COMPLEXITY OF WOMEN'S MODERN-DAY CHALLENGES IN CONSTRUCTION

Abstract

Purpose – Although the UK construction sector has enjoyed a significant rise in the number of women, there is undoubtedly more room for improvement. Numerous schemes have been initiated by government and other professional bodies to encourage more women to join the industry. This paper sheds light on the organizational complexities of problems faced by women working in professional roles in construction. It thus initiates a dialogue on the lack of workplace flexibility and discriminatory practices that prevent many more women from joining.

Design/methodology/approach – An interpretivist philosophy is adopted. The research critically explores the views of women working professional roles in six large construction firms in the UK.

Findings – It was widely acknowledged that the industry had improved significantly, however there are still concerns yet to be addressed. It was identified that many women struggle to re-enter the industry after embarking on maternity leave. Furthermore, it is believed that some workplace progressions were only due to senior managers' attempt to demonstrate a level of inclusivity rather than due to merit.

Research limitations/implications – Sample size and narrow focus on large construction firms.

Practical implications – Through academic and industry dissemination, the findings from this research encourage both men and women working in the construction industry to adopt inclusive practices that will help widen the pool of knowledge and expertise.

Social implications – This paper sheds light on a problem that has prevented women from joining the industry many years.

Originality/value – This presents an in-depth critical perspective of challenges faced by women construction professionals.

Keywords: equality, glass ceiling theory, inclusive practice, organizational complexity, women.

INTRODUCTION

The importance of the UK construction industry cannot be overstated. The industry contributed to the economic output by £103 million (6.5% of the total) in 2014 (Rhodes, 2016), comprising of over 280,000 businesses (Waters, 2017) and employment figures of 2.1 million jobs (6.2%). This covers 10% of the UK's total employment figure in 2015 (Rhodes, 2016). Skills shortage in the UK construction industry continues to grow and there is an urgent need to plug this gap. One method of plugging this skill gap is the recruitment of women into the industry. The industry lacks great numbers of women participation and this could be one of the solutions to the skills shortage. Unfortunately, the construction sector has been known to be less attractive women due to the stigma attached to the industry e.g. sexism (Construction Industry Training Board (CITB), 2015). Mohamed et al (2017) also lament the looming dangers of the extra shortage of skilled workers in the industry if the UK fully leaves the European Economic Community in the wake of BREXIT.

This research explores the current challenges faced by women in the UK construction industry to identify barriers that can be eliminated to encourage more women to join the industry. Previous research projects (see Loosemore and Lim, 2016; Powell et al, 2010; Galea et al, 2014) have identified numerous barriers that may be limiting the entry, retention and progression of women in the industry but as times change, the challenges evolve hence the need for a deep interpretive research that will explore the intrinsic concerns of women in the industry. Furthermore, this research specifically focuses on women in professional roles i.e. roles such as trades persons and other administrative roles are beyond the scope of this paper.

WOMEN AND THE CONSTRUCTION INDUSTRY

The UK construction industry has always been dominated by males (Gurjao, 2017). The recruitment of workers in the industry has been homogeneous, with a marked propensity for companies to attract, recruit and select men (Dainty et al, 2001: 297). Understandably this has led to women being significantly under-represented (ibid).

Figure 1 Proportion of female employees entering the UK construction industry (Randstad, 2016)

Figure 1 shows an upward trajectory of women entering the construction. By 2020, the industry could witness a quarter of its workforce being females. A great deal of effort has been made by professional bodies including the Royal Institution of Chartered Surveyors (RICS), Chartered Institute of Building (CIOB) and Construction Industry Council (CIC) to encourage more women to join the industry in recent times. As part of widening the pool of talent working in the construction industry, the RICS have even tapped into the demographic of Black and Minority ethnic females by showcasing role models of similar backgrounds (RICS, 2018). However, such initiatives still receive some resistance. This is partly due to the recruitment trends and the perceived image of the sector.

