THE EXPERIENCES OF WOMEN IN MALE-DOMINATED PROFESSIONS AND ENVIRONMENTS IN SOUTH AFRICA

by

PHIONA GAMBIZA MARTIN

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SUPERVISOR: PROF. H.A. BARNARD

DECLARATION

I, Phiona Gambiza Martin, student number 47136839, declare that

"The experiences of women in male-dominated professions and environments in South Africa"

is my own work, and that all the sources that I have used or have quoted from have been indicated and are acknowledged by means of a complete reference list.

Signature……………………………………………… Date…………………………………..

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SUMMARY

Women working in male-dominated professions and environments face experiences that are unique to their counterparts in more gender-balanced and female-dominated professions. The nature of these experiences affects women's integration and potential success in male-dominated professions. To enhance employment equity in historically male-dominated professions and environments, an understanding of women's experiences in such environments is beneficial.

The purpose of this research was to explore the challenges and coping strategies of women working within male-dominated professions and environments. This was an exploratory qualitative study conducted within the interpretive research paradigm. A purposive sample consisting of five women working in identified male-dominated professions and environments was utilised. In-depth interviews were conducted and data was analysed using grounded theory. The main findings indicate that the central theme pertinent to women working in male-dominated professions and environments pertains to the types of challenges inherent in their work settings. The main challenges found were as follows: discrimination and bias; physical and health-related difficulties experienced; negative emotions resulting from working in male-dominated environments; lack of real transformation; and work/life balance. This study provides current insight into the plight of women working in male-dominated professions and environments in South Africa.

Key words: qualitative research, grounded theory, male-dominated, women, work

CHAPTER 1

SCIENTIFIC ORIENTATION TO THE RESEARCH

1.1   INTRODUCTION

The experiences of women within the work context differ distinctly from those of their male counterparts. The history of women and work has predominantly been recorded through the eyes of men (Finnemore & Cunningham, 1995), and being female, I felt strongly inclined to explore the experiences of women working in male-dominated professions and environments. This study was exploratory in nature in order for emerging themes experienced by the female participants to come to the fore. As such, it was not a positivistic approach, which investigates preconceived themes and concepts.

This chapter focuses on the scientific orientation to the research, illustrating that the research was worth doing, that the researcher was competent to conduct the study and that the study was carefully planned and successfully executed (Marshall & Rossman, 2006). First, the background and motivation for the research is presented, followed by an outline of the problem statement, research aims, paradigm perspective and research design. The chapter then concludes with the chapter layout and chapter summary.

1.2   BACKGROUND TO AND MOTIVATION FOR RESEARCH

This research topic was motivated by my personal experiences and perceptions as a woman working in the mining environment, a historically and still highly male-dominated industry. I felt the contribution of women was undervalued and not highly regarded by our more populous male colleagues. I experienced the environment as sexist, gender-oppressive, coupled with a patriarchal culture and "boys club" mentality. The organisational structures and decision making were militaristic and difficult for me as a woman to function under and fit into. This made me question how other women working in various historically male-dominated environments and professions experienced their work. Were there similarities or differences between women who found themselves working in such positions? What strategies were employed by them in order to have tenure and succeed in these environments? As a woman, I personally felt deterred from pursuing a career in such a male-dominated environment as I perceived it to be highly stressful and difficult, if not impossible, for women to be appreciated and valued in relation to their male counterparts.

Historically, male-dominated environments in South Africa such as heavy manufacturing and production were built upon and embedded in intense racial and class struggles (Webster, 1978). These environments only provided room for a male workforce, mostly due to the immigrant nature of the labour. White and black fractions of the working class were irreconcilably divided to the point where the economic and social position of the former rested on the political and economic oppression of the latter (Webster, 1978). In such heavy manufacturing and production industries, which historically made no provision for women and even in present day remain highly patriarchal in nature, it comes as no surprise that the role of women is still mostly confined to clerical and support roles.

The Department of Minerals and Energy Database of Mining Operations (2004) reported that of the total number of women employed in the mining sector, the highest percentage (32%) were employed in clerical roles. Often, women working in male-dominated organisations and positions are less inclined to see themselves as leaders or to seek leadership positions (Jackson, 2001) which is often where the lowest concentration of women are placed. The Database of Mining Operations (2004) illustrated that only 3% of women in the mining sector were employed as senior officials, managers and owner managers. In general, women still have to contend with the problem of being able to manage themselves and fulfil both their age old stereotypical obligations as homemakers and their obligations as paid workers (Franks, Schurink & Fourie, 2006).

