

THE BARRIERS AND CHALLENGES OF WOMEN'S INVOLVEMENT IN THE CONSTRUCTION INDUSTRY WITHIN KLANG VALLEY AREA

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ABSTRACT

Construction industry has been viewed as a “*male only image*” industry and is associated with the need of physical strength, adjustments to harsh outdoor working conditions and oppressive dialects. Fortunately, throughout the years, women are seen to be involved in construction industry. However, women involved in construction industry still face barriers and challenges. The objectives of this research are to examine the ideal characteristics and attributes of women involved in the construction industry, to identify the major barriers and challenges faced by women involved in the construction industry and to recommend company policies which can be adopt to enhance women involvement in construction industry. The methodology adopted to carry out this research was quantitative method via questionnaire survey. Convenience sampling was used, whereby respondents who have experienced in construction industry were randomly selected. The results concluded that the top three ideal characteristics and attributes of women involved in construction industry are to show self-confidence, while remaining the feminine characteristics, research and alliance. For barriers, the major barriers are private life demands, family commitment, work environment, sexual harassment and flexible working hour. Lastly, it can be concluded that major challenges come from women's support system and the women itself. Additionally, three recommended policies were identified namely working hour, welfare and outstation. It is hope that this research paper will provide useful information on future to all parties involved especially women in construction industry as well.

Keywords: Barriers, Challenges, Company Policy, Construction Industry, Woman

INTRODUCTION

In the past, women are seen to have one primary role in a community, which is to carry out domestic household and child-rearing duties. However, as time goes by, this belief is breaking down due to education and cultural globalisation. Women have gone through changes in terms of their personal and professional lives. Construction industry has been viewed as a male-only image industry.

The industry itself is associated with the need of having physical strength, adjustment to harsh outdoor working conditions as well as oppressive dialects. Due to the male-only image and characteristic of the industry, the value of women to be involved in the construction industry has been undermined and are seen to be the wrong gender for construction occupation (Aulin & Jingmond, 1999). Fortunately, throughout the years, the industry has seen a significant change. The change can be reflected as there has been a moderate growth in women's involvement in the industry.

In Malaysia, the involvement of women in construction has gained acknowledgement thus a non-profit organisation called "Women in Construction Industry Malaysia (WIBM)" was formed on 30th January 2015. However, women still face barriers and challenges in attempting to progress in construction industry. A study on women's career advancement in Malaysia for manufacturing firm (Yet-Mee, Peng, & Yin-Fah, 2013) stated that career women faces more barriers and challenges compared to men.

PROBLEM STATEMENT

In Malaysia, by the year 2000, there have been a rising trend in women working. The increase of women in labour force has increased from 44.7% in year 1995 to 52.4% in year 2013. During that time, women have also been engaged in occupations traditionally occupied by men; construction. With this increase, there is also likelihood for women to be exposed to sexual harassment. The frequency of occurrences of such incidences have been found to range between 35% and 53% (Ismail, Lee, & Chan, 2007).

A study on women's career advancement in Malaysia for manufacturing firm (Yet-Mee, Peng, & Yin-Fah, 2013) revealed that career women faces more barriers and challenges compared to men due to work-life balance issue, mentoring support, networking and training. Although the factors stated are only applied to manufacturing firm, it may also be applied to construction industry as those factors are focus on women and their career. Additionally, women in the construction industry also faces barriers such as sex discrimination, sexual

harassment and stereotyped assumptions on the women's capabilities (National Women's Law Center, 2014).

Additionally, women and their emotion during decision making might also be a barrier and a challenge for women to be retain in the construction industry. Indeed controlling emotion at workplace is a skill that is quite hard to grasp and utilize especially for women. Thus, these barriers and challenges led to the moderate growth of women's involvement in construction industry as well as attempting to progress and stay in the construction industry.

