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The Role of Women in Construction Industry Development: The UK Perspective

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ABSTRACT

The UK construction industry is suffering from severe skill shortages. It is also suffering recruitment problems with its traditional male workforce. The constant reliance on a limited recruitment base disadvantages the industry by disregarding half the population and the diversity of skills these people have to offer. Thus the under-representation of women in construction industry is a matter of concern to the UK government and to the industry. The project on which this research paper is based argues that recruitment of women is imperative to achieving these objectives and prolonging the industry's growth. It is aimed therefore at examining the ways of encouraging women into construction by learning the lessons from other sectors where women are successful. This paper aims to provide recommendations to aid the recruitment and retention of women emphasising the role of women in construction industry development within the UK perspective.

Keywords: Construction, Barriers, Recommendations, Women.

1.1 BACKGROUND

The UK construction industry is growing faster than any other major sector. This significant growth of the industry necessitates an increase in the rate of recruitment of a skilled workforce. However the skill shortage is a major threat that challenges the long term development of the UK industry. The UK construction industry suffers from severe skill shortages both at craft and at professional level. Currently the industry recruits and relies on

overseas workforce or workers from low wage economies. It is also suffering recruitment problems within its traditional source of labour – young men aged 16-19 (Gurjao, 2006). The industry cannot therefore rely on recruiting the traditional male dominated workforce to meet these targets. Women, who are deemed to be capable enough to work in the construction industry, are largely ignored by construction employers. The constant reliance on a limited recruitment base disadvantages the industry by disregarding half the population and the diversity of skills these people have to offer. By restricting the possible workforce, the industry is limiting the choice of applicants at its disposal, which in turn may lead to the recruitment of lower quality employees

In this context, this research paper argues that the recruitment of women is imperative to achieving these objectives and prolonging the growth of the industry. It discusses that there is considerable evidence to indicate that the male dominated nature of the construction represents a significant barrier to female recruitment, career progression and retention. Thus the under-representation of women in construction industry is a matter of concern to the UK government and to the industry. The work acknowledges therefore that there is a need to examine ways to encourage women into traditionally male dominated professions such as construction related. This problem was approached through a comparative analysis where the construction sector was compared with other sectors where women are successful. Thus medical and marketing sectors, which are considered as the accessible careers for women, have been studied in order to find out what lessons construction can learn from them.

In this context, this paper aims to provide recommendations to aid the recruitment and retention of women, emphasising the role of women in construction industry development within the UK perspective.

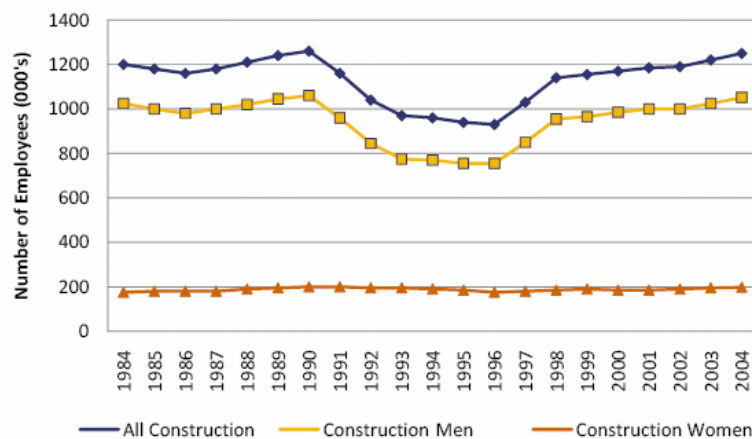
1.2 Construction and Women: UK Perspective

1.2.1 The Status of Women in Construction

The construction industry is one of the UK's chief employers, with over 2 million people in employment, which is more than 1 in 14 of the total UK workforce (CITB, 2005). The role of employed women is changing radically in most societies and in Britain they constitute just over half of the total work force. However in the CITB (2005) it was revealed that women still constitute only 9% of the workforce in the construction sector, of which 84% hold secretarial posts, nearly 11% are employed in a professional capacity and the remaining are craft and trade level employees. Court and Moralee (1995) noted that the under-representation of women in construction only became an issue in the 1980s. In 1988, less than 7% of the full time construction industry workforce in Britain were women. The Equal Opportunities Commission (EOC, 1995) stated in its annual publication that women continue to be significantly under-represented in

the primary sector (agriculture, energy and water), in most manufacturing sectors, in transport and communications and, in particular, the construction industry. Figure 1.1 illustrates that the number of women working in the industry has remained constantly low over recent years.

