Glass ceilings – A study into the barriers faced by aspiring professional black women in the South African Built Environment

RESEARCH REPORT

Submitted by

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CONSTRUCTION ECONOMICS & MANAGEMENT

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Abstract

The purpose and inspiration behind this research was to outline the barriers faced and hurdles that aspiring professional black women in the South African Built Environment face. These hurdles usually occur as black women work towards climbing the corporate ladder and establishing careers within executive leadership positions, when compared to their male counterparts. The main research objectives of the study were to specifically determine generic barriers to the career advancement of professional black women in the South African Built Environment. The study was also meant to outline mechanisms used by women in the built environment professions to break through the above the glass ceiling that aspiring young black females below the glass ceilings should be aware of to break through the glass ceiling. As such the study was delimited to aspiring black women in the South African Built Environment. Literature review touched on various aspects that pertain barriers faced by aspiring professional black women in the South African Built Environment. Issues such as the factors that contribute to the glass ceiling as well as mechanism that can be used to overcome the glass ceilings were critically reviewed. The research methodology of the study comprised the use of a qualitative research approach with structured interviews being the main data collection instrument. Interviewees were drawn from a diversity of professions within the South African Built Environment. The main research findings established that the majority of interviewees were able to comprehend the essence to the BBBEE legislations as it pertains to them. The majority of interviewees underestimated the appeal of networking in improving career prospects of black women in the South African Built Environment. None of the interviewees expressed that they have black women as their mentor. There appeared to be mixed feelings with respect to maintaining a work-life balance upon getting married with some expressing that they expect no differences in their work schedules whilst others highlight that they will have to adjust. Practical implications derived from the study are that, for black women to effectively break the glass ceilings in the South African Built Environment, they have to pass the criteria for high potential designation and executive positions. This criterion includes issues such as the development of a strategic fit between the aspiring black women and the strategic and financial goals of the built environment.

Dedication

To all the hard hat ladies…. we will get there!

Acknowledgements

To God Almighty, You have proven again that nothing is impossible with You on my side.

Mrs Karen Le Jeune, thank you for supervising me and, once again reminding me that I can do absolutely anything I put my mind to.

To my parents Shepherd and Gladys, I couldn't have asked for a better and more supportive structure. To my younger sister, Chido, thank you for inspiring me to further my studies. I love you guys. You are a true blessing.

To Mudadisi, thank you for constantly checking up on me and reminding me to keep going.

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CHAPTER ONE

GENERAL INTRODUCTION

1.0 Introduction

This study on the glass ceilings has been inspired by the barriers aspiring professional black women faced in their quest to advance their careers in the South African Built Environment. This section of the research focuses on the background to the study that gives way to the development of the statement of the problem and research questions. Research assumptions, scope and delimitations are also outlined in this chapter.

1.1 Background to the study

The Built Environment Professions offer exciting, challenging and meaningful careers for the youth and in particular females (CBE, 2018). Approximately 60% of women in the United Kingdom and United States of America are employed in traditionally female occupations, such as cleaning roles, clerical or administration within the built environment (Fernando *et al.*, 2014). Despite an increase in the number of women within the built environment over the years, research shows that female participation in management positions has remained stagnant since an insignificant number of women make it up to management positions (Sang and Powell, 2012). Research in the United Kingdom has established that the retention of women at top management has become a challenge synonymous to a leaking pipe that restricts the numbers of women in top leadership positions (Lowe and Woodcraft, 2014).

In the South African context, the Built Environment Professions remain a male dominated arena. Male domination in the South African Built Environment can be linked to race since most white males dominate the built environment, even though black males marginally outnumber females (Madikizela, 2008). Though there are legislative instruments in place to address issues of inequality, statistics show that overall there are more men in the labour force across industries compared to women (Stats SA, 2017). The South African construction industry had a quarter to quarter change in women employment of -0.8 % and 0.4% for men, as shown in the Table 1.1.

Table 1.1: Contribution of women in construction employment

	Oct-Dec 2016	Jan-Mar 2017	Apr-Jun 2017	Jul – Sept 2017	Oct - Dec 2017	Quarterly change	Yearly change	Quarterly Change	Yearly change
	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)
Both sexes	**16 069**	**16 212**	**16 100**	**16 192**	**16 171**	**-21**	**102**	**-0.1**	**0.6**
Agriculture	919	875	835	810	849	39	-70	4.8	-7.6
Mining	421	447	434	446	411	-35	-10	-7.9	-2.5
Manufacturing	1 727	1 790	1 799	1 794	1 791	42	63	2.4	3.7
Utilities	131	145	148	153	149	-4	18	-2.4	13.8
Construction	**1 483**	**1 505**	**1 395**	**1 365**	**1 390**	**26**	**-92**	**1.9**	**-6.2**
Trade	3 222	3 207	3 265	3 286	3 240	-45	18	-1.4	0.6
Transport	961	965	954	988	1 001	13	40	1.4	4.2
Finance	2 329	2 378	2 395	2 463	2 373	-91	44	-3.7	1.9
Community and social services	3 571	3 569	3 560	3 616	3 691	75	119	2.1	3.3
Private households	1 299	1 319	1 311	1 313	1 270	-43	-29	-3.3	-2.2
Other	5	11	3	3	6	3	1	107.4	27.6
Women									
Agriculture	305	278	264	252	267	15	-38	6.1	12.4
Mining	62	60	61	53	45	-8	-17	-14.3	-27
Manufacturing	554	627	603	597	585	-12	31	-2	5.5
Utilities	37	31	31	43	38	-5	2	-10.7	4.7
Construction	**174**	**199**	**174**	**158**	**174**	**15**	**0**	**9.6**	**-0.2**
Trade	1 555	1 573	1 578	1 563	1 536	-27	-18	-1.7	-1.2
Transport	189	199	171	190	197	7	8	3.8	4
Finance	970	1 009	1 003	1 008	976	-32	6	-3.2	0.7
Community and social services	2 186	2 199	2 172	2 248	2 259	12	73	0.5	3.3
Private households	995	1 001	1 018	1 010	990	-20	-5	-2	-0.5
Other	5	7	3	3	3	1	-1	22.5	-24.6
Men	**9 037**	**9 030**	**9 022**	**9 067**	**9 100**	**33**	**63**	**0.4**	**0.7**
Agriculture	614	597	571	558	582	24	-32	4.2	-5.2
Mining	359	387	373	393	365	-28	6	-7	1.8
Manufacturing	1 173	1 163	1 196	1 152	1 206	54	33	4.7	2.8
Utilities	95	114	116	110	111	1	16	0.8	17.3
Construction	**1 309**	**1 306**	**1 221**	**1 206**	**1 217**	**10**	**-92**	**0.9**	**-7**
Trade	1 668	1 634	1 686	1 722	1 704	-18	37	-1.1	2.2
Transport	772	766	783	798	804	6	32	0.8	4.2
Finance	1 359	1 369	1 392	1 455	1 397	-58	38	-4	2.8
Community and social services	1 385	1 370	1 388	1 369	1 432	63	46	4.6	3.3
Private households	304	319	294	303	280	-23	-24	-7.6	-7.9

Source: Quarterly Labour Force Survey (Stats SA Quarter 4, 2017)

The “old boys’ club is a term originated from the British elite who attended certain public schools as boys and also applies to a network of social and business connections. A phrase associated with this tradition is “it’s not what you know, its whom you know”. Le Jeune and Root (2009) describes the “boys club” as a mentality that pervades workplace practices and management style due to the male dominated mentality that surrounds it. Women are often overlooked for promotion and advancement and are paid less on average than their male counterparts within the built environment. Hence, career advancement for women has been associated with frustrations and the urge to resign.

Though there have been efforts to curb the proliferation of this culture, more needs to be done to improve the progression of black women towards executive positions in the built environment and this requires a serious, urgent, focused and collaborative journey towards diversity in the sector (Madikizela, 2008). Research has shown that women are concerned about issues affecting their career advancement, such as workplace discrimination, harassment, rates of pay and the need to balance work and family related responsibilities (Watts, 2007). Research has also established that some male co-workers are promoted not based on merit but gender (Raiden and Sempik, 2012).

Notwithstanding the marginal increase in the number of women employed in the built environment, females still constitute a minority of the built environment industry workforce (Agherdien and Smallwood, 2009). Statistics show that although women accounted for 41.3% of the South African workforce, only fifteen percent of them were executive managers and seven percent of all directors were women (Pandor, 2005). The increase in women’s participation in the built environment labour force has not been paralleled with the management levels in organisations where women appear to be trapped at middle and junior roles (Cross and Lineham, 2006). As similar trend has been found in the built environment where various annual reports and statistics show that there are more males than females professionals (CBE, 2018). Grant Thornton Business Report revealed that in 2017 twenty-five percent of women occupied top management positions, a percent increase from the previous year’s survey and six percent in 13 years since the research began (Thornton, 2017). International research indicates that recruitment at both the senior and managerial levels by construction firms and the professions has remained the same with a bias towards attracting, recruiting and selecting men resulting in a demonstrable under-representation of women in the sector globally (Madikizela, 2008).

Haupt and Madikizela (2010) argue that the culture of male domination in industry and the accompanying gender-based discrimination experienced by women employed in the built environment are challenges that have to be overcome if there is to be an increase in the number of women participations at top levels of management within the built environment.

1.2 Focus of the study

The study was focused on the hurdles faced by aspiring professional black women in the South African Built Environment. It specifically discussed challenges in the professional environment that hindered black women in the South African Built Environment from successfully "climbing the career ladder" as their male counter parts do.

1.3 Rationale of the study

Previous research by Hejase and Dah (2014) has shown that on a broader scale, women are usually aware of the challenges that lie ahead of them but underestimate the effort that is required to overcome these challenges. Despite the existence of advanced employment equity legislation in South Africa that addresses inequalities and discrimination, black women in the built environment still face hurdles. This study seeks to identify tools that aspiring professional black women can utilise to overcome and breakthrough the glass ceiling. This study focuses on tools such as legislation and role models of professional black women who have managed to break through the glass ceiling.

1.4 Research Problem, Research Questions and Research Assumptions

1.4.1. Research Problem

The black economic empowerment (BEE) initiative in South Africa depends on the participation of black women in management positions (Emuze and Adlam, 2013). However, there are barriers commonly referred to as glass ceilings which hamper aspiring professional black women in the South African Built Environment from advancing their careers, thereby preventing BEE targets and milestones from being met.

1.4.2. Research Questions

The following research questions are to be addressed:

i. Are aspiring professional black women in the South African Built Environment aware of the barriers they face, and the extent of effort that is required to break the glass ceiling imposed on their career advancement?

ii. Are the tools used by females in different disciplines within Built Environment above the glass ceiling appropriate and applicable to assist professional black women to break through the glass ceiling?

1.4.3. Research Assumptions

Aspiring young black females are sufficiently equipped with tools to break through the glass ceiling obstructing career advancement in the South African Built Environment.

