Entry and Career Barriers applied to the South African Construction Sector: A Study of the Perceptions held by Female Built Environment Management Students

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ABSTRACT AND KEYWORDS

Purpose of this paper
The research study reported in this paper sought to determine the level of awareness of employment barriers, specifically marketing and industry culture and environmental barriers, among female professional built environment management students at the University of Cape Town, as well as the perceived impact of these barriers on their entry into and sustained employment in the construction industry.

Design/methodology/approach
The research methodology can be classed as positivist, and allows for a view from different standpoints by incorporating both qualitative and quantitative methodologies to reduce or eliminate the disadvantages of each individual methodologies.

Findings
Overall, the female professional built environment management students, who represent a next generation of entrants into the construction industry, indicated a strong motivation to effect change from within.

Research limitations/implications
However, previous research has shown that even the most motivated entrants are often emotionally worn down by the male dominated industry culture and environment. The impact of the lack of flexible work practices that allow women to balance work and life (family) commitments, as well as provide job satisfaction with regular promotions and equal remuneration jeopardise the positive findings of this research.
Practical implications (if applicable)
Researchers argue that it makes good business sense to remove discriminatory employment practices and provide equal opportunities – not only does it improve competitiveness, but also unleashes quantifiable and qualitative benefits on the construction industry.

Keywords: professional women in construction, work-life conflict, remuneration discrimination, promotion prospects.

1.1 INTRODUCTION

As the most male dominated industry (Fielden et al., 2000), construction is under great pressure to remove barriers to the entry and retention of women (Menches & Abraham, 2007) in order to both stave off the current skills crisis (ibid) and satisfy clients who are demanding different skills and traits (Gurjao, 2006).

The challenge is not with women employed in secretarial or administrative roles, but with the under-representation of women in professional and managerial occupations in the construction industry when compared to other sectors that require high-level professional qualifications, such as law, accountancy and medicine, and which have managed to exhibit near equal numbers of men and women (Gurjao, 2006).

The lack of women in the built environment management professions such as Construction Management, Project Management and Quantity Surveying has resulted in negative consequences for the construction industry in terms of efficiency and effectiveness (Fielden et al., 2000) as well and broader socio-economic concerns (Fielden et al., 2001). This is particularly pertinent for South Africa where the issue of ‘transformation’ dispensation reflects with broader socio-economic concerns over opening the construction industry up to previously disadvantaged groups including women.

The complex, inter-related factors that inhibit women from considering careers in construction and of entering and sustaining employment, operate as either entry barriers or career barriers, depending on when the barriers come into force during the life stage of women (Fielden et al., 2000). Along with legislative assistance, the development of a critical mass of women entering and staying employed in the construction industry is vital to overcome the four main categories of barriers, namely: marketing, socio-cultural issues, education and industry culture and environment (Dainty et al. 2004).

This paper presents research on female cognate students enrolled at the University of Cape Town, who represent the next generation of
female entrants into management occupations in the construction industry. The research investigated the level of awareness of marketing, of industry culture and environmental barriers faced by students, as well as the perceived impact of these barriers on the students’ entry into and sustained employment by the South African construction sector.

The rationale for the research is that the transformation of employment and the implementation of employment equity policy in the South African construction industry can only be achieved through the (increased) awareness of the perceptions held by these students of the challenges and attitudinal entry and career barriers have on the career plans of potential entrants and future employees.

### 1.2 BARRIERS TO EMPLOYMENT

Employment barriers are factors that prohibit women from either considering career opportunities in the construction industry, entering or re-entering employment in the construction industry and/or successfully sustaining their employment in the construction industry (Le Jeune, 2008).

It is not unique for women to experience barriers as their careers develop, but these experiences are likely to be in sharper relief for women in non-traditional occupations such as the construction industry (Bennett et al., 1999). Women take enormous personal and economic risks by choosing non-traditional vocations (Gale, 1994) and are consequently vulnerable to disadvantage and discrimination (Dainty et al., 2004). These barriers exist regardless of national characteristics of labour markets or the broader societal contexts of different countries (Dainty & Lingard, 2006).