Perceived image of the construction industry

The industry is perceived as a masculine, hostile, challenging and dangerous environment (Fielden et al., 2001). Unfortunately, the construction industry fosters a male only image, entrenched in a culture that undermines women (Gurjao, 2017). Within certain areas of construction, sexist behaviour towards female colleagues appears to have become normalised. As many as 40% of women in the construction industry have admitted to being bullied or harassed by managers, while 30% revealed they were too afraid to make a complaint about the treatment they suffered (Union of Construction, Allied Trades and Technicians (UCATT), 2014). Often women will be exposed to forms of sexual harassment, seen by male co-workers as a way of reasserting control, refusing to adapt to a culture that allows women to manage teams (Waters, 2017). A staggering 51% of women said they were treated poorly purely because of their gender (UCATT, 2014). It is imperative to acknowledge that the issues raised here are not because of women being incapable of executing the jobs to which they are tasked, but purely for their gender. Based on their gender, women believe there are significant barriers that prevent them from staying in their roles and from rising above certain levels in the industry.

The next section presents some organisational complexity theories that will be used to explore empirical data later.

ORGANISATIONAL COMPLEXITY AND GENDER DIVERSITY IN TEAMS

Baccarini (1996: 202) proposes a definition of project complexity as “consisting of many varied interrelated parts and can be operationalised in terms of differentiation and interdependency.” It is further explained that this definition can be applied to any project dimension relevant to the project management process, such as organisation, technology, environment, information, decision making and systems, therefore when referring to project complexity it is important to state clearly the type of complexity being dealt with (ibid). In a similar light, Gidado (1996) suggests that two perspectives can be derived from project complexity in the construction industry: the managerial perspective, which involves the planning of bringing together numerous parts of work to form work flow and; the operative and technological perspective, which involves the technical intricacies or difficulties of

executing individual pieces of work. This may originate from the resources used and the environment in which the work is carried out.

Although construction is a complex system; it can be argued that the general view of the processes is that it is an ordered, linear phenomenon, which can be organised, planned and managed top down (Bertelsen, 2003). The frequent failures to complete construction projects on time and schedule gives rise to notion that the process may not be as predictable as it may look, thus the concept of complexity comes into realisation. A closer examination reveals that construction is indeed a nonlinear, complex and dynamic phenomenon, which often exists on the edge of chaos.

By contrast, those definitions which may be counted for as an organisational complexity are more concerned about the behaviour of a system and its analysis (Nicolis and Prigogine 1989). For instance, as Coveney and Highfield (1995) state, within science; complexity is the study of the behaviour of macroscopic collections (of basic but interacting units) that are endowed with the potential to evolve. Richardson et al. (2000) assert that a complex (adaptive) system can simply be described as a system comprised of many entities that display a high level of interactivity. The nature of this interactivity is mostly non-linear and contains manifest feedback loops. Stacey (2001) concurs with Richardson et al. by summarising the structure of a complex adaptive system as follows: large numbers of individual agents; agents' interaction according to rules that organise the interaction between them at a local level. The only rules are the rules located at the level of the agent itself; interaction is iterative, recursive and self-referential; adaptation of agents to each other based on the non-linear interaction rules; and random mutation and cross-over replication which cause rule variation.

Construction projects as complex organisations

Construction projects can be studied as organisations. There are numerous parties involved in any construction project which form a temporary organisation. The coordination and relationship between the different parties can greatly affect the complexity of any project. It has been shown that the behaviour of firms differs considerably from what is common in other industries, particularly in terms of the absence of inter-firm adaptations, the pattern of couplings in construction is characterised by the tight couplings in individual projects and loose coupling in the permanent networks (Dubois and Gadde, 2002). The construction industry is highly fragmented, and its firms cooperate in ever changing patterns, decided mainly by the lowest bids for the project in question (Bertelsen, 2003). As well as individual projects forming complex systems, projects are also interwoven, as every firm at the same time participates in more than one project, utilising the same production capacity. In addition to the aspect of firms creating project organisations, the concept of the social complexity must also be accounted for. The project is a working environment for humans and a place for cooperation and social interaction, which because of the temporary character forms a highly transient social system. This system can be thought of as a virtual firm which employs all personnel involved in the project (ibid)

Wood (2010) categorised construction project complexity into five themes

1. Organisational (people involved/relationships);
2. Operational and technological;
3. Planning and management
4. Environmental;
5. Uncertainty.