Prior to examining male-dominated professions and environments, it is worthwhile to look at the macro-economic picture, as policies, legislation and structures at this level often cascade down, directly effecting individual organisations. There is a neglect of gender analysis and an inability to take into account the impact on women in the drafting of economic policies (Taylor, 1997). This is not surprising as males dominate the process of national planning in business, government and labour sectors (Taylor, 1997). Coupled with this are the traditional sex stereotypes that women's primary social roles are wife and mother whereas men play the primary role of breadwinner (Franks et al., 2006). In essence, the macro-economic policies reinforce unequal power relations pushing women to the periphery of the work sector (Taylor, 1997). Although this is changing and some women are becoming increasingly significant in male-dominated spheres, I feel the rate at which this is happening is disconcertingly slow and nowhere near the level where sex inequalities and discrimination are alleviated to satisfactory levels.

A study of women working in male-dominated professions and environments is of great scientific value for reasons that will henceforth be discussed. Historically, studies of women

in employment have focused on investigating preconceived concepts and themes predominantly in professions and environments where women are conventionally employed, namely in domestic work and education systems (Kretzschmar, 1995). Previous research has highlighted particular themes such as: legal and legislative policies that directly affect women (Walker, 1990; Bazilli, 1991); work-home interaction of working females (Van Aarde & Mostert, 2008); stress in high level career women (Van Den Berg & Van Zyl, 2008); gender perspectives on career preferences (Urban, 2010); and women and affirmative action (Mathur-Helm, 2005). Relatively few studies published in South African journals have taken a purely qualitative approach to experiences of women employed in male-dominated professions and environments with the goal of determining emerging trends and themes.

In South Africa, women's participation in the work force has risen and in total, women's percentage share in employment increased from 39.1% to 43.3% between 1995-2002 (Oosthuizen & Bhorat, 2004). By the first quarter in 2011, labour force participation rate for women was reportedly at 47.6%, increasing by 0.9% to 48.5% in the first quarter of 2012 (statssa.gov.za). Where female employment has grown, it has mostly been in self-employment and in the informal sector (Casale & Posel, 2002). This illustrates that females are still a minority within the formal sector, a minority status that is exacerbated in male-dominated professions. However, heavy investment in women's education, changes in labour legislation, and the sharing of family responsibilities with men have established the preconditions for women to equally participate in labour markets (International Labour Office, 2009). This equal participation in the labour market has given women unprecedented options to pursue previously male-dominated professions. With the increasing availability of such options for women, questions arise as to what has been done to prepare women (beyond merely being encouraged to enter such environments) for successful integration into male-dominated professions and if such environments are at all suitable for these women in their current state?

It was of value, from an Industrial and Organisational Psychology perspective, to explore the implications of employing women in male-dominated professions and environments. A study conducted by Benjamin and Louw-Potgieter (2008) found that Industrial Psychologists spend 34% of their time in the workplace carrying out interventions and consulting activities, a clear move towards a strategic direction for the field. In light of this, exploring the experiences of women working in male-dominated professions and environments may enable informed recommendations based on solid research to be outlined. These recommendations may support Industrial and Organisational Psychologists and their respective organisations to assist women with better integration within male-dominated professions, thereby increasing

their chances of retention and success. Comprehensive preparation and intervention for females entering such environments should be given more focus and not be left to chance.

1.3   PROBLEM STATEMENT

The difficulty with women successfully penetrating historically male-dominated environments emanates from historically prevalent sex hierarchies in family and social units. The emergence of capitalism in the fifteenth to eighteenth century threatened patriarchal control as it broke down many old institutions; yet the household unit has been traditionally structured in a manner that makes males the dominant sex (Hartmann, 2010). Hartmann (2010) argues that male workers play an important role in maintaining sexual divisions in the labour process. As women earn relatively lower wages than men, their dependency on men is reinforced and women are therefore encouraged to marry. Domestic division of labour also weakens women's position in the labour market (Hartmann, 2010), thus making it difficult for women to enter historically male-dominated professions, specifically those which require long hours and extensive travel. Moreover, the requirements necessary to be successful in such environments are likely to be in conflict with women's expected lifestyle requirements as primary caregivers in the family unit.

