

Women in Saudi Arabia Construction Industry: Motivations, Barriers and Perceptions

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Abstract

The economy of the Kingdom of Saudi Arabia has been relying on oil for a long period of time. However, with the recent global recession and political instability across the Middle East, the need for economic diversification has become urgent. Recently, the construction industry has been identified by policy makers and the government as a major sector for investment to minimise over reliance on oil. Interest in construction has led to a considerable number of construction projects all over the Kingdom of Saudi Arabia. This has translated into a demand in highly skilled professionals and labourers to effectively work and deliver the construction projects. Thus, the number of skilled males and male labourers who for generations have dominated the Saudi construction industry has been unable to fill the skill and labour gaps required by construction firms. The key question is: can women contribute in filling the skill and labour gaps in the Saudi construction industry? As part of an undergraduate degree dissertation, this study investigates the challenges faced by women in a career in the construction industry in Saudi Arabia. To achieve this aim, a mixed research method consisting of exploratory, case study, qualitative and quantitative research has been used. Three main findings have emerged from this study. Firstly, parental influences are the main motivation for students to enter the construction industry. Secondly, cultural issues involving male and female stereotypes are the main challenges for women in the Saudi construction industry. Thirdly, it also emerged that a major barrier is the segregation between men and women in the society which to a certain extent discourages women to proactively seek jobs in the construction industry.

Keywords

Barriers, construction, Kingdom of Saudi Arabia, women

1. Introduction

The construction industry is an important sector for the Kingdom of Saudi Arabia (Saudi for short) as it is one of the solid bases and the first step that could lead to the creation of a stable and sustainable economy. The demand for change in the Saudi economy to develop the construction sector has recently been top on the government's agenda. While being an important sector, it suffers from a shortage of skilled professionals and site labourers. Also, while males have not been able to close the skill and labour gaps, females faced enormous challenges getting jobs in the Saudi construction industry. Despite numerous studies conducted in other countries about challenges faced by women in the construction industry (e.g. Adeyemi *et al.* (2006) in Nigeria, Spagnoli (2012), Agapiou (2002) and Worrall *et al.* (2012) in the UK), there is little knowledge of any specific case of Saudi Arabia. The aim of this study is to investigate challenges faced by women in the Saudi Arabian construction

industry. The specific objectives include:

- Identify motivations for women working in the Saudi construction industry
- Investigate barriers faced by women in the Saudi construction industry
- Investigate stakeholders' perception about women participation in Saudi construction industry

The aim of this study was achieved by pursuing a mixed method of research. Before discussing the research methods it is important to signpost the remaining sections of this paper. In the second part, background information about the construction industry in the Gulf States including Saudi Arabia has been discussed. The third part is about the research methods used. In the fourth part, the data analysis and key findings have been presented. Based on the research findings, a discussion on how the research objectives have been achieved is presented in section 5. A general discussion and conclusion of the paper is presented in section 6.

