A STUDY OF WOMEN CAREER IN CONSTRUCTION INDUSTRY

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Thesis submitted in fulfilment of the requirements for the award of the Bachelor of Engineering (Hons) Civil Engineering and Earth Resources

Faculty of Civil Engineering and Earth Resources
UNIVERSITI MALAYSIA PAHANG

DECEMBER 2015
ABSTRACT

The achievement of women in different field in Malaysia is no more hesitating which they can compete with men in the construction industry field. There are misconceptions that women are weak and unable to be good leader or workers as compared to men. Other than that, there are many obstacles that exist for women who want to work in the construction industry. Women need to be prepared in terms of profound knowledge, expertise, work encounters and the willingness to comply at the work environment. The main problem that encountered by women when they are involved in the construction industry is risk and conflict. Besides that, the scope of appropriate work for women in construction industry or field is identified. In addition, this research was carried out through a literature review of the topics that related to the factors that led to the liability and conflict that come upon by women as workers in the construction industry or fields. The masculinity and feminization of construction engineering, sex discrimination and harassment on site, work environment and work hours and intellectual and physical capability is the main factors that led to challenges and risks for women working in the construction field are. In this research the 100 questionnaires were distributed to women and men who working in the construction industry which is currently developing construction project such as Kuala Lumpur, Johor, Penang and Pahang and were selected through simple random sampling method but only 68 questionnaires have been completed by the respondents. All data was analysed using software Statistical Package for Social Science 22 (SPSS) to acquire min statistic and standard deviation. From the questionnaire, it found that female and male have different levels or agreement with all factors of risk and conflict that encountered. This research will be supportive to any women in identifying the most suitable careers for themselves in construction industry or field and also to know the factors that cause fewer women working in the construction industry or field.
Pencapaian wanita dalam bidang yang berbeza di Malaysia adalah tidak teragak-agak lagi di mana mereka boleh bersaing dengan lelaki dalam bidang industri pembinaan. Terdapat tanggapan mengatakan bahawa wanita adalah lemah dan tidak mampu menjadi pemimpin yang baik atau pekerja berbanding dengan lelaki. Selain daripada itu, terdapat banyak halangan yang wujud bagi wanita yang mahu bekerja dalam industri pembinaan. Wanita perlu bersedia dari segi ilmu pengetahuan yang mendalam, kepakaran, pertemuan kerja dan kesediaan untuk mematuhi di persekitaran kerja. Masalah utama yang dihadapi oleh wanita apabila mereka terlibat dalam industri pembinaan adalah risiko dan konflik. Selain itu, skop kerja yang layak bagi perempuan dalam industri pembinaan atau bidang dikenalpasti. Di samping itu, kajian ini telah dijalankan melalui kajian literasi daripada topik-topik yang berkaitan dengan faktor-faktor yang membawa kepada liabiliti dan konflik yang dihadapi oleh wanita sebagai pekerja dalam industri pembinaan atau bidang. Maskuliniti dan feminiti dalam kejuruteraan pembinaan, diskriminasi jantina dan gangguan seksual di lokasi, persekitaran kerja dan waktu bekerja dan kemampuan intelek dan fizikal adalah faktor utama yang membawa kepada cabaran dan risiko bagi wanita yang bekerja dalam bidang pembinaan adalah. Dalam kajian ini 100 borang soal selidik telah diedarkan kepada wanita dan lelaki yang bekerja dalam industri pembinaan yang kini sedang membangunkan projek pembinaan seperti Kuala Lumpur, Johor, Pulau Pinang dan Pahang dan dipilih melalui kaedah persampelan rawak mudah tetapi hanya 68 soal selidik telah disiapkan oleh responden. Semua data dianalisis menggunakan perisian Pakej Statistik untuk Sains Sosial 22 (SPSS) untuk memperoleh min statistik dan sisihan piawai. Dari soal selidik ini, ia mendapati bahawa lelaki dan wanita mempunyai tahap yang berbeza atau persepsi dengan semua faktor risiko dan konflik yang dihadapi. Kajian ini akan memberi sokongan kepada mana-mana wanita dalam mengenal pasti kerjaya yang paling sesuai untuk diri mereka dalam industri pembinaan dan juga untuk mengetahui faktor-faktor yang menyebabkan wanita kurang untuk bekerja dalam industri pembinaan.
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CIDB     Construction Industry Development Board
EOC      Equal Opportunities Commission
MSD      Musculoskeletal Disorder
SPSS     Statistical Package for Social Science
CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