Fielden et al. (2000) divides the barriers experienced by women in construction into two broad categories; entry barriers and career barriers. Entry barriers restrict the number of women entering the built environment management professions and project back to ‘kindergarten’ socialization, school education and continue throughout professional training up until and including recruitment, whereas career barriers enforce the ‘glass ceiling’ or ‘glass wall’ effect where prejudices within the workplace give rise to work practices that discriminate against women (Dainty et al., 2004:80).

Although more women are obtaining construction related degrees, the construction industry remains male-dominated (Powell et al., 2005). Students’ awareness of the roles women play in the construction industry comes from lecturers, work placements, family members, etc. (Bennett et al., 1999). Researchers refer to the socialisation of women into the male orientated work practices (Bennett et al., 1999) through the active or passive promotion of the “masculine conflictual construction culture” of further and higher education departments, which have “strong vocational orientation to the construction industry” (Gale, 1994:9).

That women may know what lies in store for them may explain the number of women who opt out of a career in the construction industry.
(Gurjao, 2006). Where women are lead to believe that their femininity will allow them entry into the industry and guarantee swift promotion, reality frequently leads to their swift exit from the industry (Dainty et al., 2004).

Table 1 Summary of barriers affecting women in construction (Le Jeune, 2008)

<table>
<thead>
<tr>
<th>Classification and Listing of Barriers</th>
<th>Characteristic</th>
<th>Affect</th>
<th>Cure</th>
<th>Main Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Poor Industry Image</td>
<td>Macho, low tech</td>
<td>Not attractive career option</td>
<td>Improved, updated, “realistic” imagery</td>
<td>Greed, 1991; Gale, 1994; Bennett et al., 1999; Haupt, 2001; Fielden et al., 2000, 2001; Dainty et al., 2004; CIDB, 2004; Gurjao, 2006; Campbell, 2006; Dainty &amp; Lingard, 2006; Menches &amp; Abraham, 2007; Verwey, 2008</td>
</tr>
<tr>
<td>Lack of Knowledge of Career Opportunities</td>
<td>“Bricklaying”?</td>
<td>Not chosen as career option</td>
<td>Engage in partnered modern awareness campaign</td>
<td></td>
</tr>
<tr>
<td>Lack of Female Role Models</td>
<td>No networks</td>
<td>Fragmentation and isolation</td>
<td>Promote role models</td>
<td></td>
</tr>
<tr>
<td>Societal roles and cultural beliefs</td>
<td>Getting better at recognising women’s rights</td>
<td>Non traditional careers not promoted among women</td>
<td>Early socialisation</td>
<td>Gale, 1994; Bennett et al., 1999; Freeman, 2003; Codrington &amp; Grant-Marshall, 2004; Ling &amp; Poh, 2004; Mathur-Helm, 2005; South African Construction Sector BBBEE Charter, 2006; Dainty &amp; Lingard, 2006; English, 2006; Gurjao, 2006</td>
</tr>
<tr>
<td>Personal attributes</td>
<td>Lack of confidence in abilities</td>
<td>Domination by men</td>
<td>Bolstening of self-esteem, confidence boosting education</td>
<td></td>
</tr>
<tr>
<td>Gender theories</td>
<td>Trying to explain the “inexplicable”</td>
<td>Justifying discrimination</td>
<td>Development of “one fits all” encompassing theory, more research</td>
<td></td>
</tr>
<tr>
<td>Generational Gaps</td>
<td>Work ethic of generations different</td>
<td>Misunderstanding</td>
<td>Greater understanding of and appreciation for generational characteristics</td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Problematic</td>
<td>Discrimination</td>
<td>Implement equitable employment policies</td>
