accepted.

Correlations							
		Stereotype_MEAN	Gender_Inequality_MEAN	Mentor_MEAN	Self_Esteem_MEAN	Family_MEAN	Progress_MEAN
Stereotype_MEAN	Pearson Correlation	1	.382**	.295**	-.382*	.623**	-.582**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	140	140	140	140	140	140
Gender_Inequality_MEAN	Pearson Correlation	.382**	1	.927**	-1.000	-.664**	-.758**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	140	140	140	140	140	140
Mentor_MEAN	Pearson Correlation	.295**	.927**	1	-.927**	-.518**	-.702**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	140	140	140	140	140	140
Self_Esteem_MEAN	Pearson Correlation	-.382**	-1.000	.927**	1	-.664**	.758**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	140	140	140	140	140	140
Family_MEAN	Pearson Correlation	.623**	.664**	.518**	-.664	1	-.831**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	140	140	140	140	140	140
Progress_MEAN	Pearson Correlation	.582**	-.758**	-.702**	.758**	.831**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	140	140	140	140	140	140

Table 5: Pearson's Correlation coefficient (Additional Findings)

Apart from the objective of the research, there are a few new correlation coefficient relationship were identified from the data analysis of this thesis (as marked in the above table).

(1) And (4)  $r=0.295$ ; There is a weak and significant (positive) relationship between family-work conflict and stereotype. Low stereotype will result low family-work life conflict which is an acceptable fact. To further discuss on this, in a situation where women are not stereotyped or not underrepresented, there will be more equal treatment. There for, family conflicts are less likely to be happened and women have more space to focus and perform on their career progress.

(2) And (3)  $r=0.927$ ; There is a strong and significant (positive) relationship between family-work conflict and gender inequality. Which can be presume that family-work life conflict increases, it impacts the gender inequality treat as well and vice versa. These two factors are highly correlates which each other. Perception exists that, unequal treatment towards women will be a reason for more family conflicts and there for, work become unmanageable for most of the women.

(5) And (6)  $r= -0.927$ ; There is a strong and significant (negative) relationship between self-esteem and family-work conflict. This correlation make sense, because when family-work life conflict increases, the self-esteem of women will be impacted negatively and vice versa. Women who have high self-esteem and confident will be able to perform well in their career

progress and know how to manage between family and work wisely. This is the key to avoid conflict between family and work life.

As a summary of the correlation coefficient data analysis done in this study, all the independent variables correlates well with the objective of the study and have a significant relationship against the dependent variable. There for all the five hypotheses are tested and accepted there for the objective of the study is achieved precisely.

Item	Hypotheses	Correlation (r)	Sig (2-tailed)	Strength	Outcome
H <sub>1</sub>	Cultural stereotype has a direct relationship and significant impact on women's career progression.	- 0.582	0.000	Moderate Relationship	<u>Objective Achieved</u>
H <sub>2</sub>	Gender inequality has a direct relationship and significant impacts on women's career progression.	- 0.758	0.000	strong Relationship	<u>Objective Achieved</u>
H <sub>3</sub>	Family work conflict has a direct relationship and significant impacts on women's career progression.	- 0.702	0.000	strong Relationship	<u>Objective Achieved</u>
H <sub>4</sub>	Low self-esteem among women has a direct relationship and significant impacts on women's career progression.	0.758	0.000	strong Relationship	<u>Objective Achieved</u>
H <sub>5</sub>	Gender gap in mentoring has a direct relationship and significant impact on women's career progression.	- 0.831	0.000	strong Relationship	<u>Objective Achieved</u>

Table 6: Summary result after testing the hypotheses

## 5. Conclusion

In conjunction with the objectives, the five most common perceived challenges were identified and the result shows that gender gap in mentoring is the most common impact among Malaysian women, followed by low self-esteem, gender inequality, family work life conflict and least was cultural stereotyping against women. All the perceived challenges are resulted to be having impacts on women career's progress at certain level or strength. As an overall conclusion from this research, the entire five hypotheses (H1-5) are accepted and met the objective of the research conducted with their respective strength. All the five tested challenges are statically proven that each factor have direct relationship to women's career progression rate in IT industry in Malaysia. Thus, all the five research questions defined in chapter 1 has been successfully answered. To further improve the current concerns in women labor force in IT sector in Malaysia, the government should absorb law and guideline like this to further enhance the current employment regulation which has for women in our country. In other countries like United States of America, special association called WOMEN BUREAU by U.S Department of Labor has established and monitor major laws and guidelines to protect women employment discrimination.