1.5 Research Aim and Objectives

The research seeks to identify ways in which professional black women in the built environment can overcome barriers and break through the glass ceiling to progress with their career.

Research objectives are to:

i. Determine generic barriers to career advancement that exist in a professional workplace, which are specific to black women in the South African Built Environment.

ii. Establish mechanisms used by women above the glass ceiling in the Built Environment Professions that aspiring young black females below the glass ceilings in the South African Built Environment should be aware of to break through the glass ceiling.

iii. Investigate the awareness among black women in the built environment of the impact of the glass ceiling on their career advancement, as well as the awareness of the barriers to and mechanisms with which to break through the imposed glass ceiling.

iv. Investigate the struggles faced and coping mechanisms used by black female managers as basis to test how the barriers faced by aspiring young black females in the South African Built Environment can be broken.

1.6 Proposed Research Design and Methodology

The research was designed such that previous research findings were integrated to validate or refute points put forward by the researcher. Research methodology was carried out in two steps. The initial step entails a review of previous literature on the subject to provide the context. The second step will be to examine the context from previous research by means of conducting one-on-one interviews with black female managers (above the glass ceilings) and documenting their struggles and coping mechanisms. The interview findings will be used as a basis for interviews of aspiring professional black women (below the glass ceiling) in the South African Built Environment.

Data was gathered by means of identifying black female managers and aspiring professional black women who hold various positions in the South African Built Environment through platforms such as professional bodies and networks.

Snowball sampling was used to recruit interviewees. Through the use of snowball sampling, the researcher contacted an initial group of women in the South African Built Environment at random. After interviewing the initial group, they were asked to identify other suitable respondents who could participate in the study. Therefore, subsequent participants were identified on the basis of these referrals. Personal experiences of the both women above and below the glass ceiling were studied from the qualitative data obtained from interview. This data was based on a structured interview framework. The interviews were conducted in English, and was undertaken confidentially. A thorough analysis of the interviews with the research participants using NVivo software were used to analyse the subject matter and conclusions was drawn from the interview results.

1.7 Quality Control

As this research involves the collection of data from human subjects, ethics clearance was needed from the University of Cape Town. To ensure that the data collected is not biased, the same questions were administered to all the interviewees. To protect the identity of interviewees, the interviewees were coded by profession and randomly numbered in order to remain anonymous.

1.8 Risk Analysis and Contingency Plans

Due to the spread in location of Built Environment professionals, there was a risk that the identified research participants would be geographically scattered. To mitigate this, the researcher travelled to conduct the interviews, and made use of recorded telephonic interviews with the research participants. Other respected forms of data collection such as emails were used.

1.9 Scope and De-Limitations

This report was focused on specifically educated black women who are working within the South African Built Environment and who have career aspirations to enter management.

The number of women in the South Africa Built Environment is small and detailed experience on the subject matter was required from the research participants in order for the researcher to draw conclusions and make recommendations.

The identified participants were geographically spread out which resulted in some identified aspiring professional black women being unavailable for face-to- interviews.

1.10 Research Chapters Overview

The research report consists of five chapters as outlined below:

Chapter one introduces the background of the study which leads to the statement of the problem and the formulation of research objectives.

Chapter two includes an in-depth review of literature on the concept of the glass ceiling within the context of the male dominated built environment in the South African perspective. Literature review is structured in line with research objectives of this study. Various perspectives are critically compared and contrasted as they pertain to the concept of the glass ceiling with specific emphasis being given to the built environment in different environmental contexts.

Chapter three focusses on the research methodology that is used in the study. This methodology is inspired by previous research done on a topic similar to the current research. The target population, sampling size, data collection, presentation and analysis procedures are covered in the research methodology section.

Chapter four includes the presentation, analysis and discussion of findings as guided by the research objectives.

Chapter five concludes the study by providing a summary, conclusions and recommendations on the basis of the research findings.

1.11 Conclusion

The chapter outlined the background to the problem on the concept of the glass ceilings as it impacts on aspiring black professional women in the South African Built Environment. The chapter also noted on the statement of the problem and developed research objectives that will guide the rest of the research. The next chapter focuses on the critical review of pertinent literature related to the concept of the glass ceilings paying particular attention to the effects of barriers faced by aspiring black women in their quest to advance their careers especially in the South African Built Environment.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter includes an in-depth analysis literature related the concept of the glass ceiling. Literature review is conducted within the confines of the conceptual and theoretical frameworks underpinning the study. Literature review focused on the origins and development of the concept of glass ceilings. Factors that lead to the development of the glass ceiling and the strategies that can be undertaken to break the ceiling were critically analysed. The experience of South African women at the workplace was explored with special focus looking at the built environment. The legal frameworks and policies that govern the protection and empowerment of women at the workplace were focused on. South Africa has a history of inequality from the Apartheid era. This inequality spans across demographic categories including sex. The number of females in the workforce has been found to be lower than that of males within South Africa (Stats SA, 2017). This has also been found to be true within the South African Built Environment. There are career progression barriers found to be faced by aspiring professional black women in the South African Built Environment. Certain themes and trends can be identified in previous literature. It has been found that the most common barriers faced by aspiring professional black women to career progression are due to poor industry image (Gurjao, 2006) and the culture of the built environment such as the "boys club" (Le Jeune and Root, 2009).

2.1 Glass Ceiling: Concept and Characteristics

There has been significant progress in women's educational achievements (ILO, 2016). However, these achievements are not properly reflected in women's participation in executive leadership positions especially in the construction industry (Navarro-Astor *et al.,* 2017). The failure of women to make it to the top management levels has been attributed to the existence of the glass ceiling.

The glass ceilings concept originated in the United States of America, following the formulation of the Federal Glass Ceilings Commission.

The US Civil Rights Act was created to conduct a research and recommend courses of action that the US Congress could eliminate barriers that were hindering the advancement of women to senior management positions (Xiu and Gunderson, 2015). Research conducted by Chang *et al,*. (2014) describes the glass ceilings phenomenon as invisible obstacles that prevent women from rising to leadership status. Glass ceilings effects imply that gender disadvantages are more pronounced at the top of the hierarchy that at lower levels (Tandrayen-Ragoobur and Pydayya, 2015). Morrison, White, and Velsor, (1994) concur that glass ceilings have been prevalent in the construction industry. Barriers created by the glass ceilings are elusive yet they prevent women from moving up the corporate ladder (French and Strachan, 2015). From their vantage point, women can see high-level corporate positions but are kept from reaching the top (Morrison *et al.,* 1994).

From a biological perspective, the glass ceiling is not only a manifestation of male dominance but has biological connotations. Cognitive studies have shown that doctors, scientists and managers have experience that brilliant and ambitious young women, qualified and capable for top career, lose their interest in such career after child birth and make choice in favour of parental role instead (Schulpen, 2017). A career is defined as a journey that takes over the course of a person's work life. It is frequently described as a path involving a series of jobs that involve advancement and competency (Navarro-Astor *et al.*, 2017)

Despite this biological perspective to the glass ceilings extant literature has shown that women in management positions face significant hurdles in the attainment of top level positions (Acar, 2015). Morrison *et al.,* (1994) propose that the glass ceilings are not based on an individual's inability to handle higher level responsibilities; rather they are barriers that hinder women from career advancement. Within the construction industry, there are certain positions that men can feel comfortable to have a woman occupying and there are some that are deemed too high to be occupied by a woman.

Due to the debilitating effects of the glass ceilings women face systematic disadvantages in their career advancements in terms of vertical mobility, lower status positions, authority and low income (Tandrayen-Ragoobur and Pydayya, 2015).

Insights from the study by Cansu (2013) highlight that few women move beyond the glass ceiling into executive management. However, their number is not proportional to their representation in middle management compared to their male counterparts.

Tandrayen-Ragoobur and Pydayya (2015) attribute the existence of the glass ceilings to gender stereotypes ingrained in society causing women to choose "pink collar" jobs such as adminstrative support fields. The stereotype of the South Africa construction industry is that of a male dominated industry (English and Le Jeune, 2012). The industry is characterised by brute strength, tolerance for outdoor activities, foul language and inclement weather (Madikizela, 2008). Attaching such labels to the South Africa construction industry pervades the notion of gender discriminantion at lower levels and the promotion of glass ceilings at higher levels.

Despite the appearance of gender neutrality, gender works to shape organisatonal rationality from a masculine perspective (Olofsdotter and Randevåg, 2016). Tandrayen-Ragoobur and Pydayya (2015) suggest that this creates phenomenon that characterises a *"sticky-floor"* that binds women from career advancement and attaining executive positions in leadership. The *"sticky-floor"* spectacle is associated with issues such as the need to balance family and professional careers roles, gender sterotypes and organisational structures (Chang *et al.*, 2014).

A sticky floor is a wider pay gap at the bottom of the pay distribution where females tend to remain stuck (Xiu and Gunderson, 2015). Sticky floors arise due to the appointment of men and women at a similar rank but with a bias towards men when it comes to a favourable scale (Hejase and Dah, 2014). The notion of sticky floors appear to dispute the notion of the glass ceilings that women are disadvantaged at a higher level in their career, since it proposes that women face hurdles in their career progression from the onset of their caeers (Xiu and Gunderson, 2015).

However, the study by Del Río, Gradín and Cantó (2011) suggest that the glass ceilings effect appears to affect highly educated women whereas the sticky floor phenomenon affects primary and secondary educated women. Despite the appearance of gender neutrality, women under-representation in the built environment, characterise traditional project based industries of engineering and construction (Olofsdotter and Randevåg, 2016).

It has been observed that women in executive leadership positions are at risk of falling from their higher positions of influence as they are judged for their mistakes harshly than males in a phenomenon known as the *"glass cliff"* (Chang *et al.*, 2014).

The notion of glass ceilings is complicated such that a number of legislative instruments have been enacted to help curb the spread of the glass ceilings phenomenon in the South African Built Environment. Over and above the use of legislative enactments, role models of typical women who have managed to break through the glass ceilings, especially in the construction industry, have been used to inspire other women in the built environment to aim for higher corporate positions in the South African Built Environment (Madikizela, 2008). Moreover, management and leadership styles and networking have also been put as likely tools that can arm women in the South African Built Environment to aim for higher leadership positions. These tools are discussed in detail in the section that follows.

2.2 Tools to overcome barriers

Various initiatives have been undertaken to deal with the spread of the glass ceilings in South Africa and beyond. Some of the measures that have been considred include the use of legislation, women empowerement and affirmative action as well as **s**trategic networking, mentoring and role playing on the part of women who have managed to break through the glass ceilings. Some of the these tools to overcome glass ceiling barriers are reviewed in detail below.

2.2.1. Legislation

In the South African context, legislation has been put in place as a tool to curb the proliferation of gender based discrimination at the workplace. The need to promote employment equity in South Africa was realised back in 1998 when the South African parliament passed the Employment Equity Act 55 of 1998. The Act was meant to redress historical workplace discrimination that had been prevalent in South Africa and to provide a sound footing for women to break the glass ceiling that had always existed in the workplace for generations (Booysen and Nkomo, 2012). The rationale of the Employment Equity Act 55 of 1998 was to give women as marginalised or vulnerable groups in society the opportunity to venture into any sector and to rise as far as possible in the hierarchal setups without any form of discrimination (Mathur-Helm, 2015).