2. Construction Industry in the Gulf States and Saudi Arabia

For most of the countries of the Arabian Gulf, such as the United Arab Emirates, Qatar and Saudi Arabia, which have small populations and big construction programmes financed by oil, the development of the construction industry is particularly important (TMICT, 2001). Since 2005, the oil-dependent Middle Eastern countries have begun to expand their economies by searching for alternative sources of income and decrease their dependencies on oil (GCC, 2013; ICP Gulf, 2012); and one of the main alternatives identified was the construction and real estate sector. Saudi Arabia is one of several oil-rich Gulf countries that have undergone the economic and social change discussed above during the recent decades (Madhi and Barrientos, 2003). Countries like Saudi saw their non-oil sector as a percentage of real GDP grew from 65% to 68% between 2000 and 2007, mostly as a result of large construction projects (Mitra and Tan, 2012). In 2012, US\$ 15.6bn of contracts were awarded in Saudi Arabia, only second to United Arab Emirate with contracts worth of US\$ 16.2bn for the first time since the global recession in 2008 (GCC, 2013). Recent forecast by Deloitte revealed Saudi Arabia to be the most flamboyant construction market globally with a budget value of contracts to be awarded in Saudi Arabia in 2011 onwards is set to increase to US\$35 billion, as compared to US\$25 billion in 2006 (ICP Gulf, 2012). Yet, despite the economic growth and resultant demand in both skilled and unskilled workforce, female representation has continued to be limited, with limitations strongly reinforced by what Moghadam (2007) calls a "patriarchal contract". The demand for labour in Saudi Arabia was therefore mostly met by foreign workers while most skilled and management positions are occupied predominantly by Saudi males. A study carried out in 2003 revealed that among females in Saudi, a very small percentage of native Saudi women are in employment (just below 5%) whilst 40% of foreign women in the country are employed (Mahdi and Barrientos, 2003). In 1990s, the Saudi government's concern to increase the number of Saudi workers in the private sector resulted in a new policy known as "Saudisation", intended to substitute foreign workers with Saudis and impose restrictions on the employment of non-Saudi workers in the public sector (Mahdi and Barrientos, 2003). While the "Saudisation" policy has already opened new paths for women's involvement in a variety of sectors including construction, much still needs to be done about recruiting women into the Saudi construction industry (Strategic Media, 2008). Preliminary findings based on the literature cited in this section revealed three main issues. Firstly, a general lack of literature on the specific case of women representation in the Saudi construction industry. Secondly, while there is information on how government policies influence women's jobs in other countries and how Saudi policies in general influence other sectors, information about such policies in Saudi are sketchy. Thirdly, while there is research on general barriers faced by women in other countries, there is a clear lack of research on the types of barriers faced by women in the Saudi construction industry. In this study, our focus is about motivations, barriers and perceptions about women representation in the Saudi construction industry.

3. Research Methodology

In this study, a mixed research method consisting of exploratory, case study, qualitative and quantitative research has been used. Given the sensitive nature of issues related to gender particularly with regards to females in Saudi, a pilot study was conducted to test the validity of the questions and to ensure any sensitive issues were not included. Exploratory research is usually conducted for a problem that is not well-defined or about a domain that is not well-defined. While research on women in the construction industry has been conducted in other countries, especially the Anglo-America and European countries, the Gulf States including Saudi Arabia are lagging behind in this area. Cultural and religious issues make any studies about women a very sensitive area in Saudi Arabia. Furthermore, given that most scientific literature on issues in Saudi Arabia tends to be in Arabic, it is difficult to trace and acquire relevant articles through popular journal databases. For these reasons, the domain of women in the Saudi construction industry remains quite vague and not well understood. A mock viva session was organised for undergraduate students in Department of Real Estate and Construction in Oxford Brookes University, and this candidate seized the opportunity to present the preliminary ideas and findings about this study and received useful feedback that led to the exploration and focus of some key aspects of the study.

A case study is a way to collect facts and study the relationship of one set of facts to another (Naoum, 2007). Once a case study is chosen, either qualitative or quantitative research instruments are used to acquire data or information required to meet the objectives of the research. As one of the objectives of this study is to gain an understanding of women's representation in the Saudi construction industry, five major construction firms were used as case studies. Qualitative in-depth interviews were used to establish the barriers faced by women and the perceptions about women working in the Saudi construction industry. Also, it was imperative to investigate the motivations for female students to undertake built environment degree programmes and the challenges they faced. Two universities were chosen as case studies and qualitative focus group interviews were conducted with both female and male students.

Quantitative research requires 'structuring questions, developing categories and variables, and counting responses' (Nardi, 2006). In order to identify the barriers and perceptions about women in the Saudi construction industry, a structured questionnaire was used to collect quantitative data from a relatively large group of respondents. The questionnaire was designed using Survey Monkey and sent out to identify construction professionals.

