



University of
Salford
MANCHESTER

Effect of attitudes towards creating women managers in the construction industry

Ginige, K, Amaratunga, RDG and Haigh, RP

Title	Effect of attitudes towards creating women managers in the construction industry
Authors	Ginige, K, Amaratunga, RDG and Haigh, RP
Publication title	
Publisher	
Type	Conference or Workshop Item
USIR URL	This version is available at: http://usir.salford.ac.uk/id/eprint/9854/
Published Date	2007

USIR is a digital collection of the research output of the University of Salford. Where copyright permits, full text material held in the repository is made freely available online and can be read, downloaded and copied for non-commercial private study or research purposes. Please check the manuscript for any further copyright restrictions.

For more information, including our policy and submission procedure, please contact the Repository Team at: library-research@salford.ac.uk.

EFFECT OF ATTITUDES TOWARDS CREATING WOMEN MANAGERS IN THE CONSTRUCTION INDUSTRY

K.N. Ginige, R.D.G. Amaratunga, R. Haigh

Research Institute for the Built and Human Environment, University of Salford,
Salford, M5 4WT, UK.

E-mail: K.N.Ginige@pgr.salford.ac.uk

ABSTRACT: The paper attempts to explore the issues associated with peoples' attitudes towards under-representation of women at senior managerial positions in the construction industry through a literature review. The construction industry holds an image of a rough natured industry associated with difficult working conditions. The attitudes and stereotypes of society regarding managing work and resources in that hard environment - by a woman, normally expected to be the heart of the family scene, with social responsibilities and in the traditional motherly role - are preventing the promotion of women managers in the industry.

Since attitudes are the people's biases or tendencies that influence their response to situations, activities or the people, changing attitudes can be used as a powerful device for altering the pattern of thinking and human behaviour. The construction industry will benefit with more women managers if the unfavourable attitudes regarding the promotion of women managers can be changed.

Keywords - Attitudes, Construction industry, Glass ceiling, Women.

1. BACKGROUND

According to Mott (1998), women of all ages remain under-represented in skilled career fields due to misconceptions regarding gender-specific abilities and preferences and under-valuation of women's skills.

Construction is well known as a male dominated industry. Women in the UK construction industry currently account for fewer than 10 percent of the workforce, reflecting their under-representation in an industry that fails to attract and retain women. For a number of years, women have been moving into professional work such as law, accountancy and medicine, all of which require high-level qualifications and are considered attractive because of the perceived high level of social status. Today, the number of women and men are almost equal in these sectors. However, occupational sectors such as engineering and construction have not seen a corresponding change in the make-up of the workforce (EOC 2004b cited Gurjao ca2006).

Further, previous studies show the UK's construction industry is facing a skills shortage which is threatening the long-term health of the industry. In the UK, the construction industry has the second highest level of skill shortages as a percentage of total workforce vacancies. It is suffering recruitment problems within its traditional source of labour, i.e. young men aged 16-19. Efforts are being made to recruit women into the workforce, but with limited success. In the short term, the industry fills the skills gap using workers from low wage economies. What is needed is a skilled workforce that sees its long-term future in the UK construction industry. To meet the challenge of the skills gap, recruitment of women has become a necessity.

The Equal Opportunities Commission (EOC) investigation into the segregation of men and women in training and work found a strong correlation between sector-specific skills shortages and the under-representation of women. Under-representation of women in sectors experiencing skills shortages is exacerbating these shortages. The EOC says breaking gender barriers will help

solve skill shortages (EOC 2004b cited Gurjao ca2006). Construction, engineering, plumbing and childcare are among the most strongly gender segregated sectors of the workforce in Britain (Gurgao, ca2006).

A recent occurrence in the world of work is the phenomenon of women being stuck at lower levels, also referred to as the glass ceiling effect (Morrison and Von Glinow, 1990). Different studies and sources in several countries show that the increase of women in managerial positions is still lopsided, especially when compared to the total number of females in the workforce (Ott, 1998; Vianen and Fischer, 2002; Vinnicombie, 2000 cited Cassar and Cortis 2004). The representation of women in many industries decreases with an increase in the seniority of the position. Women occupy junior and supporting positions within high status professions (Dainty 1998 cited Gurjao ca2006).