The institutional armoury of the Employment Equity was quite formidable. For example, Chapter 2 of the Employment Equity Act prohibits unfair discrimination against designated employees including women and employee with disabilities (Horwitz and Jain, 2013). Furthermore, Schedule 7 of the Labour Relations Act (1995) considers unfair discrimination as an unfair labour practice (Booysen and Nkomo, 2012).

Nevertheless, the South African construction industry is reeling under the effects of workplace gender inequity (Madikizela, 2018). Attempts to use legislation to address unequal opportunities on the basis of gender have been largely ineffective as they had no significant impact on women participation in the South African construction industry. Cross and Linehan (2013) highlight that most women in the South African construction industry are trapped at junior and middle management roles and they account for only about 10% of the total workforce in the industry. The South African employment equity was modelled from the Canadian jurisdiction and affirmative action provisions in the USA legislation and has been difficult to legislate (Horwitz and Jain, 2013).

Notwithstanding this, the paradigmatic shift in gender equality expectations brought about by the move from the apartheid rule created a platform to transform gender-based barriers faced by South African women in their career progression (Booysen and Nkomo, 2012). After gaining political independence in 1994, South Africa implemented the equal opportunity and affirmative action legislation as a national strategy to address past gender imbalances created by apartheid (Mathur-Helm, 2015). Following the enactment of the equal opportunity and affirmative action legislation gender issues such as empowerment, their rights and equality particularly affecting black women in South Africa came to the fore (Booysen and Nkomo, 2012).

Essential measures around these issues started to gain traction as shown by the authourisation of the Elimination of All Forms of Discrimination Against Women (CEDAW) which was a fore runner to the formulation of the South Africa Gender Policy Framework (GPF) (Mathur-Helm, 2015). The main purpose of the GPF was to integrate gender policies by making sure that; women's rights are viewed as human rights, ensuring that women's economic empowerment is promoted and that they play an active role in decision making.

Despite the enactment of the GPF, the current occupational representation in terms of race and gender in the labour force largely reflects the situation that existed during the apartheid era (Booysen and Nkomo, 2012).

White males still dominate senior management positions followed by white females, black males and black females (South African Department of Labour, 2009). Statistics from the Department of Labour show that Black, Indian and Coloured women are the least represented ethnic groups on all management levels and professions (Department of Labour, 2009). This is against the spirit of equality as pronounced in the Bill of Rights as enshrined in Chapter 2 of the South African Constitution that stipulates that, *"everyone is equal before the law and has rights to equal protection and benefit of the law."* The essence of the bill of rights to the built environment is that the construction industry must take steps to promote equal opportunities in the workplace by eliminating unfair discrimination on the basis of gender or any employment practice of policy (Emuze and Adlam, 2013).

To buttress the pronouncements of the bill of rights, the Broad-Based Black Economic Empowerment Act (BBBEE) (2004) was enacted. The Broad-Based Black Economic Empowerment inspired the ratification of the Construction Sector Code in 2007 whose main objectives were to transform the racial and gender structure of the South Africa Built Environment in terms of ownership, management and control (Emuze and Adlam, 2013). The construction sector code as meant to enforce the employment equity which a hoped to influence the promote the career advancement of women in the construction industry. Langford, Fellows, Hancock and Gale, (1995) concur that the construction industry has long been a site of gender discrimination across culture, and nationalities as women remain under represented at top echelons of leadership.

An analysis of the legislative environment shows that the post-apartheid labour laws have been at the fore front of the South African government's determination to remove unfair labour practices and discrimination at the workplace. Despite these initiatives, it appears that women are still finding it difficult to rise up the corporate ladder especially in the South African Built Environment.

The present study therefore seeks to rethink the tools that can be used by women in the built environment to break the glass ceiling and rise through the ranks and gain positions of influence and leadership in the in South African construction industry.

2.2.2. Role Models for Aspiring Professional Women

A role model is a common reference to individuals who set examples emulated by others and may stimulate or inspire other individuals to make certain career decisions and achieve certain goals (Bosma *et al.,* 2012). The relevance of role models for aspiring professional women is evident in feminine literature littered with stories that give reference to successful endeavours of women who have managed to breakthrough the glass ceilings (Sharif, 2015). As young people consider their career paths, they may be drawn to role models who have gone through a similar career journey as a tool to break glass ceiling (Singh, Vinnicombe and James, 2003).

The male-dominated culture of the South African Built Environment, has an influence on women's intention to leave the construction industry (Haupt and Fester, 2012). This can negatively affect the gender balance in terms of the number of female role models (above the glass ceiling) for aspiring professional black women (below the glass ceiling) within the South African Built Environment. Black female managers (above the glass ceiling) should ideally serve as mentors or role models to young aspiring professional black women (below the glass ceiling) and also share their professional journey of how they broke through the glass ceiling (Mathur-Helm, 2015). The two-fold conundrum of few female role models above the glass ceiling and the alienation of women below the glass ceiling by black female managers can potentially retard the breaking of glass ceiling by aspiring professional black women within the South African Built Environment (Bosma *et al.*, 2012).

2.2.3. Mentoring

Mentoring a process through which a more experienced and qualified individual, usually in a position of power guides a junior individual (Palmer and Johnson-Bailey, 2008). The earlier works of Senge (1996) looked at the notion of mentoring from the perspective of a learning organisation and outlined that mentorship has a role to play in helping the local line leaders to mature to understand complex political cross-currents and to communicate their ideas and accomplishments to those who have not been involved.

Research conducted by Lu (2006) define the role of a mentor as a facilitator who encourages development the mentees skills through instructing, coaching, modelling and advising. Moeketsana (2014) argues that more channels and business networks are open to people with mentors than those without mentors. Thus, the absence of a mentoring relationship can be said to be an external barrier to career advancement.

2.2.4. Strategic Networking

Strategic networks are coalitions that women form in response to the isolation and social exclusion they face in the corporate world (Tandrayen-Ragoobur and Pydayya, 2015)**.** Black women in the South African Built Environment are in the minority and they are disadvantaged compared to white men respect of the quality of useful work relationships (Navarro-Astor, *et al.*,2017). Consequently women form coalitions and support networks and become more acceptable for senior positions (French and Strachan, 2015).

2.2.5. Adopting Management and Leadership Styles

Differences have been found in management and leadership styles between men and women. The styles of management and leadership in the corporate world that are typically most valued are those often used by men (e.g. being direct and factual), rather than the interpersonal style women often use. Women and men organize their lives differently according to their gendered roles. Their participation in decision-making processes, access to justice or the legal system and economic resources is not equitable. The manner in which gender relations are defined in the workplace often mirrors the division of labour in the home, where roles are based on gender stereotypes. Therefore, for example, women tend to be well represented in positions that are synonymous with motherhood, caring and "nimble fingers". These have limited advancement prospects and lower benefits. Men on the other hand are over-represented in positions that command significant decision-making power, higher salary scales and prospects for advancement (CGE, 2015). Cansu (2013) concluded that women who use the more direct communication style may be more likely to advance in the corporate world than women who do not.

2.3 Factors Contributing to Glass Ceilings

Glass ceilings have largely been influenced by situational, personal and social barriers, (Kiaye and Singh, 2013). The research identified job segregation, sex discrimination, sexual harassment as key factors that have played a key role in promoting glass ceilings in workplaces.

2.3.1. Job Segregation

Job segregation is a key factor that has promoted glass ceilings in workplaces (Wright, 2014). The mining and construction sector in South Africa have been largely affected by job segregation (Haupt and Fester, 2012). Women participation in these sectors is very limited as they are largely seen as the male domain. Padavic and Reskin (2002) highlights that just as the overall labour market remains sharply segregated by gender, women executives are concentrated into certain types of jobs mostly staff and support jobs. In most industries, women who hold the highest-ranking positions are mostly drawn from support non-operating areas such as personnel, human resources and public relations.

Women are locked out of jobs in the mainstream role assumed by the CEOs and presidents. The segregation of jobs lays the foundation for other forms of inequalities against women such as wage differentials, lower job security and fewer promotion prospects (Parashar, 2014; French and Strachan, 2015). Even if women managed to get a line job, it is not likely to be in a crucial part of the business where they can make a mark as leaders (Cansu, 2013). This is evidenced by the fact that the number of women in senior management positions still lags behind that of men in the same industry.

Job segregation can be categorised into two, vertical and horizontal occupational segregation. Vertical segregation is whereby women hold lower status and less pay in organisations. Vertical occupational segregation measures the severity of inequalities. On the other hand, horizontal segregation measures the extent of difference within occupations (French and Strachan, 2015). Navarro-Astor *et al.*,2017 concur that intense horizontal gender segregation results in the exclusion of women from manual occupations in the construction industry in most developed countries.

The severity of job segregation against women in the South African Built Environment is that although women account for the majority of the population, they account for only 12.5% of the occupations in the built environment (Stats SA Quarterly Labour Report, 2017). Only a third of the entire South African labour force are women according to Mathur-Helm, (2015). On construction sites, women are expected to work in technical trades or areas where they are not exposed to less demanding tasks such as finishing touches to the building like painting and tiling (Navarro-Astor *et al.*,2017). The sexist allocation of tasks is a result of gender role segregation as a consequence of the negative stereotypes upheld by employers. In the South African Built Environment context, job segregation is worsened by cultural and racial factors especially in the mining and construction sectors.

2.3.2. Sexual Discrimination

Sexual discrimination refers to prejudice based on the physical or biological differences between men and women (Jahn, 2009). Hejase and Dah (2014) stress that sexual discrimination can occur at different stages in the career path of a women. Pathway, Channar and Brohi (2012) argue that sexual discrimination starts upon the arrival to the labour market where sticky floors mean that men are put at a favourable scale than women. A study by Chang *et al.,* (2014) revealed that sexual discrimination is more pronounced at the sticky floors or lower level in the organisational hierarchy that it is at the executive level. Therefore, women at lower levels suffer more sexual discrimination that women in executive leadership (Loosemore and Lim, 2016).

Haupt and Fester (2012) suggested that the aim of the Gender Policy Framework (2008) was specifically to eliminate all forms of sexual discrimination against women particularly in the male dominated industries such as construction and mining (English and Le Jeune, 2012). Sexual discrimination at the workplace has been well captured in literature by the research conducted by Lingard and Lin (2003), Dainty *et al* (2004) and Oldham (2004). In a study of the Australian construction industry, Lingard and Lin (2003) established that women were more likely to show higher levels of commitment to their jobs in the construction industry if their male partners or spouses support their roles at work.