As of today the construction industry with its extreme gender stratification is still conservative in its recruitment of women. The involvement of women in construction industry has grown, women are observed as minority in this field. The increasing demand for qualified engineers will soon reach a critical level. The prevalent common social conditions the employment occupational segregation of the labour market into masculine and feminine employment is like an imperforate today as it was at the beginning of the century, with construction as the prime example. The percent of women working in the construction industry which are perform in an administration, technical and professional work while the intake at the operative level is very low and the data are intimidating to non-exist which is only 1% of the workforce (Clarke et.al 2005). This is an avoidable where it can be concluded that the construction is not only dominated by men, but is does not have of female participation. On the other hand, there have been few studies focusing on factors influencing women entry into construction fields and what their expectation are (Bennett et.al, 1999).

Besides that, this study research is focused on the category of women who work in technical fields in part of construction industry in Malaysia. This research is essential which is to identify the extent of the level of women categories of work in the aspects of technical knowledge, skills and work experience to qualify them to occupy a high position in the industry nowadays. Some of the men assume that women are not able to perform in a construction company until they prove themselves to be capable. However, the situation changed todays where the women were found to compete and achieve a
high social status in their lives. In certain field, women are found to be more competent that their male counterparts (Barnabas et al., 2009). Thus, women are encouraged to participate actively in all stages of the construction industry to increase competition for deployment and also increase the needs of participants in the industry. Besides that, increasing the participation of women in this industry is important for the construction industry where it need to have a sustainable growth through a regular supply of labour. However, women still can work as men in construction fields without any hesitate.

The industry of construction needs to encourage women to participate it and grow forward as a leader. These leaders will be an example or roles model who would attract other women for working in construction fields. With more women attracted in construction industry, this sector would be in a better position to deal with the talent crisis that encountered currently. Also, the social image of the industry can be improved from time to time. Madikizela and Haupt (2010) revealed that an organization that seeks to release the potential of women and to take the advantage of the soft part of the leadership necessary to formulate a strategy where they can develop the next generation of women leaders in construction fields or industry. Now, by this modern time and sophisticated women is part of an important resource for achieving the country’s development especially in the glorious 2020. Therefore, there is no doubt where the fact that happen about the contribution of women in construction field. And also women have the right and role in providing services and contributions to family, community and also country.

In Malaysia, women are able to work intelligently by using time efficiently, good workforce management and emphasizes productivity in managing the priority either in career and personal life. Women are now able to develop their potential to the optimum and take all the advantage of every opportunity to develop themselves. An achievement of women in various fields is no longer in doubt, even if women be able to compete with men. However, women is still regarded as weak because of the perception of women cannot be able to a be a leader as well as men and it causes them to received very little opportunity for advancement especially for the higher positions which requires them to lead. Disproportion of women often happen in jurisdiction or chance of women neglected from the employment sector. However, in Malaysia is rarely occur the
discrimination of gender in employment, this is because women can also do the job as good as a men (Tajul Ariffin, 1992). Unlike men, a women’s career decision does not depend on them but need to think about responsible to family also.

Currently, especially women in Malaysian dealing with challenges associated with life, and also their life. When asked whether the woman is ready to held important positions, the question is not about the entitlement, but focuses on the factors around them. Because of women is a part of the actuators of national development, women need environments, the appropriate opportunities and also choices were given so that they can took over the responsible as a wife, mother and also best worker. Accordingly by the year 2020, women should be equal partners and significantly to a man, where powerful and independent and also able to make a choice, does not afraid to speak up, have their own financial resources and able to contribute to global development.