The “glass ceiling”, the situation where women can see, but not reach, higher level jobs and are prevented from progressing in their careers, still exists in many occupations and industries (Gurgao ca2006). According to Greed (2000), 6 percent of the 15 percent of the staff in the professional and managerial levels in the UK construction industry are women. In addition, construction is one of the industries that contributes least to women’s representation. Therefore, the women managerial representation becomes less than 1 percent of the total construction work force in the UK.

Women’s labour market participation has increased over recent years and their employment rates have risen, whereas men’s participation in the labour market has declined slightly. Girls now perform better than boys in education and in gaining qualifications (Hibbett, and Meager 2003 cited Gurgao ca2006). Whilst constituting nearly 50 percent of the population, more than 46 percent of the labour market, and more than 50 percent of the entrants into higher education, women account for just 10 percent of the construction workforce (EOC, 2005i; EOC2005j cited Gurgao, ca2006). This breaks down as 1 percent of trades people, 10 percent of those working in professional occupations (such as design and management), 84 percent secretarial, 2 percent are sole traders and 4 percent are micro-enterprises (employing 1-10 people). These figures have remained relatively static for the last few years (CITB, 2004a cited Gurgao, ca2006).

Fondas (1997 cited Bono and Duehr 2006) shows that contemporary books and articles on management, describe management work in terms of “qualities traditionally defined as feminine”, such as helping and developing others and building networks of relationships. In academic literature, a new genre of leadership (i.e., charismatic and transformational leadership; Bass, 1985, 1998 cited Bono and Duehr 2006) has dominated recent research (Judge & Piccolo, 2004 cited Bono and Duehr 2006). There is also an ongoing debate about whether women now hold a leadership advantage (Eagly & Carli, 2003; Vecchio, 2002, 2003 cited Bono and Duehr 2006).

The above argument is the strongest tool for breaking the glass ceiling in construction industry because arguments on equal opportunities, or filling the skill gap by recruiting women, does not mean more women in managerial positions brings better management to the industry. Kanter (1977) explains that because women in managerial positions are not proportionately represented in organizations, they are in a vulnerable position, simply because they are in a minority.

Leadership is a process that is similar to management in many ways. Leadership involves influence, as does management. Leadership requires working with people, which management requires as well. Leadership is concerned with effective goal accomplishment as is management. In general, many of the functions of management are activities that are consistent with the

definition of leadership (Northouse 2004). Therefore, the roles of managers and leaders will be treated similarly throughout this paper in order to review the effect of attitudes towards women's career advancement in the construction industry.

2. BARRIERS FOR BREAKING THE GLASS CEILING

Several studies have been carried out to explore the reasons behind women's under-representation in managerial positions. According to Cassar and Cortis (2005) these studies can be clustered into two sets, those focusing on internal factors and those focusing on external ones. The two sets of factors are elaborated as follows by the authors.

2.1 Internal factors

Internal factors take into account family and domestic responsibilities that women may encounter and which, in turn, may interfere with women's careers (Mae Kelly and Dabul Marin, 1998; Marongiu and Ekehammar, 1999 cited Cassar and Cortis 2005). Family obligations and domestic responsibilities may thus be reinforcing the notion that because of family affiliation, women are not as deeply involved in their work as men. This may be one explanation why males populate managerial positions, since it is a career that requires an adequate degree of job involvement (Cromie, 1981; Lewis, 1994 cited Cassar and Cortis 2005).

According to Newstrom and Davis (1994 cited Cassar and Cortis 2005), the definition of job involvement is not only the degree to which employees engross themselves in their job but also involves the extent to which employees view work as being a central part of their lives. According to this definition, female managers who are both career and family oriented are at a disadvantage. This is because family demands may be interfering with women's careers, leading them perhaps to refuse overtime, rearrange their working hours or refuse extra work assignments, thus risking the possibility of being perceived as less job-involved than their male counterparts (Keene and Reynolds, 2002 cited Cassar and Cortis 2005).

2.2 External factors

External factors may be clustered into attitudinal and structural barriers (Laufer, 2000; Powell, 2000 cited Cassar and Cortis 2005). These transparent and subtle barriers may be hindering women's career advancement, perhaps even compelling them to make a choice between upward mobility and family stability (Cooper Jackson, 2001; Davidson, 1996; Mae Kelly and Dabul Marin, 1998; Marongiu and Ekehammar, 1999; Mavin, 2001; Morrison and Von Glinow, 1990 cited Cassar and Cortis 2005).