Figure 1.1 Employee Jobs in the UK Construction Industry (Office of National Statistics, 2004)



1.2.2 The Barriers: A Review of Literature

Studies detailing the position of women in construction, highlight the importance of problems faced by women entering and remaining in the construction industry. It is primarily these barriers which lead to a lower participation rate of women in construction. There are several barriers to women entering and working in construction. The literature survey identifies the major barriers as:

- image of the industry (Gale, 1994a; Fielden et al., 2000; Fielden et al., 2001; Bennett et al., 1999),
- career knowledge (Gale, 1994a; Agaipou, 2002, Harris, 1989; Fielden et al., 2000),
- culture and working environment (Dainty et al., 2000; Fielden et al., 2000, Bennett et al., 1999),
- male dominated training courses (Fielden et al., 2000; Fielden et al., 2001), and
- family commitments (Lingard and Francis, 2002; Fielden et al., 2000; Lingard and Lin, 2004; Greckol, 1987; Agapiou, 2002),

The construction industry has an industry-wide problem with 'image', which makes both men and women reluctant or uninterested in the industry

(Bennett et al, 1999; Fielden et al, 2000). The literature identifies the industry's image was found to militate against the entry of women. The predominant image of construction is that of a male-dominated industry requiring brute strength and a good tolerance for outdoor conditions, inclement weather and bad language (Agapiou, 2002). It is principally this image that makes women uninterested in the industry. Gale (1994a) has found through his research that male school students are five times more likely than their female counterparts to consider a career in the construction industry. Also, females consider the equal opportunities record of the construction industry to be worse than that for males. The Construction Industry Training Board also found that 63% of young women interviewed felt that it would be practically impossible for women to get jobs in the construction industry and only 17% thought that it would be a suitable career for them.

The image problem discussed above, which makes both men and women uninterested in the industry, is compounded by a general lack of knowledge and information about the industry, the career opportunities it can offer, and the qualifications required (Fielden et al., 2000). The CITB (2003) found that parents, teachers and school children believe that jobs in construction were limited to bricklaying, joinery, painting and decorating. It is also found that teachers, parents, careers advisors and school students have only a vague, superficial knowledge of the industry. Careers teachers and careers advisors were perceived by school students, undergraduates and graduates to provide inaccurate and inadequate information on the construction industry. Although a greater awareness has been found among 'A' level students and undergraduates, with regard to professional activities such as engineering and architecture, the status of the industry as a career opportunity does not compare favourably with other options (Harris, 1989). This is mainly because the girls' career choices, and in particular their encouragement to enter non-traditional occupations, is said to be influenced strongly by their family, friends and teachers (Agapiou, 2002).

The construction industry displays a macho culture where relationships are characterized by argument, conflict and crisis (Gale, 1994b, cited in Bagilhole et al., 2000). As a result, employees (male and female) find that they are exposed to an extremely hostile environment. Women who are attracted to the construction industry face the same stereotypical barriers as women in other sectors. In this male dominated profession there are added stereotypes regarding the nature of the profession and the professionals themselves (Langford et al., 1994). Women who do enter the construction industry in professional positions tend to fill technical specialist positions rather than general managerial posts (Bennett et al., 1999). Bagilhole et al. (2000), noted that the construction workplace has been described as among the most chauvinistic in the UK, with an extremely macho culture which is hostile and discriminatory to women. This results in gender differentiated career opportunities, which have an inevitable consequence of high staff turnover of women in construction companies (Davidson & Cooper, 1992). Dainty et