## 6. References

- i. Adler, N. J., Doktor, R., and Redding, S.G. (1986). From the Atlantic to the Pacific: cross cultural management reviewed, Yearly review of Management of the Journal of Management, 12(2), pp. 295 – 318.
- ii. Alice Zinyemba, A. (2013). Impact of Culture and Gender on Women Managers in the Hospitality and Financial Services in Zimbabwe. International Journal of Advanced Research in Management and Social Sciences, 2(5).
- iii. Allen, T.D., Eby, L.T., Poteet, M. L., Lentz, E. & Lima, L. (2004). Career Benefits Associated With Mentoring for Proteges: A Meta-Analysis. Journal of Applied Psychology, 89, pp. 127-136
- iv. Avellar, S., & Smock, P. J. (2003). Has the price of motherhood declined over time? A cross-cohort comparison of the motherhood wage penalty. Journal of Marriage and Family, 65, pp. 597-607.
- v. Aynsley, B. (2015). The Promise of Diversity. Gender Equality in The ICT Profession. [online] Available at: [http://acs.org.au/\\_data/assets/pdf\\_file/0003/87681/ACS-Gender-Equality-FINAL.pdf](http://acs.org.au/_data/assets/pdf_file/0003/87681/ACS-Gender-Equality-FINAL.pdf) [Accessed 18 Jan. 2016].
- vi. Baker, J. (2003). Glass ceiling or sticky floors? A model of high-income law graduates. Journal of Labor Research, 24(4), pp. 695-711.
- vii. Bennetts, L (2007). The feminine mistake: Are we giving up too much? Neew York, NY Voice.
- viii. Blau, F. and M. Ferber, (1987). The economics of men, women and work (Prentice-Hall, Englewood Cliffs).
- ix. Blicke, G., Witzki, A.H. & Schneider, P.B. (2009). Mentoring support and power: a three year predictive field study on protégé networking and career success. Journal of Vocational Behavior, 74, pp. 181-189
- x. Boeing, M. (2013). Analysis of cultural differences and their effects on marketing products in the United States of America and Germany. Hamburg: Anchor Academic Pub.
- xi. Cain, G. (1986), The economic analysis of labor market discrimination: A survey, in: O. Ashenfelter and R. Layard, eds., Handbook of labor economics, vol. I (North-Holland, Amsterdam), pp. 693-785
- xii. Clark, S., 2000. Work/family border theory: A New Theory of Work/Family Balance, Human Relations, 53 (6), pp. 747-770.
- xiii. Crittenden, A. (2001). The price of motherhood. New York: Henry Holt. Cummings, L.L., (Eds.), Research in organizational behavior. CT: JAI Press, Greenwich