- Structural barriers: Organizational practices such as inflexible working arrangements, mobility requirements and discriminatory personnel practices persisting within recruitment, promotion, appraisal systems and training opportunities especially for women in non-traditional female jobs are important factors, since they contribute to the formation of the glass ceiling (Cooper Jackson, 2001; Rutherford, 2001 cited Cassar and Cortis 2005). Although many of the explicit discriminatory practices towards women

have been abolished, many forms of implicit unequal treatment of women still persist (Brannon, 2002 cited Cassar and Cortis 2005). Consequently, women are often given fewer opportunities (Davidson and Cooper, 1992; Milwid, 1990 cited Cassar and Cortis 2005).

- Attitudinal barriers and stereotypes: Despite the gains that women have made, negative attitudes and stereotypes of women as leaders still prevail in many cultures (Bass et al., 2001; Ching-Yim and Harris Bond, 2002; Cooper Jackson, 1999; Mostafa, 2003 cited Cassar and Cortis 2005). Prejudiced attitudes towards female supervisors include the belief that women do not make good leaders, since the model of the successful manager is based on masculine traits (Burke and Collins, 2001; Cabral-Cardoso and Fernandes, 2003; DeMatteo, 1994; Marongiu and Ekehammar, 1999; O'Leary and Ryan, 1994 cited Cassar and Cortis 2005).

Also, according to Cordano *et al.* (2002) in his study of attitudes toward women as managers: sex versus culture, Caligiuri and Cascio (1998) have proposed four important predictors of success for women managers on global assignments such as individual characteristics, organizational policies and practices, family adjustment, and host nationals' attitudes toward women managers.

The above research prove that attitudes form a strong barrier against the women's career development towards management levels especially to the senior managerial positions.

3. EFFECT OF ATTITUDES, STEREOTYPES AND IMAGE FOR BREAKING THE GLASS CEILING

3.1 Attitudes

Many studies have established a relationship between attitudes towards women's roles and their employment (Dowdall, 1974; Mason and Bumpass, 1975; Spitze and Waite, 1978 cited Cordano et al. 2002). An attitude is, by definition, assumed to exert "a directive or dynamic influence" on behaviours to which it is related (Allport, 1935 cited Misra and Panigrahi, 1996). The emphasis on attitude change as a precursor to behaviour change has particularly been strong in the sex-role literature. More negative attitudes of older people will affect the way women are treated both in the workforce and in the home (Misra and Panigrahi, 1996).

Farmer and Bohn (1970 cited Misra and Panigrahi, 1996) state that men, especially in their roles as partners or husbands, have significant influence on the career development of most women. Several studies have concluded that the career status of working women is associated with their perception of their husband's attitude towards their employment (Parnes, 1976; Rapoport and Rapoport, 1971; Tangri, 1972 cited Misra and Panigrahi, 1996).

According to previous studies, men's preference to promote and work alongside other men and the feeling in many proactive and ambitious females that the older men find them in some ways intimidating, are the key reasons behind restricting women from moving to the higher positions in their career. However, some theories suggest, since women are significantly more feminist in their attitudes than men, it is the women, more than men, whose occupational opportunities and rewards are restricted by their domestic obligations.

3.2 Stereotypes

Gender stereotypes are categorical beliefs regarding the traits and behavioural characteristics ascribed to individuals based on their gender. They serve as expectations about the attributes and behaviours of individual group members (Cleveland, Stockdale, & Murphy 2000 cited Bono and Duehr 2006) and are considered one of the direct antecedents of discrimination at work (Dovidio & Hebl, 2005 cited Bono and Duehr, 2006). It has been found that gender stereotypes are salient in organizations as a potential barrier to advancement (Bono and Duehr, 2006).