In a study of the UK construction industry, Dainty *et al.,* (2004) outlined that there was a sexually discriminatory behaviour by the white males in the construction industry which led to a less representation by women. Madikizela (2008) established that sexual discrimination in the South African Built Environment has resulted in women-owned construction companies being under-represented in the South Africa construction sector. English and Le Jeune (2012) concur that black women in the South African Built Environment face patriarchal cultural barriers and sexual discrimination that affects their capability to believe in themselves as successful people in the construction industry.

Sandberg and Chávez (2014), in their article in the Wall Street Journal, revealed that women managers considered sexual discrimination as the most serious obstacle to their career progression. It was established that only 3% women respondents cited family responsibilities as an obstacle, about half or respondents identified gender-based reasons as obstacles. Issues related to male chauvinism, slow advancements of women in leadership, attitudes towards a female boss and the fact of being a woman were also identified as obstacles.

2.3.3. Sexual Harassment

Sexual harassment is a serious problem for women in the managerial ranks. Sexual harassment is more prevalent in blue collar masculinised professions which the construction industry is part of (Parashar, 2014). A study conducted by French and Strachan (2015) revealed that in the Australian construction industry, initiatives have been made to enforce equal employment opportunities through coercive legislative requirements to address discrimination and sexual harassment. Women face sexual harassment as an obstacle to hinder career progress (Navarro-Astor *et al.*,2017).

Sexual harassment is an obstacle that is identifiable with all categories of women in the construction industry, from engineers, architects, site managers, quantity surveyors and construction workers (Navarro-Astor *et al.*,2017). Sexual harassment usually takes form of unacceptable verbal harassment such as passing obscene comments, wolf whistles, swear words, offensive language and jokes (Haupt and Fester, 2012). Requests for sexual intimacy, fondling are other forms of sexual harassment that women face.

The effect of sexual harassment on women participation in the construction industry is that women are expected to tolerate such unacceptable behaviours. As a result women resort to leaving the construction industry due to the sexual harassment that they are subjected to (Navarro-Astor *et al.*,2017).

Sexual harassment degrades a woman's value (English and Le Jeune, 2012) and demoralises women executives. Many women hesitate to speak out against sexual harassment for fears of victimisation and jeopardising their careers. In addition, men in corporate management do not perceive sexual harassment as a real problem, making it impossible to effectively deal with sexual harassment at the workplace. According to an exhaustive study by Fernández, Rodríguez Castro and Torrejón (2001), white men consistently ranked problems encountered by women executives as insignificant compared to how women ranked them. Without constant pressure from the outside and strong legal remedies, the very real problems of race and sex discrimination in the executive suite may never be adequately addressed.

2.4 Generic Barriers to Career Advancement in the Built Environment

Literature identifies barriers to women entering and working within construction arising from, inter alia, the industry image, career knowledge among children and adults, selection criteria, recruitment practices and procedures, sexist attitudes, male dominated culture, and the work environment (Fielden *et al.*, 2000; Wright, 2014). Common barriers faced by women in pursuit of career advancement has been identified in sectors like mining which has been regarded as a male dominion for centuries. While the gender pay gap within sectors such as the hospitality industry has decreased in the construction industry the pay gap continues to increase (Obadic, 2016).

2.4.1. Discriminatory work practices

Cultural and social attitudes towards what constitutes "male" or "female" jobs result in occupational segregation, although the extent of the problem varies from country to country and from job to job (Cansu, 2013). Bender and Pigeyre (2008) explain that in the public sector, which is supposedly more equal, women struggle to reach the highest hierarchical level and are concentrated in the lower qualified positions.

The existence of political interference in municipal authorities is a career limiting barrier for women, in that some are bypassed for positions for which they are experienced and qualified for. It has also been found that whilst there appears to be a large degree of parity in senior lecturer posts in universities, women only represent 15% of professors, across all disciplines (Cansu, 2013).

2.4.2. Wage gap

Research into women in the tourism industry has shown that women still hold less than 40% of all managerial and supervisory positions. Women were found not to be paid as much as men (Obadic, 2016). The wage gap for the same position has recently been accounted for by the long-term impact of women's child-bearing and child rearing activities on their careers. Takahashi, Takahashi and Maloney (2015) bring out the view that in some organisations or companies women and men who are on the same level are given different salary packs and, in such situations, it is the men who are given more. Salary differences between men and women in companies are a good indicator of male domination over women in the workplace (Chang *et al.*, 2014).

2.4.3. Work-life Balance

Work-life balance is a gender neutral definition which recognises the conceptualisation that all workers have commitments outside the workplace (Kargwell, 2012). Work-life balance highlights how career women manage tensions between paid work and caring (Perrons, 2017). Work-life balance has become a critical issue because couples are now devoting more time to their careers (Lingard and Francis, 2012) the barriers that women face in their careers progress are inspired by cultural values and gender roles. Women have been characterised by limited opportunities, low paid part-time work and breaks of different lengths for child care (Kargwell, 2012). This affects the work-life balance when it comes to women career advancement.

Upward mobility remains one of the conventional measures of organisational and career success. Furthermore, it can be said that women are rationally and psychologically inclined to take on a domestic role in a relationship that includes child care. Navarro-Astor *et al.*,(2017) concurs that multiple role conflicts that women face force them to take career breaks. Some organisations operate a double standard for marriage.

Married male managers are viewed as an asset with a stable support network at home allowing him to give his undivided attention to his work (Ensour, Al Maaitah and Kharabsheh, 2017). On the other hand, married female managers are seen as a liability as they are perceived more likely to neglect their careers at the expense of their families at every opportunity. From this point of view, role conflict is an obstacle to women's career advancement and the ability to cope with the demands or responsibilities of high-level management (Louise, 2001).

2.4.4. Male dominated culture

Male domination can be classified as one of the greatest factors contributing to glass ceilings for women (Wright, 2014). The construction industry is a male dominated sector (English and Le Jeune, 2012) that has seen a significant degree of resistance to concepts such as affirmative action, gender equity, and resentment. There is widespread misinterpretation and justifications for unequal opportunities with men based on the belief that women are the weaker sex (Gartzia and Engen, 2012) and they are not equally physically fit to take up tasks in the built environment (Olofsdotter and Randevåg, 2016). Men who view themselves as superior to women have challenges in accepting women at management levels in the built environment (Wright, 2014). The notion of male domination in the built environment has cultural roots since organisations are oriented towards the traditional role of men in society taking up a leadership role.

English and Le Jeune (2012) concur that in the South African context, societal norms have contributed to one in three white males managers attributing lack of advancement of women to their personal behavioural traits. Loosemore and Lim (2016) argue that increasing workforce casualisation, under representation of women is one of the intra-organisational injustices in the built environment. English and Le Jeune (2012) suggest that the built environment is inundated with an unglamorous macho image that portrays the construction industry as a male dominated industry unattractive to women.

On the other hand, the rise of feminism has sensitised the society on the capabilities of women to assume leadership positions (Parashar, 2014). As a result, men who are gender conscious are aware of the role that women make in the boardroom (Navarro-Astor *et al.*, 2017) and they are prepared to engage with and work with women on an

equal footing. Olofsdotter and Randevåg (2016) attest that in the built environment, there are multiple masculinities that co-exist and over in project organisation and both male and female project managers have to adjust with these discourses in accordance with the particular context. This assertion is in agreement with the findings by Loosemore and Lim (2016) who established that within the built environment, men and women assume different roles, men are more inclined towards self-preservation in reward collection whilst women are inclined towards looking after the welfare of the group.

Takahashi *et al*,,(2015) confirm these differences in status and the different treatment of women. Moreover, studies by Hejase and Dah (2014) have found that among executives at the same level, men managed greater numbers of people, had more freedom to hire and fire, and had more direct control of the company's assets than women. It is against this background that it can be said that glass ceilings shall continue to be prevalent as long as male domination persists in the workplace and as long as males are not empowered or educated to view women as equal partners (Olofsdotter and Randevåg, 2016).

The study by Thornton (2017) suggests that graduates with a technical background have been found to mostly men. Transforming top management structures dominated by men appears to be a perpetual struggle for women since they remain concentrated in certain sectors, occupation and professions (Booysen and Nkomo, 2012). The significance of these findings appears to suggest that there is a genetic bias towards male career advancement in general and in the built environment in particular.

2.5 Conclusions

This chapter focused on a critical review of literature on the barriers faced by aspiring professional women in the South African Built Environment. Various schools of thought were critically reviewed and discussed in as far as they contributed to the understanding of the barriers faced by women in the built environment. The succeeding chapter will focus on the research methodology that will be used in the study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 INTRODUCTION

The preceding two chapters outlined the statement of the problem and formulated the research objectives. Views from various academics were critically discussed in as far as they assisted in unlocking research gaps and resolving the current research objectives. This section of the research focuses on the research methodology used in the study. Appropriate research methodologies are applied in as much as they help in unlocking the barriers faced by aspiring professional black women in the South African Built Environment. The study adopted a socially constructive research approach, since the study was conducted in the natural environmental context of the respondents. The present research is descriptive in nature as it seeks to establish the barriers faced by aspiring professional black women in the South African Built Environment. As such non-probability sampling methods such as judgemental and snowball sampling were used. In addition, archival research was also used as a data collection method to complement the face-to-face interviews. Thematic analysis was the preferred data analysis method. The chapter concludes with ethical considerations.

3.1 Research Philosophy

The research philosophy for the present study was built upon the socially constructive research paradigm. Social constructivism is concerned with the way people learn since it places prominence on subjective daily experiences (Bordley, 2001). The use of the socially constructive research approach was considered essential to the present study since the researcher is of the view that barriers that women face in achieving their full career potential are a daily phenomenon. These experiences can be better captured if the research is carried out in the natural environmental contexts of the women who are experiencing them. Therefore, the study was inspired by the need to establish the real experiences from the perspective of women themselves rather than on the objective reality of the natural world.

In the study, socially constructivism was used to institutionalise habits of women in leadership as embedded in routine, forming a generally accepted body of knowledge that future generations render as objective reality, therefore rendering the research ideal. The utilisation of a socially constructivist approach was meant to emphasise the creation, sustenance, negotiation and modification of meanings as well as the reconstruction of subjective reality. The present study sought to generate reach insights from women both below and above the glass ceilings within the South African Built Environment. This enabled the researcher to learn from interviewees who already knew and had experienced the barriers brought about by the glass ceilings. In line with the dictates of a socially constructive research approach, the research made use of in-depth face-to-face interviews with women role models who have managed to break through the glass ceilings within the South African Built Environment.

3.2 Research Design

Research design is a road map that enable the resolution of research objectives (De Vaus, 2004). This study made use of an explanatory and descriptive research designs as they subscribed to the qualitative research paradigm that the study has adopted. A descriptive research design endeavours to answer what is happening whereas an explanatory research design attempts to outline the reason behind a phenomenon.