Through conducting interviews, an importance index was calculated for each of these themes, organisational complexity scored consistently highly giving it the greatest importance index (Ip) of 0.819. This was by far the highest scoring factor with the next highest being uncertainty with an Ip of 0.733. This indicates that organisational complexity has a considerable impact upon the project complexity. The organisational theme of project complexity is related to the people involved in a project and the relationships between project parties. This is an important theme to include as it is often the highlight of works by academics, practitioners and policy makers. The organisational aspect is further made up of the following factors: poor relationships between the parties; having numerous stakeholders; problems with clients; poorly defined project roles; poor communication; and poor decision-making (Wood 2010). It is important to note that all these points do not consider intra-organisational issues. Loosemore and Lim (2016) however identify intra-organisational concerns as equally important as other stakeholder relationships, and perhaps may be more important as it is the cornerstone for each participating team in a project.

On the other hand, organisational and inter-organisational agents who develop the project from the conception stage through to the completion stage into the physical product of the built environment are the project complexity enforcement agents on behalf of and for the clients while adding another dimension of complexity inherent in their organisational hierarchy within the Architecture, Engineering and Construction (AEC) industry, i.e. organisational complexity. These agents may include non-structural agents who oversee architectural design, structural agents who take care of structures, mechanical agents who deal with MEP and finally construction and implementation agents who manage people, contracts, sites and the construction process itself (Wood et al 2013). As stated earlier Loosemore and Lim (2016) examine the intra-organisational issues in the construction industry and gender-related happen to be very significant and thus worth addressing.

Gender diversity in teams

The movement of women into management, including upper levels of management, has been an important research topic all around the globe e.g. since the passage of the Equal Pay Act (1963) and Equality Act (2010) in the United States and United Kingdom respectively. Such research and debates have encouraged the prohibition of gender-based discrimination (see Helfat et al, 2007; Jackson and O'Callaghan, 2009; Klarsfield, 2009; Koenig, et al, 2011). From existing literature, it is suggested that gender discrimination has decreased with the increased representation of women in management and professional positions (Schwab et al, 2016). Furthermore, a more critical review reveals that these improvements are largely at lower levels of management and with non-managerial professional positions (ibid). Barriers to the promotion of women into middle- and upper-level management positions still persist (Konrad, 2003). For example, Catalyst (2014b) reported that the representation of women in executive officer positions at Fortune 500 companies has stagnated at approximately 14.5% since 2010. For women in senior management positions, Catalyst (2014a) reported 21% representation for North America, 25% for Europe, 23% for Latin America, and 32% for Association of Southeast Asian Nations (ASEAN). Hence, the development of career ladders for women in management remains a concern for women with upwardly mobile aspirations and for organizations seeking greater managerial gender diversity (Schwab et al, 2016). According to Schwab et al (2016), improved managerial decision-making appears to be the most commonly mentioned benefit of managerial gender diversity. This perception will be explored in the empirical phase of this study. In particular, gender-diverse groups promise a broader information base for making decisions than homogeneous groups (Dahlin et al, 2005). It is important to encourage more gender diverse teams as several researchers have identified that the diverse experiences of men and women leads to good decision-making situations. More importantly, poor decision making was identified to be symptomatic of a lack of understanding of organisational complexity (Wood, 2010). Thus, a link can

be drawn between lack of a diverse pool of talents and knowledge sources through gender diversity and organisational complexity.

Having discussed the fundamentals of organisational complexity and showing the various facets of the industry, the next section presents two theories that are argued significant challenges faced by the modern-day woman construction professional.

The glass ceiling and leaky pipeline theories in construction

The 'glass ceiling' theory depicts the challenges experienced by women when trying to grow within their sectors (Weyer, 2007). The theory establishes the difficulties women face with lack of internal promotion, thus preventing career progression (Bass and Avolio, 1994). It can be described as the invisible, artificial barriers that prevent qualified individuals from advancing within their organisation and reaching their full potential (Morgan, 2015). The term originally described the point beyond which women managers and executives, particularly white women, were not promoted. Today it is evident that ceilings and walls exist throughout most workplaces for minorities and women. For the scope of this study, race will not be the focus. These barriers result from institutional and psychological practices, and limit the advancement and mobility opportunities of men and women of diverse racial and ethnic backgrounds (Gurjao, 2017). The 'glass wall' theory represents the traditional gender split in various sectors of the industry. The segregation of women in traditional administrative or secretarial roles in comparison to men in manufacturing and production sectors (ibid). Figure 2 depicts the existing arrangements of men and women for entry and progression in the construction industry. The glass wall will which prevents the lateral movement of staff is not highlighted in the figure because it is argued that the construction professional does not necessarily move laterally with respect to roles. For example, a quantity surveyor will not seek to move to a structural engineering role as it is not their field of expertise. Furthermore, the administrative roles in the industry e.g. office secretaries are often occupied by women. In rare instances, these individuals move into professional roles but they will have to be trained for such specific roles in institutions such as universities or professional bodies.