An occupational stereotype is a form of sex-role stereotyping, that is, a set of assumptions regarding the sorts of activities and interests that are associated with the roles of men and women in society. Sex segregation effectively creates a class of jobs which is then subject to societal stereotyping (Gutek, 1988 in Miller, Neather, Pollard and Hill 2004a cited Gurgao, ca2006). Segregation takes place first and is then embodied within stereotypes and cultural norms and expectations, which then serves to underpin the process of segregation. Individuals by and large perceive an occupation as being performed principally by men or by women, and then believe it must require masculine or feminine attributes in order for an individual to be effective within that role (Gurgao, ca2006).

Occupational gender-stereotyping is important to consider because of labour market outcomes especially in terms of recruitment, hiring, pay, promotion, etc. that may result from them. Further, gender-stereotyping of occupations may discourage individuals from pursuing careers in occupations typed as gender-inappropriate for them, even though they may actually be well-suited for such careers (Gatton and DuBois *et al.*, 1999 cited Gurgao, ca2006).

According to Johnson and Powell (1994), the decision-making characteristics of males and females in a 'non-managerial' population, in which the majority of individuals have not undergone formal management education, are contrasted with a 'managerial' population of potential and actual managers who have undertaken such education. It is argued that women are often excluded from managerial positions of authority and leadership due to stereotypes, which have been constructed by observing 'non-managerial' populations at large.

The stereotypical beliefs about women in managerial positions generate the idea that having traditional male characteristics is a better predictor for success, thus reinforcing the belief to "think manager-think male" (Schein as cited in Sauers *et al.*, 2002 cited Cassar and Cortis, 2005). Consequently, stereotypical notions perceive women who had achieved key managerial positions, as being successful imitators of characteristics believed to be utterly a male domain (Coates, 1998; Stanford *et al.*, 1995 cited Cassar and Cortis, 2005).

3.3 Image

Image is the mental picture, which is created through information gained from the external environment and processed internally with relevant past experiences, on a certain aspect. Subsequent reactions and behaviour of a person towards that aspect are driven by the image carried in the mind. Similarly, the nature of an image regarding a particular industry plays a major role in building the attraction for recruiting people. An industry with an unfavourable image finds it difficult to recruit potential employees to fulfil the demand. On these grounds, the image of the construction industry emerges as a barrier for breaking the glass ceiling.

The construction industry is seen as tedious, dirty, non-technical, non-professional, hazardous, cyclical and associated with difficult working conditions (Reid, 1995). The perception and image of the construction industry is not a positive picture from its beginning and still deeply rooted in the past. Jones (2005 cited Gurjao, ca2006) states in her research report, the image of the industry is associated with bricklaying; deeming it dangerous, hard working and macho, despite years of positive image campaigning. There is little realisation that the industry is becoming high-tech, no longer simply requiring brute strength; it is more about mental strength, commitment and the determination to succeed. The general image is equated with site work and physical labour; instead it is a complex industry with many sub-sectors such as consultancy, design, manufacturing and supply.

Therefore, the common image of construction as an extremely rough natured industry distracts women from entering the industry. It indicates that the pathway towards senior managerial levels, for women, is enormously hard. The human mindset that believes construction industry is an uncomfortable place of work creates less attraction, less recruitment and less retention of women in the industry.

4. DISCUSSION

Macke *et al.*, (1978 cited Cordano *et al*, 2002) states the impetus of the women's rights movement and the increased interest in the study of sex-role attitudes resulted in many studies which tried to establish a relationship between gender-role attitude and norms, behaviour and attitudes towards employment. It remains unclear whether non-traditional attitudes can lead to changes in gender-role behaviour. It seems likely that behaviours and attitudes are reciprocal, that "prior attitudes affect subsequent employment, and work experience shapes later sex-role attitudes".

Misra and Panigrahi (1996) in their study on "effects of age on attitudes towards working women" show that the variables potentially relevant to attitudes towards women working fall into three broad categories such as: labour market opportunities; marital and demographic statistics; and religious and orthodoxy feelings through an analytical model. The study explains the variables as follows.

- Labour market opportunities

This includes variables related to employment experience, e.g. current employment and education. Employment is expected to be an important predictor of non-traditional attitude because people currently employed and those who have worked a number of years will be exposed to more career women and, hence, will have less traditional attitudes (Mason *et al*, 1976; Thornton and Freedman, 1979). Further, those with greater security in their jobs or who believe it is easy to find a job will have favourable attitudes as they will not fear threat to their jobs. Because education is correlated with more liberal social attitudes (Lipset, 1960), it is expected that people with more formal education will be more prone to reject the traditional role and accept the liberal position. Education is a measure of earning potential and employment ability that has been shown to have a direct positive effect on the probability that a woman will work. Further, people who came from families where their mothers worked will be more supportive of women working, having themselves been exposed since early age to the concept of women working.