3.2.1. Descriptive Research Design

The ultimate goal of resorting to a descriptive research design in the research was inspired by the need to portray an accurate profile of events through the use of a set of systematic procedures to collect raw data and cerate data structures that describe the existing patterns. In the context of the current study, a descriptive research design was essential in explaining the barriers faced by aspiring black women in the South African Built Environment. The motivation for using a descriptive research design in the study was that it described the existing characteristics such as attitudes, preferences and intentions (Rugg and Petre, 2007). This enabled the drawing of inferences concerning the behavioural inferences of aspiring black women in the South African Built Environment (Saunders, Lewis and Thornhill, 2015). In line with the dictates of a descriptive research design, a case study was based on personal accounts of aspiring black women in the South African Built Environment.

These accounts provided an insight into the experiences and barriers faced by aspiring black women in the South African Built Environment.

3.2.2. Explanatory Research Design

An explanatory research design focuses on gaining ideas, insights since it is particularly helpful in breaking a problem statement into its component parts and better researchable elements (Greener, 2001). An explanatory research design enabled the researcher to avoid the replication of studies already conducted on the concept of barriers faced by aspiring black women in the South African Built Environment. An explanatory research design enables the identification of research gaps on issues that have been researched already in previous studies (Rugg and Petre, 2007).

3.3 Qualitative Research Approach

A qualitative research approach was selected in this study since it enabled uncovering the underlying perceptions behind responses given by research participants (Collins, Onwuegbuzie and Jiao, 2009). In utilising qualitative research, the researcher was interested in gaining a rich understanding of the experiences of aspiring black women in the South African Built Environment since the intention of the research was not to generalise the findings to other sectors of the economy (Saunders, Lewis and Thornhill, 2015).

The researcher made use of an inductive process that started from the specific to the general through the bottom up approach. Therefore, the study was not based on predetermined hypothesis, hence there was greater flexibility in data collection. Data was collected through the use of in-depth interviews. The use of a qualitative research approach afforded the researcher the ability to carry out the study in several stages rather than through a once off data collection approach. As such, the researcher was in constant search of new insights in streams of emerging data until no new issues emerged (Dawson, 2009). Qualitative research design enabled the researcher to adopt a new concept mid-way, address or drop additional issues that arose during the research.

The preference of the use of qualitative research in the study was based on the principle of permitting participants a degree of freedom and spontaneity in their responses rather than confining them to predetermined responses (Saunders, Lewis and Thornhill, 2015) which might not capture their true feelings and perceptions with regards to the concept

of glass ceilings in the South African Built Environment. Since the current study was interested in generating accounts from the perspective of aspiring black women in the South African Built Environment, a qualitative research design enabled the respondents to freely express themselves by adopting less rigid and less formal approaches.

3.4 Target Population

A target population is a group of people to whom research results are meant to appeal Saunders *et al.*, (2015). The target population of the current research is composed of all black women in the South African Built Environment who either held senior managerial or who held positions where they aspired to rise to managerial positions within the South African construction industry. According to the Statistics South Africa Quarterly Labour Force Survey 4th Quarter report (2017) as at 31 December 2017, the number of women employed in the South African Built Environment stood at 174,000.

3.5 Sampling Methods and Techniques

In line with the qualitative research design, the study made use of a non-probability sampling method. Non-probability sampling is a subjective approach to sampling that does not give all participants an equal opportunity to take part in the study since it is based on the personal value judgements of the researcher. The researcher made use of both judgemental and snowball sampling approaches (Saunders *et al.*,2015). Judgemental sampling was used in selecting women leaders in the South African Built Environment who have managed to break through the glass ceilings. Through the use of snowball sampling, the researcher contacted an initial group of women in the built environment at random. After interviewing the initial group, they were asked to identify other suitable respondents who could participate in the study (Greener, 2001). Therefore, subsequent participants were identified on the basis of these referrals.

Women occupy 12.5% of the jobs within the South African Built Environment (Quarterly Labour Force Survey 4th Quarter report, 2017). This means that they are a rare group within the construction industry in South Africa. Therefore, snowball sampling enabled the researcher to penetrate such rare social circles. The advantages provided by snowball sampling are that it enabled the researcher to reach unique target populations at a reasonable cost and time.

3.5.1. Sample Size Determination

Deciding on a suitable sample size determination using non-probability sampling methods is ambiguous (Saunders, Lewis and Thornhill, 2015) However, the researcher was guided by the saturation point method of determining the sample size. The basis for adjudicating the saturation point is based on the ability of the additional information that will contribute towards resolving the research questions of this study. The researcher, will group interviewee responses into themes. The saturation point is determined when no new themes emerge from additional interviews with women in the South African Built Environment. At that point interviews will be stopped since they will not be contributing anything new to the research. For the avoidance of doubt, Guest, Bunce and Johnson (2006) states that within a fairly homogenous group, twelve in-depth interviews should suffice. Since this study specifically focuses on the glass ceilings barriers that aspiring career women face in the South Africa Built environment, this makes women in this study a homogenous group. Therefore, guided by Guest *et al*., (2006) suggestions, the appropriate saturation points for conducting interviews in this study will be determined after the twelfth interview has been held.

3.6 Data Collection Instruments

This study was predominantly based on the use of qualitative research instruments. As such, the study made use of in-depth interviews to collect data. The use of a semi-structured interviews allows a flexible way of collecting data from interviewees without being confined to as predetermined interview schedule and questioning order to all interviewees (Silverman, 2016). The use of the semi structured interview schedule made it possible for the researcher to ensure that the key areas were covered (Saunders *et al.,*2015) but with the added advantage that they were able to pursue issues which emerged during the course.

3.7 Data Collection Procedures

The face-to-face interviewees who were identified for participation in the study were initially contacted by telephone to inform them of the study in detail and request their participation. After obtaining their informed consent, an appointment was made for the researcher to meet the participant and administer the interview.

On the date of the face-to-face interview, the researcher met participants and proceeded to ask the interview questions whilst recording their responses on paper and a recorder. After the completion of each face-to-face interview, the interviewees were asked to identify and refer women in the South African Built Environment who may have pertinent contributions to the research.

3.8 Data Analysis Procedures

Thematic analysis was used for data analysis in this study. The choice of the data analysis method was inspired by the study by Navarro-Astor *et al.*,2017 where thematic analysis was used in a study to determine the main barriers to women's career development in the construction industry in Spain. The emphasis of thematic analysis is on recording, examining and pinpointing common themes in a dataset. Themes are patterns across data sets that are important to the description of a phenomenon and are associated with a specific research question (Braun and Clarke, 2006). In using thematic analysis, a point presented by interviewees in an interview is only considered as a theme if it is raised by the majority of interviewees. Research findings will be presented descriptively in line with research objectives of the study. Discussions will be made on the basis of the comparison between current research findings and empirical research findings.

3.9 Reliability and Validity

To ensure the validity of the research, the data collection instruments were thoroughly checked by the researcher and the supervisor to confirm their capability to collect the data which could address the research questions. The use of the snowball sampling method in the study ensured that interviews were conducted with the most appropriate respondents who could share insights on the barriers faced by aspiring professional black women in the South African Built Environment. By focusing on these women, the reliability of research findings is enhanced. The interview guide was pretested in order to make sure that any errors and inconsistencies were rectified before using it in the actual study (Saunders *et al.,* 2015) For the purposes of the pilot study, preliminary interviews were conducted with four typical aspiring professional black women, but who were not part of the main study.

These preliminary interview respondents were chosen on the basis of their proximity to the researcher, and also taking into cognisance that they had managed to break through the glass ceilings since they held executive positions within the South African Built Environment. Insights from these black women helped to provide a proper direction to interview questions so they could properly address research objectives of the current study. Items which did not convey the intended meaning, ambiguous items and other problems with the data collection instruments were thus rectified before the study commenced.

3.10 Ethical Considerations

The researcher first obtained ethical clearance from the University of Cape Town's Research and Ethics Committee to proceed with the study. Respondents who were engaged for the study were initially given full information about the study and asked for their express permission before being interviewed. The onus was on the researcher to ensure that participant consent was treasured (Orb, Eisenhauer and Wynaden, 2014). It was essential to observe ethical principles such as the right to self-determination, privacy and confidentiality of information. The researcher looks forward not to coerce participants into taking part in the study. Respondents were also informed about their right to withdraw from participating in the interviews at any stage along the interview without having to provide a reason. To protect the privacy of participants, thematic analysis will be used. Comments made in interviews will not be attributed to specific interviewees. Thematic analysis will offer a blanket analysis covering common themes outlined by various interviewees hence protecting the identity of the interviewees. Interviewees will be identified through referrals from aspiring professional black women in the South African Built Environment following a snowball sampling approach. Data was stored securely and third parties were not given access to the data which was collected for the study at any stage.

3.11 Conclusion

This chapter presented the research methodology which was used. The study was guided by the socially constructivist research philosophy. Descriptive and explanatory research designs were used in line with the dictates of a qualitative research framework. The target population was identified. Non-probability sampling approach was used and the rationale behind sample size determination was justified.

The interviews were used as the main data collection method. Data analysis comprised the use thematic analysis. The chapter also tackled the ethical dimension in social research. The succeeding chapter will focus of the presentation, analysis and discussion of findings emerging from this study.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSIONS

4.0 Introduction

This chapter includes focuses on data presentation, analysis and discussions of research findings into the barriers faced by aspiring professional black women in the South African Built Environment. Information in this chapter has been streamlined to respond to research objectives as set out in the first chapter. The chapter begins with the demographic profiling of interviewees in terms of their educational level, marital status, work experience and designation as these factors have an impact on their ability to break through the glass ceilings within the South African Built Environment. Quantitative analysis was used for demographic data whilst thematic analysis was used for qualitative data analysis. Responses from interviewees were categorised to themes which formed the basis for data analysis. The main themes identified from the interviews for mechanisms to break through glass ceilings include legislation, strategic networking, mentoring and work-life balance. In addition, sexual harassment and discrimination were identified as the main themes for barriers that black women face in their career progression in the South African Built Environment. Themes for coping mechanisms used by black women in the South African Built Environment include career aspirations and respect and recognition for contributions made.

4.1 Demographic Profiling of Interviewees

Interviews were the main data collection instrument in this research. Interviews were conducted with sixteen black female interviewees operating in the South African Built Environment excluding the four interviewees who participated in the pilot interviews.

Table 4.1: Interview Respondents Profile

	Profession	Type of organisation	Geographical Location	Glass ceilings position in the built environment
1.	Electrical Engineer Consultant	Consultancy services	Cape Town	Below
2.	Quantity surveyor	Quantity Surveying Consultancy	Cape Town	Below
3.	Property Management	Real Estate	Johannesburg	Above
4.	Quantity Surveyor	Public sector	Cape Town	Above
5.	Architect	Consultancy	Johannesburg	Above
6.	Project Manager	Consultancy	Johannesburg	Above
7.	Civil Engineer	Consulting firm entrepreneur	Pretoria	Above
8.	Civil Engineer	Parastatal	East London	Above
9.	Junior Project Manager	Public sector	Cape Town	Below
10	Project Manager	Public sector	Cape Tow	Above
11	Civil Engineer	Contractor	Cape Town	Above
12	Civil Engineer	Public sector	Cape Town	Above
13	Quantity Surveyor	Oil and gas	Cape Town	Above
14	Quantity Surveyor	Contractor	Johannesburg	Above
15	Senior Project Engineer	Public service	Cape Town	Above
16	Quantity Surveyor	Contractor	Johannesburg	Above

A balance was struck between those female interviewees above the glass ceilings and those below the glass ceilings (refer to Table 4.2). In the conduct of the interviews, the researcher produced recordings as well as a transcription for ease of data analysis. To maintain consistency in asking questions, an interview guide was used as shown in *Appendix 1*.