al. (2000) found that younger women became disillusioned with their career choice more rapidly than men and sought to leave the industry early on in their careers. This macho environment, which is also expressed in more disturbing terms as sexual harassment within the construction industry, is a real concern with almost all reports on women in the industry acknowledging this problem (CIB, 1996). Davey et al. (1999) highlighted that in the construction industry, male values are the norm such as long working hours, competition, independence, full-time working and that rewards and expectations for career achievement are paramount. Davidson (1996) and Davidson & Cooper (1992) indicated that women who seek entry into male-dominated cultures either have to act like men in order to be successful, leave if they are not adaptable to the culture, or they can remain in the industry without behaving like men but maintain unimportant positions. Dainty et al. (2000) found out that male managers use discriminatory recruitment practices which put many women off applying for new positions with contracting organizations. It was also pointed out that construction workers are expected to work outside during the cold winter months, often in dirty conditions, which in their opinion made the industry unattractive particularly to women (Fielden et al., 2001). Therefore, the male dominated culture can be especially destructive for women entry, career development and retention in the construction industry.

The mainstream courses and training provided by colleges, training organizations and employers, create a host of problems for women arising from the male-dominated environment and masculine culture (Gale, 1994a). Peacock and Eaton (1987) found that over half of the young women who returned their questionnaire reported that during their training period they encountered a general disbelief among male instructors and colleagues that women could be technically competent. Access to high-profile development opportunities (such as to enquiries and working groups) is often gained through informal networks and mentors. Research shows that women tend to lack access to informal networks that provide information about such opportunities. Although increasing numbers of women have appropriate educational qualifications, Wernick (1994) found that there is still a perception that there is a lack of suitably qualified women for senior management positions. She attributes this to the fact that women have limited access to the wide range of developmental experiences and activities that build the credibility needed to advance. However, Gann and Senker (1998) suggest that it is due to the continued reluctance on the part of construction companies to recognize women as an important source of new workers, rather than a lack of access to appropriate training.

Work-family conflict is defined as a form of inter-role conflict whereby job and family demands cannot be met simultaneously and is an on-going problem for women with career aspirations (Wentling, 1996). The conflict between work and family obligations, that many construction professionals experience, is more acute for women than for men. Recent research suggests that job demands borne by construction professionals is damaging to their personal relationship (Lingard and Francis, 2002). Site

based employees, both professional and manual workers, are usually subject to changing work locations. This can involve travelling substantial distances and/or long periods away from home, a situation which can present serious difficulties in terms of transport and child-care (Greckol, 1987). The construction industry fails to appreciate some of the issues associated with combining work and family commitments, and organizations tend to treat family and work as completely separate (Fielden et al., 2000). A study undertaken by Lingard and Lin (2004), suggested that women in construction adopt an 'either or' approach to career and family. However, women who expect to balance both family and career success in the construction industry may experience significant difficulties (Lingard and Lin, 2004).

1.3 COMPARATIVE ANALYSIS: THE METHODOLOGY AND RESULTS

1.3.1 Data Collection and Analysis

This section explains the way in which the comparative analysis was carried out for this research. The construction sector was compared with the medical and marketing sectors in terms of career deciding factors, career progression, career motivation, opportunities, and barriers.

In this context, a number of questions relating to factors that influenced the respondents' career decisions, career progression and barriers to progression, and their general experiences at work, needed to be answered. Interviews were chosen as the most appropriate method for this study as they allow subjects to convey to others their own situation from their own perspective and in their own words (Kvale, 1996). The type of interviews used were semi-structured; as these have the advantage of being a 'halfway house' between the rigid layout of a structured interview and the flexibility and responsiveness of an unstructured interview (Moore, 2004). They allowed for the collection of both structured information and people's views and opinions, allowing spontaneity in the interviewer's questioning and the interviewee's response. The research question for this study was defined as 'what is the current status of professional women in construction, medicine and marketing sectors, in terms of their careers, opportunities and barriers?'. Based on this research question, the interview guidelines were formulated. The development of the interview guide did not end at the start of the first interview. Having carried out a pilot interview with the team members, the guidelines were modified by adding probes, and in certain instances, topics which had not originally been included. All the interviews were recorded using an electronic voice recorder, thereby facilitating the conversion of voice into text for analysis.