- Marital and demographic characteristics

This includes marital status, number of children and children under six years at home, gender, place of residence, and family income. The exchange model of gender-role attitudes (Morgan and Walker, 1983) suggests that women's support for the gender should be stronger than men's. According to this model, support for gender-role equality is based on an expectation of profit from such equality or on the increasing costs of traditional roles (Mason and Lu, 1988). Demographic changes like rising divorce rates, declining fertility and the increase in women's participation in the paid workforce (Davis and Van den Oever, 1982; Morgan and Walker, 1983) are trends that make women's traditional roles less appealing and sets the stage for women's adoption of an egalitarian ideology. Literature suggests currently that married women and women with children under six years of age, i.e. groups with more invested in the traditional division of labour, should be more traditional in outlook compared with those who are never married, divorced, widowed, or without young children (Morgan and Walker, 1983). Respondents with higher family income should have egalitarian ideology, whereas males will be expected to be less supportive of women working. Respondents from urban areas will be expected to be more supportive of women working than from rural areas.

- Religious and orthodoxy feelings

This includes the frequency of attending religious services and the respondents' views of self as liberal or conservative. Religious orthodoxy, which pertains to a fundamentalist religious orientation and belief in a literal interpretation of the Bible, includes beliefs restricting women's roles to traditional ones. In other words, people who are more religious are expected to be more conservative and, hence, will be less supportive of women working. Similarly, people who consider themselves to be liberal will tend to have more favourable attitudes.

However, an improvement in the situation of the female workforce including women managers can be seen over the pass decade. Although the figures do not show an extensive growth where the construction industry is concerned, the current situation is far better than in earlier days.

The 1970s, in particular, were heralded as a decade of social transition characterized by the increasing employment and educational attainment of women, a decreasing emphasis on early marriage and parenthood, and the apparent acceptance of greater sharing of spousal/parental responsibilities (Tallichet and Willits, 1986 cited Misra and Panigrahi, 1996). The association of egalitarian sex role attitudes with higher levels of education and increased participation in the workforce has also been documented in several studies (Mason et al, 1976; Smith-Lovin and Tickamyer, 1978; Thornton and Freedman, 1979 cited Misra and Panigrahi, 1996).

Some events in the past decades have favoured the change from traditional roles of women to careers outside the home, including declining fertility rates (making a full-time role of motherhood less necessary), rising divorce rates and the related increasing proportion of families headed by women. These combined with high rates of inflation that have eroded real disposable earnings, have thus forced families to rely increasingly on two incomes to maintain living standards. A tolerance for deviations from norms, although favourable for women, may have adverse consequences for women because more conservative attitudes can affect the way they are treated, both at work and at home (Cordano *et al*, 2002). Results of some studies reveal that younger people seem to be changing their sex-role attitudes and that women have more favourable attitudes than men towards women working.

Bono and Duehr (2006) show, as the number of women in management roles increases and organizations place a greater emphasis on diversity, a subsequent change in perceptions of women as leader-like is expected. They examined gender and management stereotypes of male

and female managers and students. The results revealed a considerable change in male managers' views of women over the past 30 years, as evidenced by greater congruence between their perceptions of women and successful managers and stronger endorsement of agentic and task-oriented leadership characteristics for women. The study also indicated that respondents with positive past experiences with female managers tended to rate women higher on management characteristics. Therefore, it can be said that the image which is built by the performance of the women managers has a great influence on changing attitudes.

Alwin *et al.* (1992 cited Misra and Panigrahi, 1996) in a study of attitudes towards women's labour force participation in the UK, Germany and the USA reported that respondents from the UK and Germany were more traditional in their attitudes towards women's work roles compared with those in the USA. On the other hand, Cordano *et al.* (2002), indicates that there are no cultural differences in the acceptance of women as managers and culture seems to have a minimal influence on men's attitudes towards female managers.