<td></td>
</tr>
<tr>
<td>Early socialisation</td>
<td>Entrenchment of gender identity</td>
<td>Limited career options</td>
<td>Engage in partnered, modern awareness campaign</td>
<td>Sommerville et al., 1992; Gale, 1994; Bennett et al., 1999; Roger and Duffield, 2000; Fielden et al., 2000, 2001; Powell et al., 2004, 2005; Chapfika &amp; Kahura, 2005; Dainty &amp; Lingard, 2006; Gurjao, 2006; Menches &amp; Abraham, 2007</td>
</tr>
<tr>
<td>Entry qualification</td>
<td>Traditional education qualifications</td>
<td>Girls not encouraged to break mould</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender biased school system</td>
<td>Gender biased career advice</td>
<td>Gender stereo typing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional education and training courses</td>
<td>Leaky pipe syndrome</td>
<td>More women studying, but not joining industry</td>
<td>Construction educators should lead with transformation</td>
<td>Greed, 1991; Gale, 1994; Bennett et al., 1999; Fielden et al., 2000, 2001; Greed, 2001; Dainty et al., 2004; Lingard &amp; Lin, 2005; O’Neil &amp; Bilimoria, 2005; Dainty &amp; Lingard, 2006; Gurjao, 2006; Menches &amp; Abraham, 2007</td>
</tr>
<tr>
<td>Dominated Culture</td>
<td>Work Life Conflict</td>
<td>Women leave the industry</td>
<td>Culture shift</td>
<td></td>
</tr>
<tr>
<td>Career recruitment, assessment &amp; advancement discrimination</td>
<td>Women are not being promoted</td>
<td>Women leave the industry</td>
<td>Implementation of employment equity policies promoting fair advancement practices</td>
<td></td>
</tr>
<tr>
<td>Long, Inflexible Working Hours</td>
<td>Work Life Conflict</td>
<td>Women leave the industry</td>
<td>Implementation of employment equity policies promoting alternative work practices</td>
<td></td>
</tr>
<tr>
<td>Remuneration Discrimination</td>
<td>Women earn less than men</td>
<td>Women leave the industry</td>
<td>Implementation of employment equity policies promoting equal pay</td>
<td></td>
</tr>
<tr>
<td>Hostile Work Environment</td>
<td>Work Life Conflict</td>
<td>Women leave the industry</td>
<td>Implementation of employment equity policies promoting</td>
<td></td>
</tr>
</tbody>
</table>
Why women are unable to sustain employment after entering the construction industry is not well known. It would seem there is a tremendous shortage of women who have more than 20 years’ experience in the construction industry (Ellison, 2003). Not only are there not enough senior female role models, who may be are able to influence employment policies as well as mentor younger women “up the corporate ladder”, but also, there are simply not enough female “bodies” to affect a ground swell of change to the traditional employment practices of the construction industry (Bennett et al., 1999; Fielden et al., 2000; Dainty et al., 2004).

Table 1 summarises the employment barriers identified in the literature that affect the entry and sustained employment of women in the construction industry. For each barrier the barrier’s characteristics, its affect on women, and an overview of initiatives suggested or implemented to neutralise the effect of the barrier are listed. However, only those highlighted in Table 1 were selected for the purpose of data gathering and analysis, the results of which are summarised in Table 3.

### 1.3 ENTRY AND CAREER BARRIERS: CHOICES OF WOMEN

Dainty & Lingard (2006) state that women face one of three choices: stay and fight (at great personal cost), accept and conform (not “rock the boat”) or leave the industry (possibly waste the specialist education investment).

Table 2 summarises the consequences of women making these choices when confronted with employment barriers.