Men and women working in a professional capacity within the construction sector including consultancy, contracting and client organizations, educational institutions, and women working in a professional capacity within the medicine and marketing sectors were

identified and interviews conducted to gather information based on the interview guidelines. Each respondent was sent a copy of the guidelines prior to the interview. The sample included several interviews with representatives of the construction industry and academia, plus seven interviews each with medicine and marketing representatives.

The next stage in the research process was the analysis of the data collected. The analysis of the interviews undertaken for this research followed the process outlined by Hall and Hall (1996) where the qualitative analysis involves three activities: data reduction, data display, and conclusion drawing. The first stage, which was the data reduction, was the process of selecting, focusing, and simplifying the interview transcripts. Before starting the data analysis, all the interviews were converted into text; thus, the transcripts of the interviews were made ready for analysis. The second stage was the data display. This was done by producing data matrices. A data matrix was produced by tabulating the interview data; the respondents were listed as columns and the questions as rows. Four data matrices were created: one each for construction industry, construction academia, medicine and marketing. This matrix format was an ideal way of putting together the summarized data from the interviews and gave an 'at a glance' way of noting responses and making comparisons. The matrix was also useful as a reference tool when providing recommendations, as it was simple to refer back to which respondents noted such issues, and subsequently to extract quotations. The final stage of analysis was to display the data and draw conclusions.

As the main aim of this research paper is to provide recommendations, the subsequent section outlines the findings of the comparative analysis in brief.

1.3.2 Differences and Similarities between the Sectors

This section summarizes the findings of the comparative analysis. Differences and similarities between the sectors are highlighted as well as the factors that encourage or discourage women to enter the three sectors.

The representation of women in the medical and marketing sectors is comparatively higher than in that of construction. The major reasons behind this under-representation of women in construction would appear to be the inaccurate perception that many have of the construction sector and the lack of knowledge of professional careers in respect of the sector. In contrast, careers advisors, teachers, parents and school children have better knowledge of the job opportunities in other sectors. Thus, women who want to choose a career in the medical or marketing sectors tend to receive positive support and advice from teachers and careers advisors, and encouragement from family members. This suggests that construction must do more to change stakeholder's often negative and inaccurate picture of the industry. Another significant difference identified between construction and other sectors is the physical environment. The site in particular, must be changed to attract more women into construction and

provide a more supportive environment once they have entered. The office based environment is viewed by many as more female friendly; by providing additional and often necessary facilities at site, it can also change into a state where it is more receptive to females.

Similarities were also found between the sectors and some of these represented common challenges for women irrespective of which one they are attached to. The work-life balance and psychological factors were identified as common issues for women across the sectors. Irrespective of sector women generally face challenges in maintaining a balance between personal life and professional life, especially if they are to progress well in their respective careers.

1.4 THE RECOMMENDATIONS

This section provides recommendations to attract and retain more women in to construction. These take account of lessons learned from other sectors; however, certain recommendations have relevance across all sectors. The recommendations are discussed under the following sub headings.

1.4.1 Work-Life Balance

Maintaining a work-life balance is a problem that is common across all sectors. It is also seen as a common problem for both males and females. However, while both need to balance the demands of work and home life, women still bear the primary responsibility for domestic duties in most households (Higgins et al., 2000). Construction organizations and employers in particular, must understand the importance of the work-life balance. Family needs must be taken into consideration and the 'either or' approach should be changed. Although it is a common issue for both genders, it is obvious that women need the option of an elective career break during pregnancy, and the opportunity for further breaks while raising children. With this in mind, the following recommendations are made to enable women to more successfully manage both work and family life:

- Allow flexible working hours based on the scale of family responsibilities women have
- Develop 'career break' schemes that may include
 - providing re-training for returning employees;
 - providing mobiles, laptop and other facilities and equipment that may enable women to work from home or provide greater flexibility in working patterns; and,
 - keeping in touch with women during their career break period and updating them with new developments in the organization.