LITERATURE REVIEW

Construction industry is characterized by crisis, aggression and conflict, gallant behaviour and traditional attitudes (Othman & Jaafar, 2013). Construction industry has a wide problem with its 'image', which makes both men and especially women hesitant or uninterested in the industry. Perception and image of construction industry are still rooted in the past. Its image is still associated with bricklaying, deeming it to be dangerous and physically demanding and macho, regardless of the positive image which have be campaigning over the years.

In Malaysia, by the year 2000, there have been a rising trend in women working. The increase of women in labour force has increased from 44.7% in year 1995 to 52.4% in year 2013. In Malaysia, the involvement of women in construction has gained acknowledgement thus a non-profit organisation called "Women in Construction Industry Malaysia (WIBM)" was formed on 30th January 2015, after a group of ten (10) women forwarded their proposal to the Deputy Minister of Work on women in construction issues. This non-profit organisation encourages women to pursue, establish and sustain successful careers and business in the construction industry. According to several studies, the involvement of women in construction are due to influenced from parents, family and friends, motivated by financial gains, job satisfaction and passion in the work they do, good career opportunities and high employment offered by construction industry.

However, women still face barriers and challenges in attempting to progress and retain in construction industry. According to several studies, nineteen (19) barriers and seven (7) challenges have been identified. These barriers and challenges comes from several factors – the women herself, support system, private life demands, company recruitment practices, opportunities to develop practical skill, attitude of co-workers, work environment etc.

Fontinelle (2013) pointed out that the common explanations on why women do not hold or are not qualified for advanced positions are because of lack of commitment, lack of ambition or leaving work to care for family. Thus, to attract and retain top female talent, company should invest or make effort in the area of talent development by implementing policy related to it in company's or employment contract. Examples of company policies which could be implemented includes – Work Life Balance (reduced work week, flexible work hours,

teleworking etc.), training and education (in-house mentorship, cross-training, training and educational opportunities), legislated benefits, compensation and recognition.

METHODOLOGY

The first step in this study is identifying the research problems and the formulation of objectives to be achieved regarding the identified problems. Then, the scope of work can be determined as well as starting with secondary sources such as books, articles, thesis and dissertations, and journals for detailed references, and followed by primary data collection (questionnaire surveys) and data analysis, and finally with the formulation of conclusion, recommendation and report writing. The flow chart of the methodology for this research process is shown in Figure 1.