#### 1.3.1 Confronting the barriers

Confronting barriers requires “bottom-up” (or grassroots change agents) and “top-down” change agents are responsible for the changes in the construction industry. Bottom-up change agents are individual women or networks of women and minorities who (at the risk of further retribution and marginalisation) promote change by example, and include businesses offering alternative, flexible and inclusive management structures catering for women. Top-down change agents are defined as “governmental initiatives, regulations, and legislation, and funding bodies that exert influence over the construction industry”. (Greed, 2000:194; Menches & Abraham, 2007:706) Other role players are industry boards, professional bodies, trade federations and trade unions (Dainty et al., 2004).
1.3.2 Conforming to the industry

Women adopt coping mechanisms to fit into the male dominated workforce, which do not challenge the existing culture or structure of the construction sector (Powell et al., 2005:41). Powell et al. (2005: 35,37) citing the study conducted by Evetts (1998) into the coping techniques employed by women engineers, concluded that the three strategies used depended wholly on the personality and individual characteristics of the women who deployed them.

These coping strategies included “fronting it out” (confrontational approach), “playing the little women” (using non-confrontational feminine tactics such as tears) and “building a reputation and earning respect” (most preferred, but difficult to achieve due to career barriers) (Ibid). Consequences that arise from this strategy are the perpetuation of the status quo with no guarantee of equal opportunities, women promoting and maintaining industry attitudes to other women, the acceptance of long hours and the geographically transient nature of industry and the forgoing of vocational success (Le Jeune, 2008).

1.3.1 Leaving the industry

Gurjao's (2006) 'leaky pipeline' describes a situation where women leave the industry because they fail to qualify or are siphoned off into other industries, are unable to translate their qualifications into employment, struggle to persist in their chosen construction-related profession in the face of employment inequities and do achieve career advancement or progression as readily as male counterparts. Dainty & Lingard (2006:113) suggest that employers be vigilant for signs of both “emotional exhaustion and cynicism” in their employees as these have been identified as predictors of employees’ intentions to leave the organisation. Causes of emotional exhaustion include lack of organisational diversity manifested in inequitable work practices and the lack of support structures (Ibid).

Consequences of this strategy are women establishing their own businesses and poor succession management and vertical development (Le Jeune, 2008).

1.4 WHY BREAK DOWN BARRIERS?

Construction clients are demanding different skills and traits (Gurjao, 2006). Women and minorities enhance the quality of skills in any industry and profession (Dainty et al., 2004). The co-operative and collaborative work style of women, not only often results in “win-win” situations, but can also produce creative solutions to problems, enhance long-term business relationships for construction businesses (Menches & Abraham, 2007) and
improve decision-making (Bennett et al., 1999). The nurturing instinct of women can limit confrontation, and motivate ‘can do’ approaches to problems. Female strengths such as listening skills, empathy, trust and openness, interpersonal understanding and facilitation can benefit customer relationships and management (Gurjao, 2006).

Fundamental change in the construction industry needs to happen from within and, rather than legislation, a well-developed business case for diversity may be the only persuading factor (Dainty et al., 2004). “Research in USA, UK and Scandinavia show a strong relationship between shareholder returns and the proportion of women in higher executive echelons, suggesting that corporate cultures that foster women’s careers can also foster profitability” (Gurjao, 2006:29).

1.5 RESEARCH METHODOLOGY

Research is the “art of the possible” (Buchanan et al. 1988:55). For most researchers, “the most conveniently accessible subjects are undergraduate student volunteers” (Rugg & Petre, 2007:80) and unsurprisingly for research carried out in a university context, the fieldwork was conducted as a workshop that brought together forty one of fifty (82%) women registered on the undergraduate Construction Studies BSc programme and the Quantity Surveying and Construction Management BSc Honours programme at the University of Cape Town.

The data collection tool comprised a multi-faceted questionnaire, where the first section one sought qualitative information to support data gathered elsewhere in the questionnaire, section two sought to determine the level of awareness and impact of nine chosen entry and career barriers on career plans and section three sought demographical information. The data was analysed using SPSS and frequency tables, cross tabulations and correlations were generated for descriptive data analysis.