Cross-tabulations that follow are meant to profile the demographic characteristics of the interviewees who took part in the study. Demographic profiling was considered as essential part of data analysis since it helped to identify the type of respondents who provided answers even though the interviewees were not expected to identify themselves by their names.

4.1.1. Highest qualification and Professional Membership

The highest level of academic qualification for respondents in the study was a Master's degree. Whilst the least level of academic qualification was a National Diploma in Civil Engineering held by two interviewees. The study revealed that the majority of interviewees were registered members of professional bodies. The main certifying professional bodies were identified as

- Engineering Council of South Africa (ECSA)
- South African Council for the Quantity Surveying Profession (SACQSP)
- South African Council for Project and Construction Management Professions (SACPCMP)
- South African Council for the Architectural Profession (SACAP)
- Royal Institution of Chartered Surveyors (RICS)
- Project Management Institute (PMI)

Findings are illustrated in Table 4.1 below.

Table 4.2: Cross Tabulation between Highest qualification and Professional Membership

What is your highest qualification?	**Are you currently registered with any professional organisations/councils?**				**Total**	
	yes	%	no	%	Frequency	%
MSc Electrical Engineering	0	0.0%	1	5.9%	1	5.9%
MSc Project Management	3	17.6%	0	0.0%	3	17.6%
MBA	1	5.9%	0	0.0%	1	5.9%
Masters in Urban Management and Development Studies	1	5.9%	0	0.0%	1	5.9%
BTech Civil Engineering	2	11.8%	2	11.8%	3	17.6%
National Diploma in Civil Engineering	1	5.9%	1	5.9%	2	11.8%
BSc (Hons) Quantity Surveying	3	23.5%	1	5.9%	5	29.4%
Total	**11**	70.6%	**5**	29.4%	**16**	100.0%

Academic qualifications and membership to a professional body can assist the elevation of black women to executive positions of higher responsibilities. The fact that the majority of interviewees are registered and with professional bodies imply that registration with a professional body is essential in women career advancement. One black female who is an owner of a Civil Engineering Consulting firm, highlighted in the interview that whenever she gets a contract, men are sceptical of her capabilities until she produces her academic qualifications and professional registrations. The interviewee highlighted that most of her male clients are doubtful of her abilities and only applaud her when the project is completed. She also outlined that despite her higher educational qualifications *(MSc Project Management and BTech Civil Engineering)* and professional registrations *(ECSA and SACPCMP),* some people in the built environment still think she is a technician.

4.1.2. Profession and Level in the Organisational Hierarchy

The research focuses on the interlink between the profession they belong to and the level in the extant organizational hierarchies in the built environment in relation to their level in the organisational hierarchy in terms of whether they find themselves above or below the glass ceilings. The basis for determining whether one lies above or below glass ceilings was premised on a number of factors. Interviewees who had more than three years in experience within the built environment, participated in decision making, with more than one mentee were above glass ceilings in their respective organisations. Based on the above criterion, interviewees who took part in the study are classified by their level in the organisational hierarchy as illustrated in Table 4.2.

Table 4.3: Cross Tabulation between Profession and Level in the Organisational Hierarchy

What is your profession within the Built Environment?	**Level in the Organisational Hierarchy**		**Total**
	Above the ceiling	**Below the ceiling**	
Quantity Surveyor	4	2	6
Architect	1	0	1
Electrical Engineer	0	1	1
Civil Engineer	3	2	5
Project Manager	2	0	2
Property Professional	1	0	1
Total	**11**	**5**	**16**

Overall, Quantity Surveyors and Civil Engineers were the majority respondents to this study, they also made up the majority of interviewees who were adjudged to be above the ceiling. Women above the glass ceilings attributed their careers success to hard work, curiosity, determination to duty, membership to professional bodies, willingness to perform tasks that others detest and an urge to learn and seek mentorship from others. Cross and Linehan (2013) similarly highlighted that most women in the South African construction industry are trapped at junior and middle management roles and they account for about 10% of the total workforce in that industry.

4.2 Mechanisms to break through the glass ceiling

This section establishes mechanisms that are used by women in the built environment profession above the glass ceiling that aspiring young black females in the South Africa Built Environment should be aware of to break through the glass ceiling. Mechanisms that were considered include the use of legislation, networking, mentorship and maintenance of a work-life balance.

4.2.1. Legislation

Legislation is one measure which was used by the South African government to ensure that they address the colonial imbalances caused by the apartheid regime. The interview specifically touched on the Broad Based Black Economic Empowerment (BBBEE). Two questions were asked to interviewees to ascertain their level of understanding and appreciation of the role and contribution that BBBEE legislation has played in elevating black women who are aspiring to command leadership positions in the South African Built Environment. In response to a question on the role of BBBEE, some interviewees were able to comprehend the essence to the BBBEE legislations as it pertains to them as women in the South African Built Environment. Responses are outlined below:

"Company needs it to get a tender" ***(Quantity Surveyor 1)***

"To (create a) level the playing field by placing quotas and a property sector charter that gives opportunity to females"
(Business Development Manager)

"To elevate black women, people with no understanding of the construction industry can benefit. Good idea but not working well" ***(Quantity Surveyor 3)***

"To empower previously disadvantaged individual, the industry has a male domination reputation BBBEE distribute opportunities." ***(Architect)***

"A system designed for previously disadvantaged people and former apartheid companies are rated on this basis"
(Civil Engineer 1)

Research findings suggest that black women in the built environment are aware of the provisions of the BBBEE. From the interviewees, we were able to comprehend the essence of the BBBEE legislation especially when it came to creating opportunities for previously disadvantaged black women. However, despite the positive sentiments expressed by the majority of interviewees on the role of the BBBEE, one interviewee commented that the black empowerment legislation was *"good at first but there is now characterised by fraud."* The interviewee perceived that white male company owners in the built environment are using black women to be fraudulently awarded with BBBEE tenders in the public-sector construction industry projects, without any significant improvement in the employment status of the black women.

An instance was cited by one interviewee whereby a white owned construction company used a female technician to get a BBBEE certification, by registering her as a company director. Other claims raised on the fraudulent abuse of the BBBEE legislation include the use of unqualified black women such as general hands to get BBBEE credit points. This is done when the company owners are well aware that these lower level employees have limited chances to go up the corporate ladder since they are not well versed in the technicalities of the built environment. In essence, some unscrupulous employers in the South African Built Environment are using unqualified black women as puppets to earn BBBEE points when they do not promote them and assign them management positions and leadership responsibilities.

As a follow-up question, interviewees were asked their opinions on how the BBBEE legislation works as a tool to aid aspiring professional black women in the South African Built Environment. A selection of responses are provided on the following page:

> *"Imbalance in gender it [BBBEE] is supposed to encourage women to get into the male dominated construction industry. I don't think it's working, women are doing it themselves"* ***(Civil Engineer 1)***

> *"Had it not been there I wouldn't be here, it's not in vain, it helps"* ***(Civil Engineer 3)***

> *"Gives opportunity for ladies to move up in a big organisation if they meet minimum requirements"* ***(Electrical Engineer 1)***

It appears that there were mixed feelings between women below glass ceilings and those above glass ceilings on the ability of the BBBEE as a tool to aid aid aspiring professional black women in the South African Built Environment. Interviewees above glass ceilings highlighted that BBBEE works in certain environments, whilst those below glass ceilings were of the opinion that *"It should work but I don't think it works"* others were of the view that the *"...it applies to women with their own companies."* Nevertheless, the import from the interviews suggest that the BBBEE legislation work in the favour of employment as it opens opportunities for females and companies to tender. However, there are sentiments to the effect that the legislation benefits the company more than the black female who contribute to its certification. An interviewee above glass ceilings expressed that:

> *"Legislation is potentially powerful but it does not guarantee success to women since it needs someone with self-worth"*
> ***(Architect)***

Research findings on the abuse of the BBBEE at the expense of women career progression support Booysen and Nkomo (2012) suggestions that the legislation was meant to redress historical workplace discrimination, and to provide a sound footing for black women to break the glass ceiling that had been prevalent in South Africa.

Current research findings are also consistent with Wright and Conley (2016) who established that the South African Built Environment has long been a site of gender discrimination across culture, and nationalities as women remain under represented at top echelons of leadership.

4.2.2. Strategic Networking

Some interviewees did not appreciate the appeal of networking in improving career prospects of black women in the South African Built Environment. A segment of the respondents cited time and cost constraints as the major factors that hinder them from attending women networking events, probably because a significant portion of the interviewees are based in Cape Town.

In their opinion, interviewees perceived that strategic networking events are only conducted in Johannesburg. Hence, they find it a challenge to travel especially when the strategic networking events are conducted during the weekdays.

Apart from travel commitments, it was also outlined that companies where interviewees work for are not willing to pay for strategic networking events as they are not regarded as part of training. This increases the cost burden on the part of the women below glass ceilings who took part in the study.

In addition, below glass ceilings interviewees expressed ignorance over the existence and the value that such strategic networks can add to their careers. As a result, the majority of women expressed that they rarely attend strategic networking events held in Johannesburg. An Architect who took part in the study outlined that she is not bothered by her lack of attendance to strategic networking events she outlined that:

> *"I don't do well with crowds, the architectural fraternity is very small and people know each other, I'm at a point in my career where I am not prepared to meet people who ask me what I am doing."*
>
> **(Architect)**

The import of these findings is that though women in the South African Built Environment are determined to break through glass ceilings. There is an unwillingness on the part of those who have managed to break through the glass ceilings attend strategic networks which is illustrative of the lack of appreciation of the value and purpose of strategic networking. The reluctance by interviewees to fully utilise the opportunities availed by strategic networking leaves them fragmented and in isolation (English and Le Jeune, 2012). The failure to attend strategic networks might imply that women in the built environment have not developed an emotional stamina to stand against criticism and making a courageous leap forward that helps them to prosper in their career aspirations.

In addition, research results on the failure of women to attend strategic networking events might suggest the lack of will power or capacity to develop relations with a diverse group of people who hold different biological, physical, functional, political, cultural and socio-economical traits.

This phenomenon creates significant talent gaps and widens leadership gaps amongst black women since having a diverse strategic network is a source of solutions. Women in senior positions see the value of coalitions and strategic support networks (French and Strachan, 2015). However, some interviewees to this study appear to hold an opposing view based on the value they place of strategic networking.