With the advent of aggressive employment equity policies in South Africa, as well as the introduction of initiatives such as the Mining Charter in 2002 (www.dme.gov.za), more women have been entering historically male-dominated work environments. The Mining Charter prescribes 10% female participation in the mining industry within five years of its inception, and this has encouraged the penetration of women into the mining industry. Yet women working within historically male-dominated professions and environments still face challenges of full acceptance and integration from a cultural, structural, and even macro-economic level. Kahn (2009) examined the representation of women at senior management levels in the South African National Defence Force (SANDF) and found continuous under-representation of women at these levels. Furthermore, the SANDF had not complied with the government's equity targets for 1999 and 2005 (Kahn, 2009). Other studies have also found women to be under-represented in the following male-dominated professions and environments: accounting managers (Hinson, Otieku & Amidu, 2006); information technology (Michie & Nelson, 2006); computer gaming (Prescott & Bogg, 2011); quantity surveying (Madikizela & Haupt, 2009) architecture (Caven, 2004); and pilots (Davey & Davidson, 2000).

From the above it is evident that discrimination against women in the workplace is still rife and women face the challenge of adjusting their behaviour to fit within a "boys club" environment where expressing feelings is labelled as "arguing just like a woman" and yet assuming characteristics suitable to the male environment labels them as strident and unfeminine (Kretzschmar, 1995). Women also report the perception that adopting a "feminine" managerial style opens them to the risk of being perceived as ineffective, and alternatively, adopting a "masculine" style results in criticism for not being feminine enough (Ragins, Townsend & Mattis, 1998). If women experience discriminatory perceptions in the general work environment, I expect their experiences would be even more pronounced in male dominated professions and environments. From the underrepresentation of women in historically male dominated professions, it furthermore seems clear that the level of accommodation and ease of penetration for women in historically male environments is still not alluring enough to solicit the entry of women in substantial volumes.

From the discussion of factors affecting women in employment, the research question underlying this study is "What are the experiences of women in male-dominated professions and environments in South Africa"?

1.4   AIMS

The general aim of this research is to explore the experiences of being a woman in male-dominated professions and environments in South Africa.

The specific literature aims are:

- To analyse studies and literature specific to women in historically male-dominated occupations, in South Africa as well as other countries, in order to identify dominant patterns, similarities and differences.

The specific empirical aims are:

- To explore prevalent issues experienced by women in male-dominated professions and environments.
- To formulate recommendations for organisations as well as the field of Industrial and Organisation Psychology in terms of the successful integration of women in male-dominated professions and environments.

1.5   THE PARADIGM PERSPECTIVE

The study was executed within the interpretive research paradigm. This paradigm is concerned with contextual research, which is less geared at discovering universal and law-like patterns of human behaviour and more concerned with making sense of human experience from within the context and perspective of human experience (Terre Blanche & Durrheim, 1999). The major assumptions of interpretivism are that knowledge and meaning are acts of interpretation and there is no objective knowledge which is independent of thinking, reasoning human beings (Gephart, 1999). Furthermore the key focus is to search for patterns of meanings. The nature of knowledge is abstract descriptions of meanings and the research participants' definitions of situations produced in natural contexts (Gephart, 1999). A good research project using this paradigm will both develop an understanding of subjective experience as well as provide an interpretation thereof (Terre Blanche & Durrheim, 1999).

Paradigms of sciences are defined by the underlying ontological and epistemological assumptions on which they are based. There are different versions of the nature and essence of social things and the researcher needs to recognise that alternative ontological perspectives exist and the researcher's own ontological view of the social world is a position that should be established and understood (Mason, 1996). Baptiste (2001) states that ontology deals with the question of what is real. It is concerned with the natural world and how it came to be, rather than an analysis of what it is (Nel, 2007). The ontological approach selected will shape the kind of information captured, recorded, interpreted and conveyed. The ontological dimension of this study, in line with the interpretive paradigm, assumes that people's subjective experiences are real and should be taken seriously. As such, there is an internal reality of subjective experiences (Terre Blanche & Kelly, 1999).

Epistemology deals with the nature, sources and processes of knowledge and knowing (Baptiste, 2001). It is the study of what knowledge is and how it is possible and it focuses on how we can obtain knowledge and how we can reason (Nel, 2007). What is regarded as knowledge or evidence of things in the social world are epistemological questions (Mason, 1996). Epistemology is literally the theory of knowledge and therefore concerns the principles and rules by which the researcher decides how social phenomenon can be known and how knowledge can be demonstrated (Mason, 1996). The epistemological dimension underlying interpretivism assumes that others' experiences can be understood by interacting with them and listening to what they say. As such, there is a subjective relationship between the researcher and the subject (Terre Blanche & Kelly, 1999).