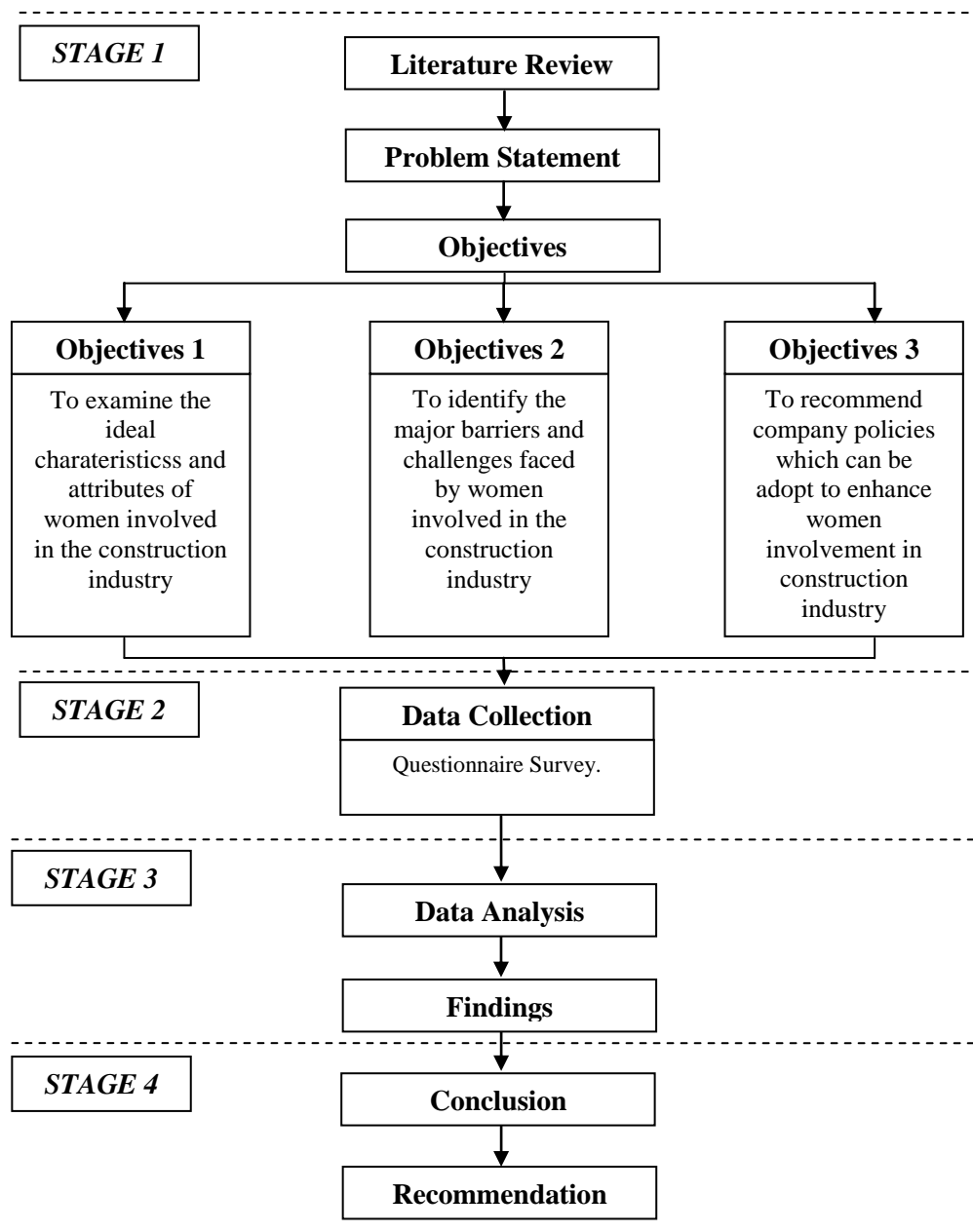


Figure 1: The Flowchart of Research Process

METHODOLOGY OUTLINES

This research provides the essential of barriers and challenges which women in Malaysia (within Klang Valley area) are facing in Construction industry. The first chapter of this research is the introduction whereby it includes the problems statement, objectives of study, scope of study and significance of study. Second chapter is the literature review, whereby it is based on secondary data – previous research studies, journals and articles related to the

research topic i.e women in construction industry, barriers and challenges of women involvement and policy which could help in enhancing women involvement in construction industry. The third chapter of this research, research methodology, explained on the methods used to conducted the research and to analyse the collected data. Fourth chapter shows the data analysis and findings obtained from the collected data. Lastly, fifth chapter concludes and recommends with reference to chapter four.

Literature Review

Literature review is used as a secondary resource. The information gathered is related to the research topic and are based on previous studies, journals and articles. Such information includes women in construction industry, barriers and challenges of women involvement and policy which could help in enhancing women involvement in construction industry.

Questionnaire Survey

The questionnaire survey was conducted in middle of July 2016. Due to time and cost constraints, convenience sampling was used whereby 140 sets of questionnaire survey were distributed to relevant parties of construction field as well as academician and students. The target respondents were based on the recommendation from experts and industry players. In total 140 sets of questionnaire, only 86 sets of completed questionnaire were returned back to the researchers. It can be said that; 86 responses were successfully obtained giving a response rate of 61.4%.

Being a convenience sampling, the rate of response (61.4%) is higher compared to random sampling. Takim et.al (2002) reported that the norm response rate in the construction industry using postal or blast email method of questionnaire is around 20-30%. This research is aimed at showing the indication rather than reliability to ensure quality data obtained.

Data Analysis

All the data acquired will be analysed using software such as Microsoft Excel. The statistical methods will be applied in the study, which is descriptive statistical. The data generated from the question was first analysed by using frequency analysis. Then, the data were analysed using Average Index (AI) analysis for the questions which uses an ordinal scale of 1 to 5 (in descending order).