4.2.3. Mentoring

None of the interviewees indicated that they have had black women as their mentors. The majority of those who received mentorship, indicated their mentors were either black or white males. Given the male domination of the built environment industry, this is no surprise. Respondents were asked to describe the qualities of their mentor. Their responses are outlined below:

"Intelligent, outspoken and opinionated." ***(Electrical Engineer 1)***

"Strategic, managed to navigate the property environment with strong technical skills" ***(Business Development Manager)***

"Experienced, technically minded, excellent planning and financing skills" ***(Quantity Surveyor 2)***

"Very informed with contract, Architectural background, motivator" ***(Property Manager 1)***

"Good teacher, advice on how to handle the male industry, thorough hand on, supportive" ***(Civil Engineer 1)***

"Easy to talk to, honest with integrity" ***(Junior Project Manager)***

"Driven, believes in overcoming" ***(Civil Engineer 3)***

"Concerned gives advice share his experience." (***Quantity Surveyor)***

Despite the gender of mentors, interviewees indicated positive sentiments over the qualities that their mentors possess. Mentors were described as intelligent, technically minded, good and supportive teachers who provide advice on how to handle the male dominated built environment industry. This implies that women in the built environment can learn from their mentors to enhance their career advancement since mentors have a wealth of experience in the built environment that spans even up to 50

years. Interviewees attributed mentorship to their promotion prospects amongst other strategies:

> *"I have a willingness to perform tasks that others detest and an urge to learn and seek mentorship from others. I put on extra hours just to make sure that I made an impression and eventually it paid off."* ***(Civil Engineer 2)***

> *"My mentor has inspired me to work hard, develop determination and to register with a professional body which is important since I am working within the public sector" (****Project Manager 2)***

> *"I can do work like any other man"* ***(Civil Engineer 3)***

> *"Having a mentor stimulated a desire and determination to pursue further studies, as I realised that I would face challenges in my career growth if did not advance myself" (****Architect)***

> *"Mentorship helped me to make career decisions such as moving to smaller company. I sacrificed salary to get an opportunity to break through glass ceilings."* ***(Business Development Manager)***

The import from these responses suggest that despite their gender, mentors have inspired black women in the built environment to advance their careers in the industry through motivating and inspiring them to exploit their full potential. Nevertheless, some interviewees who perceive the built environment as an unattractive career option due to poor *"macho"* industry image and low technological sophistication levels thereby echoing the research of English and Le Jeune (2012).

A study by Lu (2006) outlined that a mentor acts as a facilitator who encourages the development the mentee skills through instructing, coaching, modelling and advising Navarro-Astor *et al.*,(2017) concur that mentoring is an effective tool for coaching and achieving growth and success for women in the built environment.

Mentoring is essential to the upliftment of black women in their careers in the South Africa Built Environment that is predominantly male dominated. It appears that the presence of mentors for aspiring black women in the South African Built Environment is assisting in uplifting black women into executive leadership positions within the built environment.

4.2.4. Promotion Prospects

Promotion determines the elevation of women and their ability to break through glass ceilings.

*"It took me eight years to get promoted" (**Civil Engineer 1)***

*"It took about three and a half years to break through the glass ceiling and earn a promotion." (**Civil Engineer 2)***

*"It took six months to earn a promotion." (**Property Manager 1)***

There are instances where it took more than seven and a half years and as little as six months to get a promotion. Analysis of promotion prospects for black women who took part in the interviews shows that their promotion prospects are boosted if they are employed in a small organisation such as in consulting firm. These findings are corroborated by Navarro-Astor *et al.*, (2017) who established that there are limited promotion prospects for black women in parastatal or a public-sector organisations.

In public sector organisation, females in the South African Built Environment face stiff competition from their male counterparts as such they do not become the first preference when a career promotional opportunity is available. Current research findings corroborate what English and Le Jeune (2012) found with respect to the male domination of the South Africa Built Environment. The failure to promote women in the built environment despite the fact that they hold requisite qualifications corroborates research findings by Madikizela (2008) who established that there is a prevalent social perception that males are more productive and capable than females especially when it comes to the built environment.

4.2.5. Work-life Balance

The majority of interviewees in this study were single ladies, with only two interviewees indicating that they had children. Interviewees were asked how they balance their work-family life. Those with family responsibilities responded as follows:

"Hectic especially with studying its stressful"
(Quantity Surveyor 2)

"I stick to a strict 8 – 5 work schedule" ***(Civil Engineer 2)***

Interviewees with no family responsibilities were asked whether their work-family life balance would be different if they had family responsibilities, below are their responses:

"I [would] need more time with the family I have to reconsider to reschedule my time to produce same quality of work."
(Civil Engineer 1)

"I think it would but work but I would have to do things differently"
(Project Manager 1)

"It depends on the job, the job I'm at is stressful but if I had another job it would be easier to manage."
(Quantity Surveyor 1)

"Yes, I would prioritise differently and adjust my timetable to that."
(Architect)

"A lot of time is flexible." ***(Project Manager 2)***

"It would be hectic for me because I am being micro managed, my black employers do not have the technical knowhow of the built environment." ***(Quantity Surveyor 2)***

There appear to be mixed feelings with respect to maintaining a work-life balance upon acquiring family responsibilities. Some black women below glass ceilings indicated that they expect no differences in their work schedules. This might be due to the fact that the majority of interviewees did not have family responsibilities hence they did not perceive to face challenges in maintaining a work-life balance. They did not consider career breaks because they were enthusiastic as they were just starting on their careers in the South African Built Environment. Others black women above glass ceilings indicated that they understood that they will have to adjust their work-life balance when they have family responsibilities. This might be attributed to the hostile working environment and site conditions that sometimes demand brute strength leading to a work-life conflict on the part of black women in the built environment. Project based work ethic of the built environment that emphasise on completing a project in the best minimal time exacerbate the work-life conflict that black women in the built environment face.

These views are in line with the thinking of English and Le Jeune (2012) on the industry's intolerance to career breaks that affect women when they have family responsibilities such as child bearing. These career breaks affect the work-life balance for black women with family responsibilities in the built environment. This phenomenon can be closely linked with barriers of remuneration discrimination during the period of intense family responsibilities. As a result, women who are exposed to unequal employment situations end up leaving the industry (Navarro-Astor, Román-Onsalo and Infante-Perea, 2017).

4.3 Barriers faced by Black Women in the Built Environment

Black women in the South African Built Environment identified sexual harassment as the main barrier they face. These sentiments were expressed by black women both below and above glass ceilings. Below are their perceptions on the sexual harassment that they experience in the built environment:

> *"The sexual harassment I have had is getting to site as the only female black person and white male team members speak in Afrikaans."* ***(Project Manager 1)***

> *"I worked in a project team made up of 10 people and I was the only woman. The manager called everyone by their name but called me "sweetheart", "skattebol", "darling". After I got promoted based on merit, rumours started spreading that I was having an affair with him. This was not the case, since I looked up to him like a father."* ***(Project Manager 2)***

> *"When I wear a skirt, my manager would say things like "why have you been hiding those legs" and make unwelcome comments and calling me "Beyoncé" whenever I have a new hairstyle."* ***(Quantity Surveyor 2)***

> *"Women are seen as an addition to numbers required to meet BBBEE targets before anyone cares about skill or experience or what the black woman has to offer in the built environment."* ***(Civil Engineer 2)***

The most prevalent forms of sexual harassment experienced by interview respondents include not being treated as a competent and equal partner in a project but being reduced to a sexual object on the basis of comments passed by management and workmates. Comments such as *sweetheart, skattebol* and *darling* degrade a women's value which corroborates findings made by (English and Le Jeune (2012) that inappropriate language is used.

In addition, sexual harassment makes it difficult for women to progress in their careers as they often perceived as *"ornamental objects"* who are promoted at the pleasure of the boss and not on merit.

The interviewees who represented black women below glass ceilings expressed the view that they have not personally experienced sexual harassment outright. Nevertheless, they indicated that the practice was rife in the built environment by describing the unprofessional behaviour they received from some male consultants who engage in hugging at meetings and use inappropriate endearments like *"sweetie."* These research findings are in line with the research of Haupt and Fester (2012) where it was established that women suffer from unacceptable and unprofessional behaviour from male colleagues.

In one of the interviews, a foreign national black female said that in addition to the sexual harassment challenges experienced by black women in the built environment, she had to deal with further discrimination from fellow black females. From her perspective, local black women in the built environment feel threatened by experienced foreign black women. They perceive foreign black women are taking jobs that South African women would occupy. On the other hand, foreign back women in the South African Built Environment might perceive it to be discrimination; but in essence, they do not qualify for the Employment Equity since they are not South African citizens.

Research findings suggest that glass ceilings are prevalent in the South African Built Environment. Such limitations and bad workplace experiences have driven other black women to quit employment and venture into entrepreneurship by offering their own built environment consultancy services. Insights from a female architect who took part in the interview, showed that opening their own built environment consultancy was not adequate to deal with sexual harassment:

> *"Whenever I meet a fellow consultant or client (blacks) they behave and make it clear my professional fee is high and express that we can "talk about this differently." The other client claimed to have influence at Power FM, so I was not supposed to charge him as he offered to take me places, he constantly commented on my looks."* ***(Architect)***

Research findings show that sexual harassment is prevalent in the South African Built Environment. Sexual harassment occurs at different levels within different hierarchies, predominately male hegemonies.

Black women usually face it from their bosses or colleagues. In the case of entrepreneurial black woman, they face sexual harassment from their clients, as experienced by the black female the architect offering her consultancy services.

Many women hesitate to speak out against sexual harassment for fear of victimisation and jeopardising their career prospects. Current research findings corroborate finding made by English and Le Jeune (2012) were sexual harassment was found to degrade a woman's value and demoralise women executives. The research by Navarro-Astor, *et al.,* (2017) highlighted that sexual harassment is an obstacle that hinder the career progress of black women in the built environment.

Black women in the built environment have to learn to establish rules of engagement and boundaries with their male counterparts if they are to deal with sexual harassment. This imply that black women in the built environment be assertive in outlining their tolerance thresholds with regards to nature of interaction and comments made.

4.4 Coping Mechanisms used by Black Women in the Built Environment

The section covers aspirations, respect and recognition as the coping mechanisms.

4.4.1. Career Aspirations and Fulfilment

The interviewees seem to demonstrate that ambition is growing within the built environment. These ambitions are not only expressed at a personal level but are reflected by the need to self-actualise and be seen to have made a positive contribution to the society and the built environment at large. Below are some of the sentiments expressed by interviewees:

"I am passionate and delighted to bring sustainable water to communities" ***(Civil Engineer 1)***

"To grow to executive level in the property development industry" ***(Project Manager 1)***

"To grow within the built environment especially construction industry" ***(Civil Engineer 3)***

"…to become a regional port planning and development manager" ***(Civil Engineer 4)***

"Staying with the same organisation to executive level" ***(Quantity Surveyor 1)***

As a follow up question, respondents were asked whether they perceived that they have fulfilled their career aspirations within the built environment. All interviewees except one expressed that they are yet to fulfil their career aspirations. Due to personal female attributes, there appeared to be a lack of confidence in the abilities of some black female. The lack of confidence in women capabilities in the built environment might due to the male dominant structure of the built environment as corroborated by a study by English and Le Jeune (2012). On the other hand, an electrical engineer with six and a half years' experience in the built environment expressed satisfaction with her level in the organisation, though she is not affiliated to any professional body and does not attend strategic networking events.