1.2 BACKGROUND OF THE STUDY

The construction workplace is the challenging nature and its will impact on the careers of women which has formed on the basis of several studies. The recommendation will be stated to address the barriers to the improvement of women in their careers in the construction industry. Dainty et al. (2001) stated that careers in construction would create comparison between the women and men experience. Haupt and Smallwood (2004) cited that construction industry is normally dominated by men at all levels. Enrolment at senior and management levels by construction has been similar, with a marked tendency for companies to attract, recruit and select men. Dainty et al. (2001) revealed that it has led to an obvious under-representation of women. Less than 10% of percentage of women those were employed in the construction industry. The percentage is more less when the women who were registered as professional or act as model and leaders by managing their own construction firm (Geerstemar, 2005). The implication of the individual, industry and all the community will be suffer from only fully utilising one sex if the number of women in construction industry is low.

Thompson (1996) stated that many young men still believe that women are physically and psychological not suitable at the construction work. A large sector of
economy can be defined to construction industry. It may strongly influence by the level of professionalism and working practices based on the size and market of the construction firm. Women participation in construction industry is particularly very low, both for those employed in the industry and for those engaged in training. One of the most male dominated industrial sectors has equal opportunities present a challenge in the construction industry. It is not only male dominated in the construction industry of all the industries in the world, but it also exhibits the greatest degree of vertical segregation.

The women general experience is the barriers in their career development where it apply particularly to women who choose non-traditional occupations as a career such as construction industry such an example, the representation of women were found in all industrial sectors (Bennet et al, 1999). Anecdotal evidence suggests that huge gender inequalities exist in many jurisdictions of life. Thus, more women than men are untrained and innumerate and besides that, girls receive less formal education. There were limited of women access to and income control and also assets. Then, the proportion of women in wage is lower than for men. Women are incredibly under-represented in policy and decision making at all levels.

Currently, various scenarios that can we refer to these issues for women. In western countries, most of all women are able to get the opportunities to lead the development that have been given. According to Ashrige Management College (1998), almost 3% of directors for the 1500 major companies in the United Kingdom are women. In fact, women are accounted for 45% of the total employment of the country. Golzen and Garner (1994) consider demographic trends in some western countries clearly indicate that women will have a greater role in the management of the future. In Malaysia, it was found that the contribution of women to country which are accounting in fields of politics, business, trade, agriculture, education, industrial and administration. In addition, the community also require a woman services, especially in the field of professional and also social services and it also can changes the roles and status of women where can make their lives better. A sense of isolation is another reason for high defections with women having almost no chance of meeting other women working in the industry and therefore lacking of support structures they need.
The role of women in Malaysia development clearly showed that the important role in determine the future direction and development of the country is increasingly. Furthermore, the involvement of women in industrial sector is increasingly due to government incentives and opportunities. It is not surprising to say that there are number of women in certain career fields especially in science and engineering field where it can emphasize to improve the government and also get the high demand of the industry for engineering fields. As we know, the science is generating a new knowledge while the engineering knowledge as idea that we get from what we design that used to satisfy human needs in their life. Mitchell (2003) stated that the industry is focused on whether the required skill needs of the industry itself or not. Therefore, when the industry has changed then it needs to enhance more skills where it is one of the most important elements in the development of economic and also social development in the globalization era. Hence, there have a high demand on skills in the industry sector. Knowledge, skills and understanding in certain fields of specialization are important aspects that need to be possessed by an individual to face the challenges in work.