A pilot study provides a trial run for a prepared questionnaire in order to test the wording of the questions, or the technique, or measure the effectiveness of encouragement to respondents (Naoum, 2007). For this study, a short pilot study involving 5 women in the Saudi construction industry was conducted in order to test the effectiveness and inform the validity of the questions included in the in-depth interviews, focus group discussions and the structured questionnaire. The women were aged between 22 and 35 years and worked in the Saudi construction industry. Two of them held managerial positions, while the other three worked in secretarial positions. They were chosen since they had been working in construction companies for between one and 10 years, and had therefore understood the construction industry as well as sensitivity issues in Saudi Arabia. All of the women were native Saudi Arabians. The test results of the interview questions through this pilot study were revised and used for the final interviews. The revised version helped minimized potential sensitive issues. The interviews were conducted in January 2014 at leading construction companies in Saudi Arabia, which serve as case studies for this research. Originally five companies were approached, but one company (Company 5) refused to participate because of the sensitivity of the topic, a not unusual occurrence in Saudi Arabia. A total of 20 interviews were completed with both male and female professionals from the four remaining companies, who were selected based on their experience in the industry. Altogether, 13 male and 7 female respondents completed an 8-question interview, with answers collected completely anonymously. The interviews started with general questions on information about the company, its employees and managers, followed by more specific questions on types of occupations for women, barriers to their careers, and perceptions about them, and then concluded by

soliciting recommendations for improvements of women's career development in the construction industry. All four companies have different departments for male and female employees respectively, although they all have one male manager who oversees both departments in the company. For ethical reasons, Company i , with $i=1, 2, 3, 4, 5$ will be used in discussions in the ensuing section.

4. Data Analysis and Key Findings

4.1 In-Depth Interviews

4.1.1 Barriers

Women engineers and interior designers from two companies identified not being allowed to visit construction sites, especially governmental ones, as one of the main barriers in their careers. One of the engineers who previously worked in Syria, where women are allowed on site, commented on the lack of experience as a result of women not being allowed to visit sites in Saudi Arabia. Similarly, female employees from two different companies commented that women were not allowed in jobs or work environments which were considered to be "unsafe" or "dangerous". In addition to this lack of experience through barring women from site visits, a general lack of practical and working experience is another significant barrier for the women in Saudi. As one of the female respondents from Company 3 pointed out, since engineering and architecture courses have only existed for females at Saudi universities for around 10 years, there have only been female graduates from Saudi universities since around 7 years ago - Saudi universities tend to be single-sex institutions, and men have been able to attend engineering courses for a long time. Therefore all Saudi-educated female engineers and architects have only been working in companies for a relatively short time – all the female employees in these fields in Company 3, for example, had been working there for only 4 years. Nearly half of the respondents mentioned cultural issues, namely the gap between men and women in Saudi society as a major barrier. One male respondent from Company 3 insisted that it was tradition, not policies, which stopped women from being recruited into the industry, however the manager of Company 1 emphasised that although no such policies were actually in force in the company, his repeated attempts to establish a female engineer as a Head of Department had not succeeded. He commented that he "would never get the green light for something like this" (Recording of interview, Company 1). A construction project coordinator in Company 4 remarked that working with males, especially in this particular working environment, was a significant challenge for women. Since, as mentioned earlier, they are newer to the industry, women generally have less work experience than men do in this field, and a female respondent from Company 1 clearly specified, "working with more experienced males" as a major challenge. Clearly the main barrier that emerged from the in-depth interviews was strongly related to issues of culture and tradition problems.

4.1.2 Perceptions

A high proportion of the female respondents believe that the idea of having women working in the construction industry in general is very 'empowering'. One female engineer stressed that women should be given the chance to prove themselves in Saudi society. In several interviews with employees from Company 1, the idea of being in the construction industry was not perceived to depend on the gender, but was seen rather more as a question of "a person's desire" and "ability" than gender. While some companies acknowledge the benefits of having women in the construction industry some of the male viewpoints were rather discriminatory. Two of the male managers stated that women are generally weak, and that site work therefore does not suit women, and they strongly suggested women should work in managerial positions and office jobs.