Research data suggest that interviewees have prospects to grow within the built environment, what is probably holding them back are personal female attributes that dampen self-esteem and lower confidence in a male dominated built environment. The research by French and Strachan (2015) established that the availability of equal employment opportunities in the built environment have increase women participation in the industry.

4.4.2. Respect and Recognition for Contributions made

Interviewees were asked to rate the level of respect they perceived received from their peers and employers for their knowledge and contribution to a project/experience on a rating scale of 1 to 10. One being the least recognition received and 10 being the uppermost recognition received. The study established that the lowest rating scale was 3 and the highest rating scale was a 10. The majority of interviewees perceived their rating scales to be between a range of 5 and 7. Research data and the main reasons given are illustrated in Table 4.3.

Table 4.4: Level of recognition received

	Rating Scale	Frequency	%	Main Reasons given
Low	1	0	0%	
	2	0	0%	
	3	1	6%	
	4	1	6%	*"People assume that I'm a technician"* ***(Civil Engineer 1)***
	5	2	12%	
Perceived level of respect and recognition	6	4	24%	*"I had to prove myself as a capable team player"* ***(Civil Engineer 2)***
	7	4	29%	*"The is need to go an extra mile and convince someone that you are doing the right thing."* ***(Civil Engineer 3)***
	8	1	6%	
	9	1	6%	
High	10	2	12%	
	Total	16	100%	

Whilst other interviewees chose not to provide reasons for their rating scales, those who managed to justify their ratings outlined that in some instances they are looked down at. Hence, they have to go an extra mile to prove their mettle within the built environment.

The realisation that the majority of interviewees to this study had their ratings between 5 – 7 imply that they perceive a moderate level of respect and recognition from their peers and employers for their efforts in the South African Built Environment. The study also show that they are those who perceive a high level of respect and recognition from their leaders and workmates. These interviewees gave themselves a 10 in their rating scale because they have reached a certain level of job fulfilment in the course of their careers. The study by Kiaye and Singh (2013) identified lack of respect and recognition of efforts made by women as situational barriers that contribute to glass ceilings.

4.5 Conclusions

Broader issues emerging from the study highlight that for black women in the South African Built Environment to be able to breakthrough glass ceilings effective enforcement of the BBBEE legislation is essential. Apart from macro issues, black women in the South African Built Environment have to recognise the essence of strategic networking to share experiences and find role models to motivate them to achieve their full potential. The presence of mentors emerged as an important issue to coach black women on aspects that help them break through glass ceilings. Achieving a work-life balance is important especially for black women with family responsibilities since women who are exposed to unequal employment situations end up leaving the built environment.

Mechanisms to cope emerging from the study show that interviewees demonstrate growing ambitions within the built environment through their positive career aspirations. The level of respect and recognition that interviewees received from their peers and employers act as motivators to help them cope with the demands of built environment. The succeeding chapter focuses on summary, conclusion, recommendation and areas of further studies.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

The preceding four chapters were based on the research objectives formulated in the first chapter. These formed the basis for outlining research gaps in chapter two and the development of research methodology in the third chapter. Chapter four focused on the presentation, analysis and discussion of data. This chapter focuses on the conclusions and recommendations reached in the study.

5.1 Summary

The purpose of the research was to outline the barriers faced by aspiring professional black women in the South African Built Environment. The study was inspired by the hurdles that hinder aspiring professional black women in the South African Built Environment as they try to go up the career ladder to executive leadership. The first research objective was to determine generic barriers to career advancement that exist in a professional workplace, which are specific to black women in the South African Built Environment. The research established that black women face the same barriers as other women but suffer from lack of mentorship and role models more so than other women in the South African Built Environment. The second research objective was to establish mechanisms used in the built environment profession by women above the glass ceiling that aspiring young black females below the glass ceilings in the South African Built Environment should be aware of in order to break through the glass ceiling. The research established that women above glass ceilings, made use of legislation, strategic networking, mentorship and work-life balance to break through glass ceilings. The third research objective was to investigate the awareness among black women in the built environment of the impact of the glass ceiling on their career advancement. The research established that black women in the built environment are experiencing glass ceilings since they take long to be promoted into executive positions even if they have a wealth of experience in the built environment. On the other hand, men in the built environment take less number of years to be promoted into executive positions.

The fourth research objective was to investigate the coping mechanisms used by black female managers in the South African Built Environment to break through glass ceilings. Career aspiration and recognition for effort made are coping mechanisms used by women in the South African Built Environment. The research further established that black women in the South African Built Environment are yet to fulfil their career aspirations and that black women in the South African Built Environment perceived a moderate level of respect and recognition from their peers and employers for their efforts. Recognition is used by black women below glass ceilings as a coping mechanism in their quest to break through glass ceilings in the South African Built Environment. Literature review touched on various aspects that pertain to the notion the glass ceilings. Issues such as the factors that contribute to the glass ceiling as well as mechanism that can be used to overcome the glass ceilings were critically reviewed. The main research findings established that the majority of interviewees were able to comprehend the essence to the BBBEE legislations as it pertains to them. The majority of interviewees underestimated the appeal of networking in improving career prospects of black women in the South African Built Environment. None of the interviewees expressed that they have black women as their mentor. There appeared to be mixed feelings with respect to maintaining a work-life balance upon getting married with some expressing that they expect no differences in their work schedules whilst others highlight that they will have to adjust.

5.2 Conclusions

The following conclusions are made:

5.2.1. Generic barriers to career advancement in the South African Built Environment.

Black women experience the same barriers as other women but suffer from lack of mentorship and role models in the South African Built Environment. All interviewees expressed that they did not have a black female mentor, only a few expressed that they had white female mentors whilst the majority expressed that they have a male mentor. With respect to mentorship, interviewees revealed they had specific ideas about what constituted as leadership and how to achieve career advancements. The interviewees indicated that a meeting of minds had limited chances of success when different genders are involved in a mentor/mentee relationship. Therefore, it can be said that having a male mentor, may not be adequate to propel black women for career

advancement in the South African Built Environment since they might be facing different challenges.

Other barriers that emerged from interviews are related to their failure to strategically network. Most interviewees were of the opinion that strategic networking events are only done in Johannesburg, even though there are some that are done in Cape town. The reluctance to seek alternative strategic networking events acts as a barrier to career advancement on the part of women in the South African Built Environment. Women have the opportunity but they do not use it. Sexual harassment was also singled out as a barrier to black women career advancement in the South African Built Environment. Sexual harassment is evident when black women are not being treated as a competent and equal partner in a project but being reduced to a sexual object on the basis of comments passed by management and workmates.

5.3 Mechanisms to break through the glass ceiling.

From the perspective of women above glass ceilings, essential mechanisms to break through glass ceilings include the use of legislation, networking, mentorship and work-life balance.

5.3.1. Legislation

With respect to legislation, the realisation that the majority of interviewees were able to comprehend the essence to the BBBEE legislations as it pertains to them imply that they can effectively exploit provisions of the BBBEE legislation to propel themselves towards career advancement in the South African Built Environment. However, allegations of fraudulent abused of BBBEE by employers reduces the conceptual appeal of the BBBEE legislation as a potential mechanism to enhance the career advancement of black women in the South African Built Environment. Though the BBBE legislation is potentially powerful but it does not guarantee success to black women since it needs someone with self-worth and willingness to learn.

5.3.2. Strategic Networking

The majority of interviewees did not perceive strategic networking as being of significance towards improving their career prospects in the South African Built Environment. There is an unwillingness on the part of those who have managed to break through the glass ceilings to strategically network and help other black women

follow their path to success. In addition, employers do not regard strategic networking events as part of training hence they do not meet the cost of strategic networking events.

5.3.3. Mentoring and Promotion Prospects

None of the interviewees had a black woman as their mentor. The majority of those interviewees who received mentorship, expressed that they received it from either back or white males. This is most likely to perpetuate sexual segregation. In terms of promotion, it took an average of three and a half years for black women within the built environment to break through the glass ceiling and earn a promotion. Promotion prospects for black women are boosted if they are part of a small organisation such as those involved in consulting and they are fewer if it is a parastatal or a public-sector organisation. In public sector organisation, females in the South African Built Environment face stiff competition from their male counterparts as such they do not become the first preference when a career promotional opportunity is available. The failure to promote women in the built environment despite the fact that they hold requisite qualifications in their specific trade areas can be linked to prevalent social perception that males are more productive and capable than females especially when it comes to the built environment.

5.4 Coping mechanisms used by black women in the Built Environment

Career aspiration and fulfilment as well as respect were used as the main coping mechanism in this study as outlined below.

5.4.1. Career Aspirations and Fulfilment

Black women in the built environment show ambition in growing within the construction industry. These ambitions are not expressed at a personal level but are also reflected by the need to self-actualise and be seen to have made a positive contribution to the society and the built environment at large.

5.4.2. Respect and recognition for Contributions made

The majority of interviewees who make up a cumulative 65% of the respondents appear to be stuck in the middle (with a rating scale range between 5 to 7) in terms of

their ratings. This is because black women have to go an extra mile to prove their worth within the built environment.

5.5 Recommendations

In light of the above conclusions the following recommendations are made.

- Seeking a mentor who have similar characteristics and life experiences can help black women in the South African Built Environment to advance in their careers and break the glass ceilings.
- The BBBEE need to be effectively monitored and evaluated to weed out fraudulent abuse that violates the rights of black women especially in the South African Built Environment.
- Attendance at strategic networking events are critical if women are to learn from others who have managed to navigate through the glass ceilings in their professions. It is essential for those who organise strategic networking events to target black women in the built environment since most of them appear not to be aware of the existence and importance of these network events.
- For black women to effectively break the glass ceilings in the South African Built Environment, they have to pass the criteria for high potential designation and executive positions. This criterion includes issues such as the development of a strategic fit between the aspiring black women and the strategic and financial goals of the organisation. These skills go beyond, getting a mentor, self-promotion, negotiation and communication skills, confidence and assertiveness, developing a strong personal brand.
- Black women must be in a position to clearly translate their contribution towards the strategic and financial objectives of the firm. This would help black women to break through the glass ceilings and enter into executive leadership in the South Africa built environment. This transition implies that women in the South African Built Environment must develop a financial acumen, strategic focus and financial literacy skills.

6.0 Suggestions for further Studies

The research uncovered that though the BBBEE is a noble idea to uplift the career prospects of women in the South African Built Environment, the provisions of the legislation are being violated due to poor monitoring and evaluation of the efficacy the BBBEE. Further research should be conducted to investigate the impact of the enforcement of the BBBEE legislation and its ability to assist black women to effectively break through the glass ceilings.

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