1.4.2 Women's Psychology

Most women from all three sectors interviewed felt that they have to work harder than their male counterparts to achieve the same recognition. However, many claimed that achieving recognition is not a gender issue; irrespective of gender it happens in organizations. One of the main reasons for women to have such a feeling is the psychology of their own clients. There is a frequent perception among clients, irrespective of whether they are construction clients, patients or marketing clients, that male professionals perform better than their female counterparts. Thus, clients or patients often prefer their project, or their health, should be attended to by male professionals. Females therefore may have to work harder than their male counterparts to be competitive and prove that they are equally capable. In addition, females are said to have certain psychological feelings which may act as a barrier to their displaying capabilities to clients and thus may have to work harder than male counterparts. Women have a tendency to lack confidence and self-esteem, and are often less competitive in nature than men; they have a tendency towards less risk taking and do not seek help. This problem can be considered as an internal barrier. A feeling of inferiority may affect progress in their career and prevent them gaining promotions. Therefore we need to:

- Promote 'can do' and 'can win' attitudes among women;
- Promote role models – identify appropriate role models and introduce them to the public and the construction sector to encourage women attached to construction or women who want to begin a career in the industry.
- Appreciate and promote women's achievements, including success stories about projects managed and supported by female managers. This may change the attitude of clients towards women's performance.

1.4.3 Image Problem

The 'image problem' discussed earlier in this paper has more impact on women's career aspirations than that of men. It is important to understand the difference between the 'negative image of the industry' and an 'incorrect perception of the industry'. The negative image is an industry-wide problem, irrespective of whether they are male or female. For instance, the construction industry is typically portrayed as offering low paid, promoting adversarial business relationships, poor working practices, environmental insensitivity and a reputation for under performance. Solving some of these problems will take a long time and require significant change. However, an 'incorrect picture of the industry' can be resolved by educating people and women, in particular, and it would ultimately increase the number of entries of women into construction. This could be achieved by:

- Organizing positive image campaigns to educate young women about professional roles and the career opportunities available for them. Merely implementing a positive image campaign without revealing the real picture may attract more women into construction but is unlikely to keep them in the industry. Therefore it is important to give a correct picture of the industry;
- Inviting construction women role models to schools to share their experiences with female students; and,
- Organizing workshops for women on how to work successfully in a male dominated industry, with examples and practical solutions.

1.4.4 Career Knowledge

Education at the very early age is the best way to improve awareness and create an understanding of the industry. The decision to select a career in the construction industry should be taken well in advance at a school level, particularly by those who intend to be a construction professional in the future. The more that schools students know about the construction industry the more likely they are to select a career in it. Therefore information about careers within the industry must be transmitted to school students. As the girls' career choices, and in particular their courage to enter non-traditional occupations, is said to be strongly influenced by their family members, teachers and careers advisors, it is also important to educate these influencers with the knowledge of professional roles and careers opportunities for women in construction. Thus education has taken an important place in playing a role in raising public awareness on construction industry. This could be achieved in the following ways:

- It was suggested that young professionals be encouraged to visit schools and talk about their careers in order to change incorrect perceptions many people have towards the construction profession. They could talk about the nature of industry's professional occupations, higher education routes to professional status and career opportunities for school students considering a degree in construction.
- Advice should be given to parents and teachers on how to encourage and support their daughters and students respectively who choose a career in construction.
- It is imperative to prevent career advisors providing inaccurate and inadequate information on the construction industry. Training events could be organized for professional careers advisors where they can be educated on the career opportunities available for women in construction.
- The skill shortage is an ongoing problem in the UK construction industry at present. It is necessary to emphasise this problem to employers and advise on how the recruitment of more women might address this issue. They could also be advised on implementing Equal Opportunities (EO)

recruitment procedures in order to recruit skilled women in to the industry.