4.2 Focus Groups

The focus group interviews were used to establish the motivations for undertaking degrees related to built environment, as well as the barriers and perceptions of the role of women among female university students. Focus Group A consisted of students from Effat University, a single-sex girls' privately funded university, while respondents in Focus Group B attended King Abdulaziz University,

a single-sex girls' government-funded university. For the purpose of the focus groups interviews, altogether 18 young female students (20 original participants with 2 absent students) were randomly selected from these two universities, with 10 students assigned to each group, discussing a list of 14 questions. All the students selected were either enrolled on an Engineering Interior Design or Architecture degree programmes. For ethical reasons, the focus groups will be called Group A and Group B.

4.2.1 Motivations

A great number of the respondents expressed a personal preference for the programmes they were studying, and had high aspirations for themselves. Unexpectedly, almost 80% of the students were encouraged to enter their courses of study by their parents. Apparently construction is considered to be a sector with great and new opportunities for women, and therefore a great demand for female professionals is predicted for the near future. A small minority stated that they had followed their own wishes in taking the Engineering Interior Design course. The majority of the students declared that they did not mind the prospect of working in a male-dominated career, or studying towards that career, as long as they would be able to do the work as well if not better than their male colleagues. Surprisingly, only a small minority said that they were worried about the gender difference. However, in the Arabic conversation there was no real mention of "gender discrimination". The Arabic word used in this context was actually "الجنس اختلاف", which more accurately translates as "the differences between male and female", or "the difference in treatment between males and females", with the implication that males are naturally better, stronger and more capable, but without any real feeling of females being mistreated or insulted. This seems to indicate that the students think of gender discrimination as something natural and normal, which just has to be accepted, instead of something they can challenge or change. In general, respondents from Focus Group A held the opinion that women actually perform much better than men in the field of Interior Design and Architecture, particularly when it comes to decoration and other aesthetic issues like colour schemes. Despite the fact that construction is one of most male-dominated sectors and often perceived as unsuitable for women, the majority of the female students were influenced by their parents to go into the construction career, which seems to indicate a shift in perception, or possibly a change to a rather more practical view point where the prospect of a well-paid job is more important than maintaining traditional gender roles.

4.2.2 Barriers

Virtually all the interviewees confirmed that they received help, encouragement and support from their families. Only 2 out of 18 students protested that one of their main obstacles was disappointment and negative attitudes among their family members. The main barrier identified by both focus groups was that presented by the culture of the country and its traditions. A high proportion from both focus groups (90%) felt that cultural issues were the key barriers which hindered women from entering the construction sector. One student from group B stated: "Being raised up in a traditional society has made the situation even worse for me to enter a male dominated-career". Even if there are no actual prohibitions for women to study; the field, culture and tradition put some limitations on women. In answering on how easy it was to find information about their courses, the views were split approximately 50-50 between "easy" and "difficult". Responses from the students of King Abdulaziz University included "lack of career knowledge" as one significant barrier, and nearly all the students from King Abdulaziz University said that they were not given any information about a career in construction. Both of these responses match the views expressed in the relevant literature, which identified knowledge gaps as the most significant barrier to entering the field. On the other hand, the students from the privately funded Effat University stressed that in their final year of school they were given help to guide them on their career path. Despite having the courses available for females at universities, there is a lack of information provided by universities and the responsible sectors. Cultural issues and lack of information were thus the main barriers highlighted by female students, which corroborates other findings throughout this research.

4.3 Structured Online Questionnaire

The questionnaire was conducted using the online website Survey Monkey (ww.surveymonkey.com). It was sent out to construction professionals. The questionnaire was completed by 40 respondents, constituting 40% female and 60% males. The questionnaire's main aim was to determine the key barriers hindering women working in the Saudi construction industry. After establishing gender, respondents were asked to rate 12 possible barriers for women in the construction industry and 7 perceived views about women in the construction industry from "highly significant" to "not significant".

4.3.1 Barriers

In the question about barriers, the majority of the respondents (62.50%) rated cultural aspects as a "highly significant" factor, and almost a third (29.27%) also rated religious grounds as a "highly significant" factor. See Figure 1 for other factors.