The nature of the workplace culture is in the construction industry where it is the central to explaining women’s career under-achievement. It can see from their equal progression through the exclusionary and discriminatory work environment. Women will become disillusioned with the discrimination and lack of opportunities that they confronted if they entering construction industry without an in-depth knowledge of the cultural influences on construction careers. Their male peers perceived them as added competition for the limited promotional opportunities available, which incited resentment and discriminatory behaviour from their male colleagues (Dainty et al, 1999). Furthermore, women also had to conform to work practices towards men’s needs and in addition to having to deal with the explicit resistance to their development or construction industry. This can included long working hours, geographical instability and also an expectation that they would subordinate their personal lives. Dainty et al., (1999) stated that these works need to endure because of the attitudes of male middle managers, which were empowered to impose such work within their own projects environments.
Besides that, we can notice that employers are more focused on solution for cost reduction, productivity improvement and also provide a new market where need a good services. So, it is a necessity that needs to have in female employees for indicated cooperative teamwork, problem solving ability and also ability to deal with various situations. Women also need to try to make decision, be more responsible and also need to communicate more effectively. Now, competence and domination of skills has become a main requirement for moderns’ workers (Calla, 2003). In addition, women also need to expose the ability and capabilities of her in order to achieve a balanced in development. Therefore, the role and contribution of women in the economy is very important. In addition, the involvement of women in the industrial field is particularly spread due to government incentives and opportunities. Following the serious suppression of government and high demanding of the industry, it is no wonder if there is had women in certain career fields especially engineering. As it is know that engineering functions is to satisfied human needs.

Therefore, these skills are needed in a women especially those who living in the industry. By Harvey and Green (1994), they found that employers need workers who have the intellectual skills, willing to learning, analytical thinking skills, ability to solve problem, work in group and also have the skills interpersonal. However, to fulfil the employment opportunities in the industry which are growing, women should raise up a meet the admission criteria that are required by the industry. According to Raja Rohana (1991), the higher the education level, the more opportunities to get a job and thus increase the Malaysia’s name. Therefore, it is very important for women to organize themselves in dominate of every job specifications and various skill that are required by employers just to acquire occupations that are offered by the industry. Besides that, women are not only qualified to work equivalent with men instead able to hold higher positions within an industry.

1.3 PROBLEM STATEMENT

Nowadays, it founds that there are still exist and arise of various responses to women especially in disputed the ability of women to involve which are usually dominated by men only. Abdul Rahman (2000) stated that the participation of women in
outdoors work which emphasizes its competitiveness, an independent, not emotional and need to be aggressive is considered as an incompatible with femininity and may damage its traditional role as a wife and mother. In addition, women are still regarded as someone who is has less equipped to find the knowledge and skill needed by industry (Rozi Bainon, 1999). Despite there is changes where in Malaysia, women compete with men by the number of female student who continue educations either in or outside the country is more than the men which is found that about 60% of the 75,000 unemployed graduates is women (Ruzana, 2003). According Nor Aini and Zaini (2000), female students are majoring in technical course in institution but female student that involves in industry for the engineer is opposite. In fact, women are often placed in sections that are not oriented technical skills and receive minimal salary. In addition, the industry believes that the capacity and efficiency of women are weak compared to male workers who are more active and aggressive in conducting the work.

1.4 OBJECTIVES OF THE STUDY

1. To identify the risk or conflict that encountered by women who work in the construction field and industry.
2. To identify the scope of an appropriate work for women in the construction industry.
3. To identify an appropriate employment for a women who work in the construction field or industry

1.5 SCOPE OF STUDY

The study focused on the gender issues in the field of construction industry at Malaysia which is about the extent woman inventory in technical field from aspects of knowledge, skills and experience as a preparation for the higher position in industry. Respondents were made up of women and men who work in the construction industry at Malaysia. This is due to identify the comparison opinion on behalf of women and men on this issue. For the aspects of knowledge, it is a knowledge or skill a person (Kamus Dewan Bahasa, 1998). In this research, the knowledge refers to expertise of women in
technical fields that can assist them in understanding the whole process so that the work can be done with more effective role in the fields.

Skills aspect is the ability to interpret the knowledge into action featuring person efficiency (Schermerhorn, 2005). In this study, technical skills refer to skills work as a team and are a leader in the construction project or in the construction development. It also needs to have a critical and creative thinking and problem solver among the women or men worker in the technical fields. The final aspects are taken as an aspect of work experience which is defined as all the previous commitments as employees based on technical fields. With this experiences can improve the efficiency in implementing the work.