Figure 2 – The glass ceiling effect (developed for the construction context)

As shown in figure two more women join the industry at administrative role level in comparison to men. This can be argued to be because of those roles not particularly being traditional construction roles. Some of these roles are secretarial and other clerical roles. On the second tier i.e. professional roles, more men enter the industry than women. This was highlighted in the introduction as the types of roles that professional bodies such as CIOB and RICS keep encouraging women to join. Currently, professional roles in the construction industry are mainly occupied by men (about 80%) according to Gurjao (2017). The existence of the glass ceiling (or otherwise) amongst current women construction professionals will be explored to gain a better understanding of the challenges existing in the industry.

In addition to the glass ceiling, women face the leaky pipeline whereby change in career, career break to have a family and other personal decisions see them exit the industry and subsequently struggle to re-enter (see figure 3).

Figure 3 – 'Leaky pipeline' for the construction industry (Adapted from Gurjao, 2017)

The leaky pipeline describes the lack of women able to remain within the industry (Worral et al, 2010) after entering through education. It is acknowledged that once temporarily leaving the construction industry it becomes increasingly difficult to re-enter (Gurjao, 2017). The theory further

depicts the issues that surround women throughout their career, the poor work-life balance, lack of internal promotion and continual lack of respect including instants of poor behaviour women are exposed to throughout their time in the construction industry. An important situation that would also force women to leave the industry temporarily or permanently could also be the harassment and abuse suffered by women in the workplace (see UCATT, 2014). With all the above hoops that women have to jump through, those that retire or stay through till pension have rightfully been labelled as survivors.

Having identified the existence of the glass ceiling (as opposed to hierarchical or occupational segregation) as a social phenomenon of many different communities as a real situation rather than a figment of women's imagination, the actual problem is that men above cannot see it as an institutional barrier faced by the women below (Morgan, 2015: 11). This notion is worth exploring in the context considered for data collection and analysis for this study.

Both the glass ceiling and leaky pipeline are identified to be barriers that prevent women from succeeding in the workplace. Cabrera (2009: 40) goes further to emphasize that: "*The glass ceiling is not what prevents most women from rising beyond certain levels in organizations. Most women are leaving their organizations voluntarily long before hitting the ceiling. A "leaky pipeline" is a more accurate description of what is occurring*". For this reason, the leaky pipeline supersedes the glass ceiling in the case of female construction workers and particularly in this research.

In order to understand the barriers faced by female construction professionals with respect to employment retention, an in-depth understanding of the issues faced is required. The research method is presented next.

RESEARCH METHODOLOGY

Many research projects have considered large sample sizes in studying women in construction. This is a very important approach and has been rightfully fit for the purpose of their studies. This research is seeking to understand the deep concerns of women professionals in the construction industry with a key focus on large construction organisations. Smaller construction firms have less complex structures (Aboagye-Nimo et al, 2013) and this somewhat simplifies some of the problems identified under organisational complexity such as poor communication (Wood, 2010).

Interpretivism is deemed as a preferred approach when researchers want to better understand human behaviours and essential motivation of their actions (Dainty, 2008; Bryman and Bell, 2003). The main aim of this research was to capture the holistic views of women who had experienced complex challenges while working in professional roles in the industry. Their interpretation of the events and circumstances were very important if a dialogue about better treatment of women in the industry can ensue. This research sought to highlight the ontological realities of the women professionals in the construction organisations encounter even though their male counterparts may not be aware of such elements.

Using a qualitative research approach, semi-structured interviews were conducted with six women construction professionals. A purposive sampling approach was used to identify the interviewees. Previous researchers have documented the importance of gathering information regarding people's perceptions, opinions and experiences collected with the use of semi-structured interviews (Worral et al, 2010) as the researcher would have control of the topics being discussed and still able to allow the interviewee to openly share their thoughts on what they consider relevant or related matters. The semi-structured interviews were deemed appropriate to acquire the in-depth information.