In interpretive research there are four generic interpretive processes: playing the tension between insider and outside accounts, balancing context and theory, integrating the parts of the text into a coherent whole, and the cognitive process of immersion, unpacking and associating (Terre Blanche & Durrheim, 1999). These interpretive processes are appropriate for this study because, unlike positivism, there is no attempt to test any hypothesis, but rather to generate new ways of understanding. Interpretivists challenge positivistic concerns to uncover truths and facts using experimental and survey methods by asserting that these methods impose a view of the world on participants rather than capturing, describing and understanding these world views (Gephart, 1999). In the South African context, this research topic has not been explored extensively from a purely qualitative perspective. Therefore, qualitative methods seemed highly appropriate to investigate the prominent themes and trends relating to women working in male-dominated environments and professions.

Congruent to the interpretive paradigm, the core methodologies that were used in this study included interviews as the main source of data collection and grounded theory data analysis techniques (Strauss & Corbin, 1990).

1.6   RESEARCH DESIGN

This section will cover technical aspects of the research, namely the research approach, strategy and methods.

1.6.1   Research Approach

In line with my research paradigm, this study is qualitative in nature and the research approach is interpretive grounded theory. The purpose of qualitative methods is to discover important questions, processes and relationships, not test them (Aluko, 2006; Marshall & Rossman, 2006). The informants are encouraged to introduce concepts of importance rather than adhering to subject areas that have been determined by the researcher (Aluko, 2006; Marshall & Rossman, 2006). Human nature and behaviour is far too complex to be explored by the limiting concepts and assumptions utilised by positivism (Esterberg, 2002). Furthermore, what is "empirical" in human behaviour is not merely an action but that action is embedded in meaning, context, beliefs, feelings and attitudes (Esterberg, 2002).

Grounded theory has the ability to enable qualitative data collection, analysis and theory to stand in reciprocal relationship with each other (Strauss & Corbin, 1990). The researcher simultaneously analyses data upon collection and theories or hypothesis that emerge are developed and explored further. Grounded theory is therefore consistent to the iterative nature of a qualitative type of study (Terre Blanche & Durrheim, 1999) allowing for flexibility within the research and the ability to change the focus of study based on the themes that emerge. The questions that arise are dealt with in a developmental manner, engaging with relevant literature to help refine and develop the various concepts (Terre Blanche & Durrheim, 1999). Essentially, real research is often confusing, messy and non-linear (Marshall & Rossman, 2006).

1.6.2   Research Strategy

A case study strategy complemented the research aims as it focused on studying the specified phenomenon without controlling variables, but rather through observing all variables and their interacting relationships (Dooley, 2002). The focus was on several case studies, and these were understood in context through the subjective experiences and perceptions of the research participants. This type of strategy emphasises detailed contextual analysis of a limited number of events or conditions and their relationships (Dooley, 2002). The circumstances around the study were subjective and specific to the research participants. The events and conditions studied were within the parameters of the participants' experiences, perceptions and conditions within the male-dominated professions and environments in which they were employed. Experiences were elicited from the participants through in-depth interviews. Due to the inductive nature of qualitative research, in this study the dominant concepts and themes were discovered as the research progressed, thereby facilitating the process of theory building (Dooley, 2002).

The qualitative approach to research demands flexibility within the overall research design and the research questions are best addressed in a developmental manner (Marshall & Rossman, 2006). As the aim of this study was not to test a specific hypothesis, but rather to explore the occurrences that are pertinent and prevalent to women working in male-dominated professions and environments, a hypothesis may be developed as a result of the research, rather than the research being guided by a hypothesis (*cf*. Mouton & Marais, 1988). A grounded theory should explain as well as describe and it may also implicitly give some degree of predictability, but only with regard to specific conditions (Corbin & Strauss, 1990).

1.6.3   Research Methods

This section will cover the main methods that were utilised for data collection and analysis.

1.6.3.1 Research Setting

This study focused on several female research participants who were working within a profession or environment that has been historically reserved for and is currently dominated by males. My aim was not to target one specific industry, but rather to get research participants from various professions and from within various industries, as long as they were male-dominated. The women participating in this study represented three organisations in the private sector and one in the public sector. In assessing the suitability of a setting, historical and current patterns in terms of the prevalence of female entry and occupation in the respective participants' professions was examined. Prior to the interview, information was gathered from the participants regarding their work settings to confirm whether the settings adhered to the requirement of male-domination. All settings were confirmed and acknowledged, both by the researcher and the research participant, to indeed be male-dominated, predominantly due to the very limited number of women historically and currently occupied therein. All subjects were interviewed at their place of employment upon their request. The interviews were conducted in private areas ranging from boardrooms to private offices.