1.6 METHODOLOGY

The methodology for this study will based on an approach that assesses the relationship between several factors such as masculinity and feminization of women in construction industry, sex discrimination and harassment on site, work environment and work hours, family responsibilities and intellectual and physical capability. Besides that, the decision of career that suitable for women in construction industry will be discussed in this research. A quantitative approach was chosen as the research method. An extension review will be conducted on this issue from the literature that related to the research topic including the surveys made in previous studies in this field to achieve the objectives of the research. Data was collected via questionnaire surveys that were developed from the literature review, the question will mostly closed or multiple choice questions and involve ticking bullet, ticking boxes on a table and ranking the answer by dragging and dropping the answer based on the most suitability to less suitability. The targeted respondents of this study are project manager or project team regardless whether women or men who are employed by construction industry which is having experienced work in the construction projects in Malaysia. Thus, questionnaire data collected will be incorporated into computer software, which is through the “Statistical Package for Social Science 22” (SPSS) and analysed using qualitative and quantitative analysis. All survey results are then translated in tabular form for ease of analysis performed.
1.7 SIGNIFICANT OF STUDY

In this study, the results of the study are expected to be particularly beneficial to women who were work in technical industry and also for female graduates where they can be prepared before working in the construction industry. Besides that, this research also can encourage women to work in construction industry where they can compete with men colleagues. From the literature review it is revealed that women adopt democratic and participative leadership styles in the corporate world an education. From this it could be said that the women have the capability to manage the construction environment both industry as well as in the academic.

This study will be supportive resource for enable women to find suitable position in the construction industries and it also acquires suitable skills to be more competent in the construction industries. Further it provides a good guidance to continue the research work, in particularly in the area of gender and leadership which could be considered as under theorised area.

Other than that, the results of this study, it was found that the preparation of the technical field of female employment in terms of knowledge, skills and experience can be identified as a whole as a measure the readiness of women to high positions in the construction industry in Malaysia. Besides that, from the results of this study, it may be one approach or initiative can be identified and adopted either by the industry or even education institutions to improve the level of preparedness of women technical field assistance and qualify them for high positions in construction industry in Malaysia.
CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

One of the most attractive phenomena of recent times has become a growing part of the women in the labour force, it possible for women in many regions to use their potential in the labour market and also to achieve the economic independence. Hart (2007) stated that the huge demand ensured an exponential growth of 10.5 % women employed in all levels of engineering to 35.2 % by 1943 with the official classification of women that were doing men’s work and those who are doing women’s work. Arslan and Kivrak (2004) revealed that there is much effort in order to increase the employment of women in the workforce in the industry. Consequently, many women that entered into the working life then become a pilot, doctors, engineers, teachers, educators and so on. In the early on 20th century, only several women that joined in the labour force in construction industry. The issue of women in workplace has been unrest over the last century (Davis, 2002). Most of the national academics that only select their first female members in the 20th century after the Second World War to be an employed as academic are in different sciences and engineering (Noordenbos, 2002).

As we all aware, women and careers is not an issues in Malaysia but it is the impact of the development and availability of the progress women to develop themselves to be more advanced. The contribution of the role of women in country development is very large, for example in the fields of politics, business, education, industry and so on. Now, the women and her career are growing from year by year. An increasing the number of female workers in industry opened the eyes of all parties that
all women are able to compete in the era of globalization to progress and sustainable economic development. In this regard, the women also made new inspiration as well as competitors to men so all men not complacent with the abilities that they have. So, all women that work in this industry will be respected and not easy to be eliminated in the realization of the country’s hope where it is to achieve an industrialised nation by the year 2020.

Therefore, human resources development will continue to be turned into the country’s main strategy to ensure that all people can share the prosperity of the country and further develop a dynamic labour competitive in the world without gender discrimination exists. According Arbaeyah (1993), the participation of women in science and technology started in the 40s. Overall, it appears without any action and taken to discriminate against women but women in Malaysia have been given the opportunities as men in numerous field in the industry. This issue is given the attention from other parties which caused the women’s gaining recognition from world.