1.6 RESEARCH RESULTS AND ANALYSIS

The typical demographic profile of the respondents was that of a black female in her 3rd year of study, aged between 20-22 years. The respondent group consisted of seven 1st year students (70%), ten 2nd year students (63%) and twenty-four 3rd and 4th year students (100%), where 22% of the respondents were between 17 and 19 years old and the remainder aged 20-29+. The population covered all the main ethnic groups in South Africa and was representative of the student body. For further analysis of the data on an ethnic basis see Le Jeune (2008).

Each respondent was asked to evaluate the marketing barriers and barriers related to the industry culture and environment in terms of the (i) respondents’ awareness to employment barriers inherent to the
construction industry; (ii) the perceived impact of entry barriers on the respondents’ construction career plans; and (iii) the perceived impact of career barriers on the sustainable employment of respondents in the construction industry.

The ranking of the data is summarised in Table 3 below:

Table 3: Summary of Rankings of Barriers (Le Jeune, 2008)

<table>
<thead>
<tr>
<th>Classification and Listing of Barriers</th>
<th>Awareness Rank</th>
<th>Entry Barrier Rank</th>
<th>Career Barrier Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i)</td>
<td>(ii)</td>
<td>(iii)</td>
<td></td>
</tr>
<tr>
<td>Marketing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of Knowledge of Career Opportunities</td>
<td>2</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>The Poor Industry Image</td>
<td>5</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Lack of Female Role Models</td>
<td>8</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Industry Culture and Environment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career recruitment, assessment and advancement discrimination</td>
<td>7</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Industry Intolerance of Career Breaks</td>
<td>3</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Male Dominated Culture</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Long, Inflexible Working Hours</td>
<td>6</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Remuneration Discrimination</td>
<td>9</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Hostile Work Environment</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

Key: 1 = Least likely to be considered a barrier and 9 = Most likely to be considered a barrier

The highlighted barriers shown in Table 3, were deemed by the students to reflect (i) the barriers they are least aware of, (ii) those considered to be ‘entry barriers’ and (iii) those considered to be ‘career barriers’.

1.6.1 Awareness of barriers

The data revealed awareness of most of the barriers, with the exception of female role models (rank 8), remuneration discrimination (rank 9) and discriminatory industry recruitment, assessment and advancement practices (rank 7). Reasons for these not being identified may be:

- “Youthful” ignorance and lack of exposure to the relatively few female role models in the construction industry, such as Ms Bridgette Gasa, President of the CIOB South Africa and Ms Nyami Mandindi, CEO of Intersite;

- The social “taboo” of discussing remuneration preventing comparative discussions between male and female peers on remuneration whilst undergoing practical training, contributing to ignorance among female students of remuneration discrimination.
1.6.2 Impact of Entry Barriers

The students revealed that the entry barrier most likely to impact on their decision to work in the construction industry was the lack of knowledge of career opportunities (rank 9). This sentiment echoes Gale (1994), where he found that the more knowledge of construction industry professional occupations and career opportunities in construction was disseminated, the more women (and men) were likely to select a career in construction.

1.6.3 Impact of Career Barriers

The students revealed that all of the career barriers evoked a "spirit of challenge and change" in the respondents, and that none would result in the majority of respondents (meekly) accepting the status quo or leaving the industry because of the impact of the barriers on their jobs. As the research focussed on those barriers that had minor representation in the "accept it" or "leave industry" choices, the following barriers were therefore chosen as the career barriers most likely, to impact on students’ decisions to remain employed in the construction industry:

1.6.3.1 Marketing: Poor Industry Image (rank 7)

The negative publicity or lack of marketing the truth about the conflict-riven, male dominated culture is responsible for the poor Industry image. It is the disillusionment with the reality of working in the construction industry that may lead to the early retirement of women from built environment management professions. Menches & Abraham (2007) argue that significant change to the image and the culture of construction is necessary to attract and retain more women in the industry.