RESULTS AND DISCUSSIONS

The analysis process begins with analysing the data obtained from respondents via questionnaire survey. Based on the demographic section, all of the 86 respondents are from private sector and more than half of the respondents are female workers which indicates an increase in women involvement in construction industry.

Majority of the respondents have working experience less than 5 years. With regards to the image of construction, 41.9% of the respondents agreed that construction industry is a “male dominated” / “male only image” and 43.9% agreed that the image of construction industry still remains as a “male dominated” / “male only image” although women are seen to be involved in construction industry due to education and cultural globalisation.

Third section is related to objective one (1) – *to examine the ideal characteristics and attributes of women involved in the construction industry*. Based on the percentage, it can be said that ‘to show self-confidence, while remaining the feminine characteristics’ is the most ideal characteristics and attributes which could benefits women involved in the industry.

Fourth section is related to objective two (2) – *to identify the major barriers and challenges faced by women involved in the construction industry*. The highest ranked of major barrier is private life demands and family commitment, while the lowest ranked is limited opportunities to develop practical skills. For challenges, all variables are considered to be of high level of importance and the major challenge is support and cooperation from employer and family members.

Last section is related to objective three (3) - *to recommend company policies which can be adopt to enhance women involvement in construction industry*. 69.8% of the respondents agreed that company policy related to women should be included in a company’s employment term and the recommended policies are working hour, women’s welfare and outstation.

THE IDEAL CHARACTERISTICS AND ATTRIBUTES OF WOMEN INVOLVED IN THE CONSTRUCTION INDUSTRY

Table 1 display the overall results of the survey on the ideal characteristics and attributes of women involved in the construction industry.

Table 1 : Characteristics and Attributes of Women's Involved in Construction Industry

Characteristics and Attributes	Frequency						Mean	Level of Importance	Ranking
	1	2	3	4	5	Total			
To show self-confidence, while remaining the feminine characteristics.	2	3	17	48	16	86	3.85	Important	1
Research	0	4	20	50	12	86	3.81	Important	2
Alliance	0	2	28	47	9	86	3.73	Important	3
Adopting a Democratic, Team-Centric Approach; which require “extensive questioning”	0	2	32	41	11	86	3.71	Important	4
Empathy	1	1	33	43	8	86	3.65	Important	5
Characteristics and behaviours to be more ‘male’ than ‘female’	0	5	31	39	11	86	3.65	Important	5
AVERAGE MEAN SCORE							3.73		

According to Table 1, it can be said that women who showed self-confidence while remaining their feminine characteristics have the highest mean score (3.85), thus ranked as one (1). In order to cope in construction industry, women need to show self-confidence while remaining their feminine characteristic. Male workers have great self-assurance even if they know nothing, however, women only open their mouths when they really know something.

Thus, this shows the difference between men and women. The characteristics and attributes “research” ranked as 2nd mean score (3.81), followed by “alliance” which ranked as 3rd mean score (3.73). Majority of women have the ability to plan carefully with ample research before deciding on the solution. Whereas alliance – building and infrastructure of support, offers diverse perspectives, thus makes a better decision. Additionally, alliance provide a safety net for risk-taking.

The lowest ranked characteristics and attributes (mean score: 3.65) are women who have characteristics and behaviours to be more ‘male’ than ‘female’ and “empathy”. Nevertheless, as shown in table 1, all stated characteristics and attributes have a high level of importance. However, it believes that the data produce by respondents in line with the characteristics and attributes of women involved in the construction discipline were quality data that able to provide and grant indication on involvement women in this industry accordingly.

THE MAJOR BARRIERS AND CHALLENGES FACES BY WOMEN INVOLVED IN THE CONSTRUCTION INDUSTRY

Table 2 display the overall results of the survey on the major barriers faced by women involved in the construction industry.