Almost all the studies which emphasise that traditional attitudes should be changed in order to increase the women participation in managerial positions state education, training and awareness as key criteria for achieving the above because the educational system may also be one of the primary agents that is reinforcing gender stereotypical attitudes. It is proved that as the number of years of education increases, people build more positive attitudes towards women working. Also, when a family is concerned, it has been found that the education of the couple is positively associated with the prediction of attitude. The media can also play a critical role in developing and eliminating stereotypes regarding women workers.

A recent study by Ashmore *et al.* (2001 cited Bono and Duehr, 2006) examined the impact of diversity education on stereotypes and prejudices and found that training can reduce bias at multiple levels. Not only did diversity education lead to a decrease in directly reported, explicit stereotypes, but such education also reduced implicit stereotypes, which occur on an automatic, unconscious level (Greenwald & Banaji, 1995 cited Bono and Duehr, 2006).

According to the above findings, it is clear that a greater attraction of women towards construction industry can be achieved through education, training and awareness programmes. Steps, such as making school girls more aware of the industry and its importance through their curriculum; introducing attractive selection criteria for the construction related courses including scholarships and bursaries; and conducting training programmes to change the traditional attitudes and develop necessary skills can be taken to achieve the target of developing women managers in the industry. It is essential also to change the mindset of men regarding their female counterparts through similar procedures to make the construction environment more comfortable for women as managers.

A change in organizational policies can help women to shatter attitudinal glass ceilings that they encounter throughout their careers. Davidson and Cooper (1992, cited Cassar and Cortis, 2005) argue that organizations should develop corporate support programmes to increase the number of women in the managerial sector. Such programmes should include mentoring, formal networking groups and career counselling. Training programmes can also be established within organizations in order to get male and female managers to share their perceptions, stereotypes, myths and feelings about one another and particularly about the role of women in management. Diversity and sensitivity training can also familiarize employees with women's leadership styles, which in turn may reduce stereotypical tendencies (Cassar and Cortis, 2005).

Media organizations, for instance, must examine the type of language used and the portrayal of characters on entertainment programming so as to reduce bias and stereotyping. Government

policies and initiatives for encouraging women employees, such as enhancing government funded training opportunities to increase skills and qualifications necessary for the industry; publicising government sponsored advertisements to dispel the myths regarding the industry and its jobs; and initiating quality, reliable and affordable childcare will also be important steps for changing women's attitudes towards the industry.

Twenge (1997b cited Bono and Duehr, 2006) reported that women's self-reported masculinity scores were rising over time and proposed that this increase resulted from the changing social climate for women. Contrary to Twenge (1997b), Lueptow *et al.* (2001) review — which examines gender stereotypes based largely on self-reported personality and direct comparisons of men and women — suggested that gender stereotypes have remained stable over time with a possible increase in the perceived femininity of females (Bono and Duehr, 2006).

It is said that, although there is an attempt to uplift the current image of the construction industry, image campaigning has not targeted the entire audience. According to Gurjao (ca2006), in addition to young school leavers and university students there are other groups of women - those returning to work from career breaks and those changing careers yet to be targeted.

Results indicate that there is a significant difference between attitudes of males and females regarding women as managers. Both female employees and business students had more favourable attitudes towards women as managers than their male counterparts. This shows that men are less likely to accept women as managers, while being more likely to stereotype the managerial role as a male occupation.

5. CONCLUSION

As the literature discloses attitudes are an important restriction of women's labour force participation and career improvement. Relaxing this restriction may result in an upward increase in employment for women because positive attitudes reinforce work behaviour patterns and vice versa. Literature suggests with a more pro-feminist attitude in the society, more women join in the labour force. Although a rigid attitude towards gender-based division of labour exists in almost every society, some studies indicate that beliefs based on the notion that women are not as job involved as men, due to family commitment, may be just another stereotypical belief.

The barriers that prevent the entry of women into the construction industry begin in early socializing and education and continue throughout training and recruitment. These barriers are further exacerbated by the construction industry as it continues to foster a male-only image and remains entrenched in a culture that undermines the value of women (Fielden *et al.*, 2000 cited Gurjao, ca2006). Private life demands or the social responsibilities and working environment with attitudinal barriers are the two major factors that resist the existence of women managers in the construction industry.