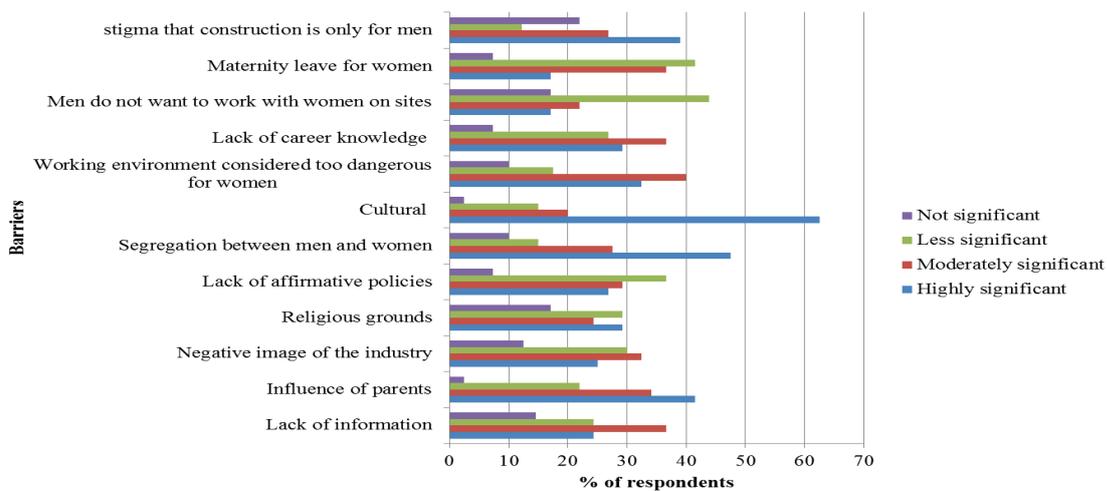


Figure 1: Challenges faced by women in the Saudi construction industry

4.3.2 Perceptions

Surprisingly, a majority (i.e. 53%) have the view “Women are not computer literate” not important at all (see Figure 2), an opinion which obviously conflicts with the reality of work in the industry. Almost 27% of the subjects selected “women are less suited for managerial positions” as "moderately important"; with a further 32% expressing that they thought the fact that females get more easily tired than males as not important at all.

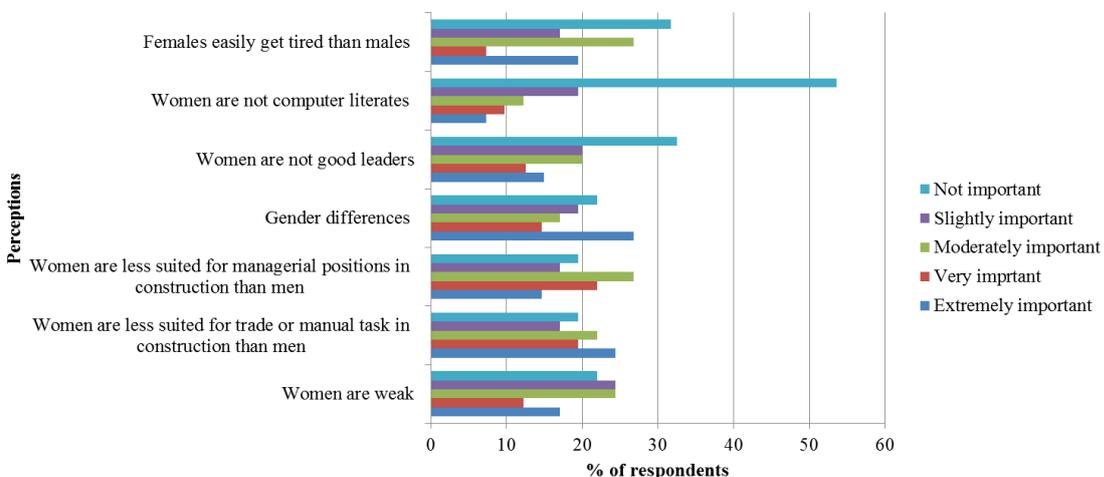


Figure 2: Perceptions of women working in the Saudi construction industry

The answers to the question of whether the respondent thought women were perceived as weak was particularly uninformative, since similar numbers rated it "highly" and "very important" (12 respondents), and moderately, slightly and not at all important (10, 10 and 9 respondents respectively). Similarly, the answers about gender difference were inconclusive. Almost 30% of respondents declared gender differences to be an extremely important perception about women in the Saudi construction industry, while 21% regarded the same perception as not important at all. In general, apart from the question about computer literacy, the responses are surprisingly uniformly spread among the different choices. Whether this is to be explained by a general disagreement among the respondents, or a result of careless and unthinking responses to the questionnaire can unfortunately not be decided.