From the critical literature review, the following areas were identified to be explored in the development of the interview guide:

1. Everyday sexism in the workplace
2. Societies' perception of industry, in terms of image
3. The gender pay gap
4. Retention issues, including maternity difficulties and progression issues
5. Educational impacts and awareness

Ethical considerations included anonymity and confidentiality of the interviewees. All interviewees were nicknamed Jane Doe (JD). Furthermore, there was a potential of sensitive matters being revealed and as such standards of the Social Research Association were strictly adhered to in order to ensure the interviewees were never in an uncomfortable situation.

FINDINGS, ANALYSIS AND DISCUSSION

The findings and analysis from the interview data are presented in this section.

Background of interviewees

Table 1 Profile of interviewees

The organisations were all large and successful in the industry. In some sense, it can even be argued that they can be considered as the gold standards of UK construction firms that other firms aspire to emulate. A range of roles and time of experience of interviewees were included in the study. All interviewees had managerial roles. The years of experience and managerial positions were chosen with the hope of capturing the barriers the interviewees face or have had to overcome during their time in the industry. Furthermore, having managerial roles meant the interviewees had some 'power' or 'control' in their respective organisations. JD4 had the least experience (4.5 years) and this was her first role in construction. Her role was not a technical construction role but more aligned to managing diversity in the organisation. As such her role may not be considered as the traditional construction role. Having had a wide range of experience in the industry and with other firms, it was important not to limit the findings from the interviewees to one organisation. They possessed experience and anecdotes that spanned across an entire industry and different timelines.

Joining the industry

The interviewees had different reasons for entering the construction industry. Some of the reasons included simply wanting to contribute to the built environment. Reasons for entering the industry seemed to be because of genuine interests. However, they had all expressed there were challenges when trying to get into the industry and more importantly rising to their current roles. JD2 described the industry as an aggressive one. She stated:

'…working in a gruff atmosphere, in a man's world'.

Unfortunately, her response demonstrates that she does not feel as though she is a part of the construction world if she describes it as a world belonging to the opposite gender. JD3 also referred to the industry as *'a man's world'*. JD4 believed she was *'only able obtain a job because [she] knew somebody there'*. She did not believe her educational qualification(s) enabled her to gain the employment opportunity. JD2 was explicitly told that she was being employed to *'meet a gender*

equality quota'. From the above findings, it can be deduced that some women may already feel inadequate when entering the workplace. Although they may be competent to undertake their role, they may be intimidated from the point of entry into the industry and the situation may frighten them throughout their careers i.e. if they do not leave. This can then lead to the individuals suffering from the imposter syndrome – a psychosomatic pattern in which people doubt their accomplishments and have a persistent fear of being exposed as a fraud (Reis, 1987).

Treatment of women in construction

A clear pattern about unhappiness with respect to how the interviewees felt at work emerged. They believed that there was unequal treatment and lack of [appreciation] from senior managers.

JD2 stated: *'the more senior you get the worse it is, the old men just won't let us have a say'.*

Although she had risen high enough to become a senior manager, she believed other senior managers wielded more power. When probed further about the above comment, she added:

'men in senior roles have worked through the ranks since an early age and believe that women should do the same, educational certificates are not worth the paper they are written on if you haven't 'been there and done that' you are not welcome'.

Evidently, she was intimidated by the behaviour of the other senior managers [men] that she worked with. She had been made to believe that working your way through *'the ranks'* was more important than educational certificates.

JD3 explained that women in the industry often feel patronised by men and added that *'if [some] men will not accept change, they should retire'*. In essence, JD3 acknowledges that treating women unequally is an archaic practice and should be phased out. It was also revealed that 'younger managers are extremely welcoming to both genders' (JD6). Poor treatment identified by the interviewees clearly pointed at male (older) senior managers. It was also uncovered that women believed they were overshadowed by male colleagues of similar positions as themselves.

The interviewees believed that the people who had treated them and other women poorly at work, did so as a form of banter or simply assumed there was not much harm. It was also revealed that sexual harassment was still around, but it was masked in jovial comments. Interestingly, that did not seem to be a serious concern for the interviewees. It was brushed off as '*building site banter*' even though it occurs in their corporate offices. It is worth noting that 'building site banter' can cost people their jobs as shown in a news article by Wales Online (2016). In that case, a construction lecturer lost his job by using language that people argued was acceptable on site. This article raises a few questions; will the students subsequently not pursue their dreams in construction knowing they may face such language? Will these new entrants in the industry take perpetrators of such offences to task when they start working in construction organisations? Or finally, will the new entrants finally accept that building site banter is a norm in the industry through enculturation?