### 2.2 DEFINITION OF CONSTRUCTION INDUSTRY

In terms of economic growth and employment, construction is one of the most important industries. Construction can be defined as the one that employs workers in two main categories which are as a managers and as a professionals where they need to plan, organize and have an advise on specialist function or fields activities or direct and coordinate all activities and resources involved with construction procedures and also construction employments where they need to construct, install, finish, maintain and repair all the internal and external structure domestic, commercial and industrial buildings and also in civil construction (Employment Service, 1990).

Parry (1994) defined construction as, “the construction and maintenance of structural in forms of domestic, commercial, industrial and infrastructure of public including groups of an occupational in manual, administrative or organizational, paraprofessional or professional who are directly involved with construction and maintenance”. In other meaning, there are many different scope of operation in the construction industry and also many activities were involves directly or indirectly to the
industry. McGrath-Champ et al, (2010) defined that construction is a “As a process directed towards the creation of structures which incorporates a number of industries. These are grouped into two: those that are directly involved with the construction process and those that are supplementary to it”. From this definition, companies that produce construction materials to those that are engaged in mortgage or control of facilities may include as a construction industry.

2.3 DEFINITION OF WOMEN

In this study, women are meant as a woman that is opposed to men. It can be said as a female adult who has a feminine identity shows the entire outline as a woman. According to the “Kamus Dewan” (1998), women are a female or a girl that has specific properties or qualities that are not owned by the man. Women have several characteristics which are opposite the nature of the men. Women have higher emotional level than men, for example, women easily distracted while doing a particular task if their minds in not in good condition or when then faced with a problem. According to Bord (1959), a woman is a mature female or girl who has feminine identity where the women femininity shows instead of a woman.

Feminine identity exhibited by features such as the role and functions of social responsibility expectation, personality expressive, always influenced by feelings, gentleness and also lack of confident. A study by Epstein (1973) revealed that women are often assumed to have high emotional, low skilled control or cannot distribute their emotions into something productive. Conflict of these people is usually encountered due to the characteristics of the opposite occurring in men where that is courageous and ambitious, aggressive, emotional and has an intellectual performance. He also stated some of the problems that faces by women with respect to their status as mother, wife and also as a working women, thus it also preventing the advancement of women career’s in their life.

Women often associated with the power sensitivity which ate often said to be something extreme. However, either it knowing or not, the sensitivity of the women that can caused they are able to do their responsibilities and also as a girl, perfect wife and
also as a mother for their kids. Without the sensitivity, they will not aware to the needs and also requirements in daily life. This sensitivity is quite privilege for a women because it means she able to express love and also affection that cannot be measured either as a child, a wife or a mother to her children. In terms of physical, the woman is given by the Creator to have less physical strength compared to man. Women are created which are requires of help and support from the men itself. Although women are lacking in term of physical strength, but women has the intellectual strength while thinking which they are able to carry them along with the men on this earth.

2.4 TECHNICAL FEMALE GRADUATE

This research focused on the professions in the construction industry namely, quantity surveying, construction management, project management, architecture, designing and civil engineering. As a graduate in quantity surveying will particularly work as an estimator or quantity surveyor to manage all cost associated with building and all civil engineering projects from the beginning calculation until to the final figures. Surveyor trying to reduce the costs of the project and increase the value of money while the standard and quality still achieve based on the required standards. Other than that, surveyor needs to understand and comply with the statutory building regulations that are provided.

Project managers, site managers, construction managers, project coordinators, planners and development managers are the career paths for a graduate in construction management. They have benefits because they have many prospective careers for the future in construction field. If they had a work experience in the construction field, they can request a higher salary for the job. Besides that, they can be a self-employed as contractors or projects developers as another option to be success in construction field. There are many specializations that can be focused on being distinguished from the other contractors in the construction industry. In Malaysia, the fastest rising profession is project management. The construction industry’s labour market is characterized by non-standard employment practices and insecure (Dainty et al., 2007). Various different types of contractual arrangements and complicated project team can be a complex affair in terms of management a construction projects.