5. Achievement of the Research Objectives

In this section, an examination into how the objectives of this study were achieved will be discussed. The first objective of this study was to identify motivations for women working in the Saudi construction industry. A main motivation for construction students is credited to parental influence with 80% confirming parents contributed to their choice of undertaking a built-environment related programme. This corroborates other studies in developed countries where over 70% of the girls interviewed wanted to follow the same or similar career path as their parent's. Also, this corroborates the work of Wahl and Blackhurst (2000) which concluded that children's ambitions are closely related to parent's occupation(s). Perhaps in the case of Saudi Arabia, students' parents expect good job opportunities, although 63% of the young women themselves felt that it would be practically impossible for women to get jobs in the construction industry.

The second objective was to investigate barriers faced by women in the Saudi construction industry. The investigation led to the identification of a number of barriers presented in Figure 1. The most important are cultural, segregation between men and women, parental influences.

- Cultural issues were identified as the strongest barrier - 90% of interviewees felt that culture was the main issue, a result similar to the opinions in the literature which found that a male-dominated culture negatively affects the women's career development in the construction sector (Davidson and Cooper, 1992; NWLC, 2014). However, a major difference lies in the fact that whereas, cultural issues in Anglo-American or European context might be related to individual practices (e.g. site workers wolf whistling at female colleagues) it appears that of Saudi deeply rooted in religion and partly institutionalised. For example, the Saudi King has plans to build a city just for women, what has been dubbed the Apartheid City (Byrne, 2012).
- Also about 74% of respondents felt segregation between males and females was another major barrier. This factor is another factor not often considered in studies in Anglo-American and European context as virtually this segregation does not exist.
- The last striking difference is the parental influence on children's career choices. While 80% of students revealed parents had influences on their decision to undertake construction degree programmes, it emerged that (see Figure 1) that 76% thought parental influences actually also constitute a barrier to undertaking construction professions.

The third objective was to investigate stakeholders' perception about women participation in Saudi construction industry.

- Perceptions: 40% of respondents from the quantitative questionnaire considered construction sites to be unsafe for females. 30% declared gender differences to be an extremely important perception about women in the Saudi construction industry, while 21% considered the same perception as not at all important. A number of male respondents confirmed the opinions in the literature that women perform better in managerial positions rather than on site.

6. Discussions and Conclusion

As a recap, the aim of this study was to investigate the challenges faced by woman in the Saudi construction industry. To commence the study, a review of the construction industries of Gulf States including Saudi Arabia was conducted. This review led to the identification of major challenges faced by women in joining the industry. The case of Saudi Arabia was peculiar as women are poorly represented in the Saudi construction industry. A mixed research method was undertaken to identify major motivational factors and challenges faced by women in the Saudi construction industry. Three major findings emerged from this study. Firstly, parental influences are the main motivation for students to enter the construction industry. Secondly, cultural issues involving male and female stereotypes are the main challenges for women in the Saudi construction industry. Thirdly, it also emerged that a major barrier is the segregation between men and women in the society which to a certain extent discourages women to proactively seek jobs in the construction industry. This constitutes a stark difference with Anglo-American and European countries, where gender segregation is very minimal and therefore has never been a factor worth investigating as part of barriers of women's poor representation in the construction industry in recent peer-reviewed literature (Worrall, 2012). With the recent launch of an Apartheid City in Saudi (Byrne, 2012), meant only for female workers in all sectors, there is a potential of further alienating women from the construction industry. It is important to note that, although findings from this study is insightful, it cannot be over-generalised as it is based on 4 companies (20 interviewees), and two focus groups (18 members) and 40 respondents for the quantitative study.

7. References

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