- Policy makers are to be informed about Equal Opportunities (EO) policies and it is important to standardise EO recruitment procedures to minimise informal recruitment via personal contacts.
- Finally, raising awareness of the construction industry among the general public is also very important. The public is yet to realize the contribution of the built environment makes towards their quality of life. This could be addressed by the following:
 - Senior professionals at a management level to raise awareness of the roles that women can obtain in construction.
 - As suggested by the former director of Women in Science and Engineering (WISE), women's achievements should be revealed to politicians and the media. A lack of awareness of women's achievement in Science, Engineering and Technology amongst politicians and media representatives could be one of the major causes for a lack of awareness among the public. The message would easily and quickly reach the public through such means.
 - Public awareness activities should be held, run not only by the education centres, but by tri-pod collaboration between such centres, the government and industry.

1.4.5 Physical Environment

The physical environment of the construction sector has been identified as a barrier to the smooth career progression of women. Although the office based environment is often viewed as female friendly, the formal structural factors within the site based environment should also be changed. The culture of the industry partially contributes to the physical environment and facilities provided at site. It is true that making a change in culture is not easy and is unlikely to be a quick process; it is very difficult to change culture within a short period of time. Mere change in the physical structural factors will not address all cultural problems, as culture includes, among other things, the way of talking, behaving and the way of being in the industry. However, by changing the physical structural factors, the industry can be converted to a state where it would be more receptive for women. This could be achieved by the following:

- Provide separate facilities for women at site such as toilets etc.;
- Provide clothing that fits females – it was claimed that male clothing is often bigger and uncomfortable for women to wear;
- Monitor the attitudes and behaviour of co-workers towards female professionals; and,
- Allocate more than one woman for site based jobs, because when women are not isolated they can make a change in the structural factors.

1.4.6 Initiatives

Dainty et al., (2000) found that women may not remain in the industry after education due to the inaccurate picture of the industry portrayed by recent recruitment initiatives. Their research found that women are more likely to be attracted to the industry through targeted recruitment campaigns. However, they noted that women who had entered the industry due to such initiatives have a poor initial understanding of the culture of the industry and the inherent difficulties of working in such a male dominated environment. There are many initiatives taken by various benefactors in order to attract and retain more women into construction. For example, the UK Resource Centre (UKRC) has an initiative called Women Returners Strategy aimed at greater work life balance for all in Science, Engineering and Technology (SET) occupations, to enable employers to make better use of all the talent available. Also, the Oxford Women's Training Scheme (OWTS) - a voluntary sector women's training organisation - offers IT, construction and personal development training to women with few previous qualifications and lack access to mainstream training provision. However, there is a question mark over whether such initiatives can reach women who really need the support. It is therefore strongly recommended they reveal the the purposes and the beneficiaries of the initiatives in order to enjoy the maximum benefit out of them. The beneficiaries could be either young women who want to choose a career in construction, women who are already in the industry, women who need career break or returning women who want to work again in construction. This could be done in the following ways:

- Promote mentoring and develop networking among the construction females professionals;
- Publicise the purpose of the initiatives taken by various benefactors; and,
- Circulate the information related to the initiatives available for professional women across Human Resource (HR) management departments of construction organizations, schools and careers advisors.

1.5 CONCLUSIONS

This paper has tried to highlight the lack of women working in a professional capacity within the construction sector and endeavours to provide recommendations to aid recruitment and retention of women in construction.

It was found that a lack of knowledge of professional roles and career opportunities available for women, and a lack of public awareness were two major causes for the absence of many women in construction. Image was found to be a major barrier for both men and women. Although a

common barrier, comparatively it was found to have a bigger impact on women's career choices. The recommendations made in this paper have taken these issues into consideration. Thus, raising awareness of the construction industry, professional roles, and career opportunities for women among various stakeholders is strongly recommended. The recommendations were also based on work-life balance and women's psychology, physical environment and initiatives. These recommendations were confined to young women who wish to choose a career in construction, women already in the industry, women who want to take a career break, returning women, parents, teachers, careers advisors, construction employers, benefactors and policy makers, government, politicians, media representatives and the general public. It is hoped that putting these recommendations into action will help to increase the number of women working in the construction industry.

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