- xiv. da Silveira, Alexandre Di Miceli and Donaggio, Angela Rita Franco and Sica, Lúgia Paula Pires Pinto and Ramos, Luciana de Oliveira. (2014). Women's Participation in Senior Management Positions: Gender Social Relations, Law and Corporate Governance (Available at SSRN: <https://ssrn.com/abstract=2508929> or <http://dx.doi.org/10.2139/ssrn.2508929>)
- xv. Dastane, Omkar and Lee, Woo Yong Willis. (2016), "Korean Expatriates Adjustments and Job Satisfaction in Malaysia: Analysis of Corporate Cultural Asymmetry", *International Journal of Industrial Distribution & Business*, 7(4), 33-45
- xvi. Dastane, Omkar and Eshegbe, Josiah Watson. (2015), "Effect of Diversity Elements at Workplace: An Empirical Study", *International Journal of Accounting and Business Management*, 3(1), pp. 1-15.
- xvii. Dean Elmuti, D. and Heather Jia, H. (2009). Challenges Women Face in Leadership Positions and Organizational Effectiveness: An Investigation. 8(2).
- xviii. Deardorff, M. and Dahl, J. (2015). Pregnancy discrimination and the American worker. Dissertation, University of Oregon, Eugene.
- xix. Dopson, S. (1996). Muddle in the middle: Organizational restructuring and middle management careers.
- xx. Gatrell, C. (2005). Hard labor. The sociology of parenthood, family life and career.
- xxi. Geert Hofstede, (2010). Gert Jan Hofstede, Michael Minkov, Cultures and Organizations: Software of the Mind. 3rd Edition, McGraw-Hill USA, 2010
- xxii. Glover, J. (2007). Effective Recruitment Strategies and Practices: Addressing Skills Needs & Gender Diversity Challenges in ITEC and Related Sectors, London, Portia-Equalitec.
- xxiii. Gregory, R. (2003). Women and Workplace Discrimination: Overcoming Barriers to Gender Equality. Rutgers University Press.
- xxiv. Hewlett, S. A. (2002). Executive women and the myth of having it all. April 2002. Harvard Business Review, 44, pp. 34-41.
- xxv. HEWLETT, Sylvia Ann. 2002. Executive Women and the Myth of having it all. Harvard Business Review.
- xxvi. Hofstede, G. (2006). What did GLOBE really measure? Researchers' minds versus respondents' minds. *Journal of International Business Studies*, 37, pp. 882-96.
- xxvii. Hymowitz, C., & Schellhardt, T. D. (1986). The glass ceiling: Why women can't seem to break the invisible barrier that blocks them from the top jobs. *The Wall Street Journal*, D4– D5.
- xxviii. Instone, D., Major, B., & Bunker, B. B. (1983). Gender, self-confidence, and social influence strategies: An organizational simulation. *Journal of Personality and Social Psychology*, 44(2), pp. 322-333.
- xxix. Jackson, S. (2009). *Statistics Plain and Simple*. 2nd ed. p.228.
- xxx. Janke, S. and Tinsley, F. (2005). *Introduction to linear models and statistical inference*. Hoboken, NJ: Wiley.
- xxxi. Jones, D. and G. Makepeace, 1996, Equal worth, equal opportunities: Pay and promotion in an internal labor market, *Economic Journal*, 106, pp. 401-409.
- xxxii. Juliet Webster, D. (2007). Challenges and Issues for Social Dialogue. *Diversity Management in the ICT Industry*.
- xxxiii. Keene-Reid, J. and J. Reynolds, 2005. Gender Differences in the Job Consequences of Work-to-Family Spillover. *Journal of Family Issues*, 26(3), pp. 275-299.
- xxxiv. Kenee, J.R., & Reynolds, J.R (2005). The jobs of family demands: gender differences in negative family-work spill over.
- xxxv. Kernis, M. H., Grannemann, B. D., & Mathis, L. C. (1991). Stability of self-esteem as a moderator of the relation between level of self-esteem and depression. *Journal of Personality and Social Psychology*, 61, pp. 80 – 84
- xxxvi. Klenke, K. (1996). *Women and Leadership: A Contextual Perspective*. New York: Springer Publishing.
- xxxvii. Springer Publishing.
- xxxviii. Koenig, A. M., Eagly, A. H., Mitchell, A. A., & Ristikari, T. (2011). Are leader stereotypes masculine? A meta-analysis of three research paradigms. *Psychological Bulletin*, 137, 616 – 642. doi:10.1037/a0023557
- xxxix. Lopez-Claros, A. and A. Zahidi, 2005. Women's Empowerment: Measuring the Global Gender Gap, World Economic Forum, Geneva
- xl. Matlin, M.W. (2008). *The psychology of Women*. CA, Thomson Wadsworth
- xli. Ministry of Women and Family Development and UNDP, The progress of Malaysian women since independence 1957- 2000 [online]: <http://www.undp.org/content/dam/malaysia/docs/WomenE/ProgressOfMalaysianWomen.pdf>
- xlii. Noor Rahamah Hj, A. (2012). Malaysian women in management. *Malaysia Journal of Society and Space*, 8(4).
- xliii. Oakley, J. G. (2000). Gender-based barriers to senior management positions: Understanding the scarcity of female CEOs. *Journal of Business Ethics*, 27, pgs :321-334.
- xliv. Priola. V. (2004). Gender and Feminine identities – women as managers in a UK academic institution, *Women in Management Review* Vol 19, No. 8: pp. 421-430,
- xlv. Emerald Group Publishing Limited. Ragins, B. R. & Cotton, J. L. (1999) Mentor Functions and Outcomes: A Comparison of Men and Women in Formal and Informal Mentoring Relationships. *Journal of Applied Psychology*, 84 (4), pp. 529-550.
- xlvi. TalentCorp-PwC. (2013). Engaging and Developing Female Leaders. *Diversity in the Workplace survey 2013*.
- xlvii. Thompson, C. B., (2009), *Descriptive Data Analysis*. Air Medical Journal, 28(2), p.56-59.
- xlviii. Trauth, E. (2006). *Encyclopedia of gender and information technology*. Hershey, PA: Idea Group Reference.
- xliv. Valenduc, G., Vendramin, P. and WWW-ICT partners (2004) *Widening Women's Work in Information and Communication Technology*, Synthesis report, Namur, Webster, J. (1997) *Shaping Women's Work: Gender, Employment and InformationTechnology*, London, Longman.

- i. Voydanoff, P (2005). Work demands and work-to-family and family-to-work conflict: Direct and indirect relationship. *Journal of Family issues*, 13(2), pp 11-16
- ii. Webster, J. (1997). *Shaping Women's Work: Gender, Employment and Information Technology*, London, Longman.
- iii. Webster, J. (2006) *Widening of Employment Opportunities in ITEC: Professional Advancement through ITEC Skills*, London, Portia-Equalitec.
- iiii. Wellington, S., Kropf, M., & Gerkovich, P. (2003). What's holding women back. *Harvard Business Review*, (81), pp. 18-19.
- lv. Wim Groot, W. (1996). Glass ceiling or dead ends. *Job promotion of men and women compared*, 53.
- lvi. Y.C.MOEY (2008). *Leadership Effectiveness of Malaysian Managers: MALAYSIA*.