According to the interviewees, this behaviour will not be changing particularly with the older generation men in the industry but they believed once a wave of generation retires, this behaviour may retire with them.

Leaky pipeline and glass ceiling in practice

There are many reasons that drive women to leave the industry. Women had to change roles continuously if they wanted to gain promotion or climb the corporate ladder. JD2 explained that it

was *'easy for men to be hired or promoted… not acceptable for women'*. Thus, she had witnessed both the leaky pipeline and glass ceiling in the workplace.

JD5 added that since women are often less confrontational, *'men show an unconscious bias and underestimate women'*. Women have been known to leave the construction industry due to frustration of being treated poorly or being overlooked for promotion. Furthermore, it was identified that entering the industry is not always based on merit and as such, females leaving a job are not guaranteed of gaining another role.

One key problem that enhanced the occurrence of the leaky pipeline for the women was issues relating to maternity. Three of the interviewees had had children. JD2 used her annual leave as a maternity break. She states: *'didn't really have a [maternity] leave, I took six weeks'*. Taking six weeks to deliver a baby and return to work should highlight the resilience of a woman such as herself and for this reason, her talents and knowledge must not be taken for granted. Unfortunately, her ordeal was not appreciated, and she believes her sacrifice of not staying at home to recover from childbirth and bonding time with her new-born baby may have gone unnoticed. She explained that she would have felt more appreciated if there were arrangements to accommodate people who found themselves in a similar position, especially women who were not lucky to have support from family and friends and also risked the fear of losing their source of income from a job they love.

JD5 had to change roles because having children meant there was no work for her when she expected to return. JD6 recalls the difficulty in returning to work and had to assure her employers that she would not be taking a maternity leave anytime soon. From the above, it is evident that the interviewees struggled to return to work. Without a stronger will they could have all decided to leave the industry for good and become victims of the leaky pipeline. Considering the situation from another perspective, if the employees feel they must choose between their newly born babies and their work, they may then leave the industry. This concept is confirmed by Carbrera (2009) where it is noted that many women leave the industry before even reaching the supposed glass ceiling. The interviewees believed that the newer generation of men in the industry saw women as equal and they believe they will allow women to share the spot of senior managers when they are in the position to make such decisions.

JD6 stated she took a maximum of three months at home and continued to work throughout the time where possible. *'It's hard to come back, even after a short time, they expect you to prove yourself'*. She believed there was a different expectation for men. The law states that a woman in entitled to 39 weeks paid maternity leave (UK Government, 2018), whereas research indicates that very little maternity leave is taken due to the lower chances of companies taking women back post maternity on a more flexible basis. JD4 recalls that she *'left the industry to cut back long travel hours'*. Unless a more flexible approach is made accessible women will not be enticed to pursue a career, or return.

The organisational complexities of the problems faced by women

Only JD1 worked with other women. All other interviewees were the lone women in their divisions. They believed this made it very difficult for their colleagues to empathize with them. As complex as construction projects and organisations get, they believe they had personal issues that they would have felt better discussing with other colleagues of the same gender. This limited their ability to communicate effectively on matters that are directly related to well-being. The interviewees with the exception JD1 believed their project site visits were not always comfortable as there were not facilities for women. They further explained that they did not believe it was a practice of discrimination but one of necessity or lack thereof. As an economic decision, their sites did not have women friendly facilities because their projects did not previously have women on site. Offsite when they were in their

company offices, the interviewees believed that there could be more provisions made for women to make their organisations more attractive e.g. the provision of a child friendly rooms and spaces for nursing mothers.

A vicious cycle had also been created in the various organisations. The interviewees believed that they were being used as 'token' women in their organisations' quests to showcase women friendly environments. That is, they were always sent to public engagement events and other client related interactions. However, this did not reduce their workload and hence it rather created a stressful atmosphere for them. The concept of tokenism is not new and has been explored thoroughly in other occupations for several minority demographics. Tokenism explains women's occupational experiences and their behavioural responses to those experiences in terms of their numerical proportion suggesting that barriers to women's full occupational equality can be lowered by the hiring of more women in organisations that are highly-skewed male (Zimmer, 1988: 64). This notion can understandably undermine a professional's self-confidence especially when working in a field known to be traditionally for men.