The educational system can serve as an agent in order to reduce sex bias in education and to ensure that girls are given adequate career guidance towards construction related occupations. It also implies that government and industry policies should be changed to create more favourable attitudes towards working women among people in general and older people in particular.

A favourable change in attitudes for non-traditional roles for women, sex-role stereotypes and the industry's image are some of the major milestones which have to be overcome in order to create women managers in the construction industry.

6. FURTHER RESEARCH

A study carried out by Bodapati & Naney (2001) identified that the negative image of the construction industry can be changed through the conscious effort and dedication of construction educators and professionals. A further research can be carried out to investigate the ways and means of changing attitudes, stereotypes and image through an effort made by the professionals.

7. REFERENCES

- Adeyemi A.Y. et al. 2006. Empirical evidence of women under-representation in the construction industry in Nigeria. *Women in Management Review*. 21(7). pp. 567-577.
- Anon, 2006. The glass ceiling: smashed or still holding strong? - Why are women still rarely in the top jobs? *Human Resource Management International Digest*, 14 (3), pp. 19-21.
- Barbara M. Bagilhole, Dainty A.R.J. and Neale R.H., 2001. Male and female perspectives on equality measures for the UK construction sector. *Women in Management Review*. 16(6). pp. 297-304.
- Bodapati, S.N. and Naney, D., 2001. A Perspective on the Image of the Construction Industry. *ASC Proceedings of the 37th Annual conference*, 4 -7 April 2001 Colorado. Denver: University of Denver, pp. 213-224.
- Bono J. E. and Duehr E. E., 2006. Men, women, and managers: are stereotypes finally changing?. *Personnel Psychology*. 5(9). pp. 815–846.
- Cames I., Singh V. and Vinnicombe S., 2001. Profiles of “successful managers” held by male and female managers across Europe. *Women in Management Review*. 16(3). pp. 108-117.
- Carter A. et al. 2006. Encouraging an increase in the employment of women returners in areas of skill shortage in traditionally male industries. The University of Sheffield.
- Cassar V. and Cortis R., 2005. Perceptions of and about women as managers: investigating job involvement, self esteem and attitudes. *Women in Management Review*. 20(3). pp.149-164
- Cordano M., Owen C.L. and Scherer R.F., 2002. Attitudes toward women as managers: sex versus culture. *Women in Management Review*. 17(2). pp. 51-60.
- Frank E.J., 2001. Chinese students’ perceptions of women in management; will it be easier? *Women in Management Review*. 16(7). pp. 316-324.
- Gale A.W. 1994. Women in non traditional occupations: The construction industry. *Women in Management Review*. 9(2). pp. 3-14.
- Greed C., 2000. Women in the construction professions: Achieving Critical Mass. *Gender, Work and Organization*. 7(3). pp. 181-196.
- Gurjao S., [ca2006]. *INCLUSIVITY: The changing role of women in the construction workforce*. CIOB
- Johnson J.E.V., Powell P.L., 1994. Decision Making, Risk and Gender: Are Managers Different? *British Journal of Management*. 5(2). pp. 123-138
- Kanter RM. (1977). *Men and women of the corporation*. New York: Basic Books.
- Levin L.A. and Mattis M., 2006. Corporate and academic responses to gender diversity. *Equal Opportunities International*. 25(1). pp. 60-70.
- Liu J. and Wilson D., 2001. The unchanging perception of women as managers. *Women in Management Review*. 16(4). pp. 163-173.

- Misra R. and Panigrahi B., 1996. Effects of age on attitudes towards working women. *International Journal of Manpower*. 17(2). pp. 3-17.
- Morrison A.M. and Von Glinow A.M., 1990. Women and minorities in management. *American Psychologist*. 45(2). pp. 200-208.
- Mostafa M.M., 2003. Attitudes towards women who work in Egypt. *Women in Management Review*. 18(5). pp. 256-266.
- Mott V., 1998. Women's career development in middle and beyond. *New directions for Adult and Continuing Education*. 80. pp. 25-33.
- Northouse, P.G., 2004. *Leadership theory and Practice*. 3rd ed. California: Sage Publications Incorporated.
- REID, J. L., 1995. Challenges for the construction industry. *Construction Business Review*. pp. 30-32.