Table 2 : Barriers of Women’s Involvement in Construction Industry

Women’s Barriers	Frequency						Mean	Level of Importance	Ranking
	1	2	3	4	5	Total			
Private life demands and family commitment	1	6	15	47	17	86	3.85	Important	1
Work environment	1	4	2	44	11	86	3.70	Important	2
Sexual harassment	3	9	16	41	17	86	3.70	Important	2
Inflexible working hours	1	7	24	40	14	86	3.69	Important	3
Sexiest attitude of male counterpart, Gender stereotyping, Sexual discrimination	3	5	24	43	11	86	3.63	Important	4
Selection criteria and male dominated courses	1	8	28	41	8	86	3.55	Important	5
Industry’s image	0	11	25	44	6	86	3.52	Important	6
Women’s Physical ability	3	8	25	42	8	86	3.52	Important	6
Recruitment practices and procedures	0	10	33	36	7	86	3.47	Fairly Important	7
Women’s masculine styles of leadership	1	12	28	38	7	86	3.44	Fairly Important	8
Peer pressure and attitudes of parents, teachers and careers advisers.	3	9	30	35	9	86	3.44	Fairly Important	8
Poor social welfare	2	15	26	31	12	86	3.42	Fairly Important	9
Lack of role model	2	15	25	36	8	86	3.38	Fairly Important	10

Limited opportunities to develop practical skills	3	18	25	31	9	86	3.29	Fairly Important	11
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According to table 2 above, private life demands and family commitment with scored the highest mean score (3.85) and indicate the first ranked. Without any doubt, women (especially married women) carries more responsibilities in most households which eventually make it harder for women to balance between and private life demands/ family commitment. Work environment scored the second highest mean score (3.70) with the second ranking. Construction industry is regarded as a 4D industry namely dull, dirty, dangerous and difficult.

Due to the working condition at construction site, the industry itself is perceived and associated with physical labour leading to an impression of a macho environment. While, sexual harassment also scored as the second highest with the mean score of 3.70. However, limited opportunities to develop practical skills scores the least with a mean score of 3.29, thus indicated as one of the variables with a fair importance.

Table 3 : Challenges of Women’s Involvement in Construction Industry

Women’s Challenges	Frequency						Mean	Level of Importance	Ranking
	1	2	3	4	5	Total			
Support and cooperation from employer and family members.	0	8	23	42	13	86	3.70	Important	1
Women’s ability to “fit in”	1	6	27	43	9	86	3.62	Important	2
Women’s acceptance on male counterpart’s attitude/ behaviour and perceptions	0	5	32	42	7	86	3.59	Important	3
Adjustment – characteristics of women.	1	6	32	36	11	86	3.58	Important	4
Male’s resentment against women.	0	11	28	39	8	86	3.51	Important	5
Societal image of construction industry	2	6	29	45	4	86	3.50	Important	6
Restrict promotional opportunities.	2	10	28	35	11	86	3.50	Important	6

Based from table 3, it can be seen that support and cooperation from employer and family members has the highest mean score (3.70) and is ranked as one (1). This is followed by

women’s ability to *‘fit in’*, with a mean score of 3.65 and is ranked as two (2). Women’s acceptance on male counterpart’s attitude/behaviour and perceptions ranked as three (3) with a mean score of 3.60. While the least variable, with a mean score of 3.50 and ranked six (6) goes to societal image of construction industry and restrict promotional opportunities. Hence, it can be said that the major challenges come from women’s support system and the women itself. The women may need to have their initiative their attitude and adapt with their work environment. Additionally, women’s support system may also need to play a role.