1.6.3.2 Industry Culture and Environment: Industry Intolerance of Career Breaks and Long Inflexible Working Hours (rank 6 and 8)

The conflict for women between family commitments and careers is not unique to the construction industry. However, this conflict is possibly exacerbated by the combination of project-driven work practices (“Time is

- Lack of experience of discriminatory recruitment, assessment and advancement practices among the youthful respondents (83% under 23), due to their current life status as students. It should be noted that the older cohort (23+) did not share the sense of disbelief that such practices existed with the younger generation, reared to believe in employment equity for all ethnicities and genders (Freeman, 2003, possibly due to their greater experience of industry practices.
money, get the job done”) and attitudes typical of the male dominated culture (“women belong at home, in the kitchen”). To improve the varied intake and sustained employment of women in the construction industry, Gale (1994) suggested a reduction in conflict. Dainty & Lingard (2006:117) summarised the problem of attraction and retention of women in the construction industry as due to the lack of “supportive work practices, structures and cultures”.

1.6.3.3 Industry Culture and Environment: Remuneration Discrimination and Discriminatory Industry Recruitment, Assessment and Advancement Practices (rank 9)

The “Boys’ club” mentality pervades work practices and management styles of due to the male dominated industry culture. Women are paid less than their male counterparts because of perceptions of weakness, and inequality in ability. Women are excluded from boys’ networks that perpetuate unorthodox recruitment practices; women are required to prove themselves more than men for promotion and are frequently overlooked for advancement because of the threat of “social” commitments (children!). No self-respecting person would stay employed in a career that permitted such blatantly discriminatory practices – why would women?

1.7 RECOMMENDATIONS

The recommendations below are summarised according to what can be done to increase awareness of barriers, and reduce the impact of entry and career barriers:

1.7.1 Improve awareness of barriers to employment

In order to improve the awareness of barriers where the respondents indicated a lack of awareness, the following are suggestions are made:

- A focussed marketing strategy by all participants in the construction industry to afford more frequent and in-depth publicity of female role models employed in the construction industry including equal representation across generational groups and ethnic classifications;
- The Salary Survey Report published annually by the Association of South African Quantity Surveyors should distinguish between gender; and
- The incorporation of best practice in recruitment, assessment and advancement practises into professional practice curricula, to alert and
educate new entrants to the industry of their “rights”, so that any discriminatory practises can be better identified, dealt with or avoided.

1.7.2 Reduce impact of entry barriers, to improve employment intake

To reduce the impact that the lack of knowledge of career opportunities may have on the intake of women in built environment management professions, it is suggested that career guidance teachers and advisors be provided with accurate and adequate information about the diversity of career opportunities available in the construction industry as well as the nature of these occupations (Gale, 1994). However, parents, peers and family friends, ought to be informed as well. The successful recruitment of women to built environment management professions depends on a well thought-out, targeted and sustained marketing campaign waged through publicity materials, web sites and job fairs (Dainty et al., 2004).

1.7.3 Reduce impact of career barriers, to improve sustainable employment

To reduce the impact that career barriers may have on the sustained employment of women in built environment management professions, a strategic industry-wide approach should be implement the actions and initiatives recommended by Dainty et al. (2004:81) to create a “fair and equitable construction industry workplace environment”.

1.8 CONCLUSIONS

Overall, the students of the University of Cape Town represent the new wave of entrants into the construction industry are motivated to affect change from within. In keeping with the conclusion of Bennett et al. (1999), the female professional built environment management students echo the sentiments of professional women in the construction industry, who are “positive and optimistic in terms of their own abilities and career development” (ibid: 290-291) From this it may be concluded that the transformation of the South African construction industry in terms of employment equity, is a work in progress, as without a committed built environment management profession student body willing to brave the challenges and attitudinal entry barriers of the construction industry, their positive attitude towards sustained employment, is potentially meaningless.

In conclusion, it is evident that the impact of entry barriers and career barriers are intertwined, without the sustained employment of
women in the construction industry, the construction industry is less likely to become an attractive employment option that can attract new entrants, yet a ground swell for change will only be sustained if the new entrants “stick around”.

1.9 REFERENCES