Recommendations for the eradication of the leaky pipeline

To eliminate the current barriers faced in the construction industry, Carbrera (2009: 45) highlights five areas that need to be improved for females to be adequately accommodated:

- Flexibility – rethinking when, where, and how work is done;
- Care-giving support – providing more support for the care giving needs of working women;
- Maintaining contact – maintaining ties with past (and intermitting) employees
- Welcoming re-entries – recruiting or rehiring ex-employees as they also possess key knowledge that will be useful to the organisation
- Supportive organisational culture – reinforcing the legitimacy of new ways through organisational culture

JD2 stated that in order for the industry to eliminate the leaky pipeline, male employees needed to be retrained in order to change their perceptions about the role of women. JD4 added that promoting flexible working conditions was the way forward and would encourage more women to join the industry. Other comments on improving the industry were as follows:

'Wait for the dinosaurs to retire' – JD3

'Make companies aware of the positives when recruiting young people' – JD4

JD3's comment reflects an earlier revelation that the older males in the industry were the most problematic therefore upon their retirement, the industry will improve. It is undesirable for women to be forced to accept that 'the dinosaurs' will keep on behaving poorly without being challenged or without having to reform. JD4 also echoes the thinking that younger people (males) embraced all genders in the workplace equally. All the recommendations are somewhat in line with suggestions from Carbrera (2009), i.e. introducing new working practices and changing the overall culture of construction firms. Sadly, almost a decade down the line and these have still not been resolved even though policymakers have put frameworks in place to curb these.

A final concern that may become a new topic to be explored in future research as more women join the construction industry and do not fall out of the leaky holes is the discourse of menopause. They will be the survivors of the industry in the leaky pipeline theory (see figure 2). Currently, it is not a

point of discussion in any of the organisations that JD1, JD3, JD5 and JD6 believe it was a very relevant issue especially having worked in the industry for many years and menopause was imminent.

CONCLUSIONS

The problems faced by females in the construction industry are still present and may be one of the main issues limiting the sector from plugging some of the skills shortage. The industry is one of the largest contributors to the nation's GDP and yet is not being encouraged to evolve for the better. Beyond the discussion of plugging the skills gap, the industry has a serious problem of women being treated badly. This situation not only discourages women from joining but also forces the women in the industry to leave and not return. Sexism is widely accepted practice in the industry according to women who work in the sector.

The industry will require a major overhaul if it is to eradicate this negative culture. At present, women are worried about taking career breaks for crucial circumstances such as starting a family. It has been recorded that the Statutory Maternity Pay is not implemented, and women can face redundancy when/if they decide to take their entitled maternity break. Some women have thus resorted to using their annual leave to have children and return to work thereby losing out on very important time they could have spent with their newly born babies. Such practices make the industry rather unattractive and hence critical steps need to be adopted to make the sector flourish.

The industry has often been labelled as being resistant to change but this is one change that must be embraced. The issue at hand is not particularly one of change but one of unfair treatment and an irrational exclusion of key people who can contribute significantly to the industry. Furthermore, the unfair treatment of women in the construction industry can also make it less attractive for males who believe in equality and therefore are unhappy with the stigma attached to the industry, thus an additional loss of new entrants. With current skills shortage, BREXIT uncertainties and the government's encouragement for the expansion of housebuilding projects, the need for more workers in the construction industry is definitely set to grow. For this reason, recruitment and fair treatment of everyone in the construction industry is a definite priority!

Recommendations for future study

Although this paper offers a unique contribution, there are a few critical recommendations for further research that will undoubtedly help advance the discourse initiated here. These are as follows:

- Having identified situations where women have faced barriers of their retention or progression in this study; a quantitative study using questionnaire surveys should be carried out focusing on variables such as age, qualifications, industry experience and family and marital status juxtaposed with the attitudes and behaviours that women have witnessed and/or experienced in the workplace. A larger sample from this approach will give an opportunity to establish representative findings for the industry.
- In numerous cases of gender discrimination, the perpetrators may not be aware of the effect of their actions (see Goldberg, 1968) often attributing it to building site banter. Thus, a research to ascertain how men feel about the treatment of women in construction would offer a very valuable perspective. This will ultimately help identify and subsequently address unconscious biases that exist amongst men (and some women) in the industry.

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