THE RECOMMENDATION COMPANY POLICIES WHICH CAN BE ADOPT TO ENCHANCE WOMEN INVOLVEMENT IN CONSTRUCTION INDUSTRY

Table 4 : Policy related to Women

Do you agree that policy related to women (Women’s Policy) should be included in a company’s employment term?	YES	NO
	60	26
	69.8 %	30.2 %
Do you agree that policy related to women (Women’s Policy) should be included in a company’s employment term? Answer NO	MALE	FEMALE
	15	11
	56 %	44 %

Table 4 showed the number of respondents responding to the question on policy related to women. Out of the 86 respondents, 60 respondents (69.8%) agreed that policy related to women should be included in company’s employment. Whereas the remaining 26 respondents (30.2%) disagree on women’s having their own policy. Those who disagreed on the policy related to women consists of 15 Male respondents (56%) and 11 Female respondents (44%). The table 5 below display the feedbacks and suggestions from the 86 respondents regarding the recommendation policies for a company adopt and included in the company employment terms/contract to enhance women involvement and participation in construction industry.

Table 5 : Recommended Policy by Respondents

POLICY	DESCRIPTIONS
Working Hour	Majority suggested flexibility on working hour for women, such suggestion include :- i) Flexible working hour from 10am – 5 pm. ii) Flexible Working hour especially for married woman. iii) Woman should not be allowed to work full day on Saturday (applicable for private sector, those working full day on a Saturday).
Women’s Welfare	The second most suggested policy is regarding on Women’s welfare. Such as :-

	<ul style="list-style-type: none"> i) Providing accommodation for female staff. ii) Consider PPE to be women size and safety especially working overtime at site. iii) Facilities at site (such as Women's toilet) iv) Claim and benefits for certain issue related with family or their health.
Outstation	The third most suggested policy is outstation policy. Such policy include :- <ul style="list-style-type: none"> i) For married woman, allowed to bring their husband during outstation. ii) Woman and man should not be allowed to go outstation together.
Other policy:-	
Pre-natal / Maternity leave	Maternity leave for 3 months (90 days).
Menstrual leave / Period Policy	Providing leave for one (1) or two (2) days, as period pain is a serious matter.
Flexibility	Flexibility on woman's task due to urgency family matters/ schedule/ maternity leave.
Family-friendly	<ul style="list-style-type: none"> i) Company should consider having a nursery in the company. ii) A family friendly office concept for the office ambience.

CONCLUSION

The research was conducted to achieve the overall objectives set by the researchers/authors. Below are the findings of the research for this paper, outlined according to the sequence of the objectives.

i) Objective One (1): To examine the ideal characteristics and attributes of women involved in the construction industry.

Among the six (6) variables, the top three (3) characteristics and attributes are considered as idealistic and beneficial for women to be involved and participated in construction industry. The top three (3) are:

1. To show self confidence, while remaining the feminine characteristics (3.85).
2. Research - Ability to plan carefully with adequate research before final decision (3.81).
3. Alliance (3.73)

ii) Objective two (2): To identify the major barriers and challenges faced by women involved in the construction industry.

From the fourteen (14) variables, the top three barriers stated below are considered as major barriers:

1. Private life demands and family commitment (3.85)
2. Work environment and Sexual harassment (3.70)
3. Inflexible working hours (3.69)

It is believed that the data produce by respondensts in line with the barriers and challenges faced by women involved in construction industry were quality data that able to provide and good foundation for women involvement in construction industry accordingly.

- iii) Objective Three (3) : To recommend company policies which can be adopt to enhance women involvement in construction industry.

From the questionnaire survey, it can be concluded that 26 of the 86 respondents did not agree with having policy for women. Nevertheless, the remaining 60 “agree” respondents of the 86 respondents voluntarily listed out company policies for company to adopt and included in the company employment terms/contract. Below are the top three (3) policies suggested by the respondents :-

1. Working hour policy.
2. Women’s welfare policy.
3. Outstation policy.

RECOMMENDATIONS

In order to get a better result with varieties of opinions, it is recommended for future research to cover the whole Klang Valley area. From here, the evaluated result will be more real rather than vague. For future research, it is recommended to study on ways to tackle the major barriers and challenges. Alternatively, a study on the recommended policies stated should be carried out whether or not its implementation will have a positive effect towards the enhancement of women involvement in construction industry. As a final point, it is hoped that this research will advantageous to all parties involved in the construction industry and would stand as a good foundation for future research.

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