1.6.3.2 Entrée and establishing researcher roles

I identified two ways of approaching potential research participants. The first means was through the use of a sponsor, someone who is accepted by the subject under study and would assist in gaining initial acceptance (Terre Blanche & Kelly, 1999). The strategy that yielded the most success was to identify male colleagues, family and friends who were in male-dominated professions and requesting an introduction to any females who were working with them in their current professions. Four of my research participants came as a result of this strategy and I believe the already established relationships between the sponsors and potential participants encouraged them to agree to participate. However, use of the sponsors was very limited; I merely required them to provide me with a brief introduction to the potential participants. On my initial contact, via email, I sent the participants a consent form I had drew up outlining all the parameters of the study (see Appendix A). Thereafter the participants signed the consent form as an indication of their

willingness to participate. The fifth participant was gained through a direct email sent to a male-dominated faculty at a university.

Unlike quantitative research where the researcher is an objective observer, the researcher in qualitative research is presumed to learn the most about a situation by participating and/or being immersed into the research (Aluko, 2006). What is important to consider is the role of the researcher as perceived by the research participant. Often the image of the researcher with participants is that of a stranger, an outsider or an intruder (Mouton, 1996; Mouton & Marais, 1988). The role assigned to the researcher by society cannot be ignored and has the ability to influence how the participant responds (Terre Blanche & Kelly, 1999). The perceived power relations between participant and researcher are very important as these perceptions are affected by issues such as race, professional position, power, and sex of the researcher (Mouton, 1996). I believe being a woman was advantageous as the women interviewed could relate to me and felt comfortable opening up with sincerity. I informed the participants that the research was for my study and information given would be handled with the strictest of confidence and would not be communicated to their respective organisations or even to the sponsor.

As a researcher, albeit having a certain level of empathy towards the participant, I needed to maintain and train myself to keep the "researcher cap" on throughout the whole process. This was accomplished by showing a level of interest in the participant, while not being overly inquisitive at all times (Terre Blanche & Kelly, 1999). The research participants' orientations had to be taken into account. These orientations included role selection, whereby the participants, as a result of having being singled out for the research, may define and ask themselves what is expected of them and may be tempted to portray ideal or imaginary attitudes and opinions (Mouton, 1996). Motivation levels of the participants were also very important as the interviews required a substantial amount of time from them. It has been empirically proven that "the more interested the candidate is in the topic, the higher the motivation levels he or she will have towards the research" (Mouton & Marais, 1988, p. 89). All the women seemed delighted to participate in the study as they felt that their voices were often unheard in their respective environments; consequently, they were grateful to be bringing their experiences to the fore.

1.6.3.3 Sampling

Sampling in qualitative research is purposive rather than random, the researcher can select individuals and sites for study as they purposefully inform an understanding of the research problem and central phenomenon being researched (Babbie & Mouton, 2001). In this study, a purposive sample was drawn from a population of females working in identified male-dominated professions and environments. Purposeful sampling is appropriate for use when the researcher needs to select a sample based on her own knowledge of the population, its elements and the nature and purpose of the research aim (Babbie & Mouton, 2001).

Sampling in the interpretive paradigm can also be conducted based on the identification of certain important criteria; this identified criteria assists in the inclusion or exclusion of respondents and in narrowing down the sample to a focused number of potential participants (Babbie & Mouton, 2001). In this study, five participants were targeted, in accordance with the recommendation of Babbie and Mouton (2001, p. 287) that an appropriate sample size for a South African master's level qualitative study is "between five and twenty to twenty five". This recommendation, along with the exploratory nature of the study, influenced the number of participants selected for this study.

The criteria used to select participants was that they had to be women working in male-dominated professions and environments and have been employed in their professions for a minimum of one year. In order to confirm male-dominance within their professions and environments, potential participants were asked questions pertaining to the current and historical entry and occupation of women in their professions within their respective organisations.

1.6.3.4 Data Collection Methods

In interpretive research, it is the researcher who is the primary instrument for both collecting and analysing data (Terre Blanche & Durrheim, 1999). Unstructured qualitative interviews were used as the main method of data collection. In grounded theory, data analysis and collection are interrelated processes, enabling the research process to capture all potentially relevant aspects of the topic as soon as they are perceived (Corbin & Strauss, 1990). It would have been ineffective to use structured methods due to procedural reactivity, which means that the very artificiality of highly structured methods may have led the respondents to

remove themselves from the situations in which they normally act, as suggested by Wilson (1993).

The unstructured nature of interviews does not mean that the researcher will let the interview go without direction or pursue any topic that emerges; the researcher goes in with a general plan of enquiry without steering the conversation by means of pre-set questions (Babbie, 2001). By going through the consent form, the participants had a general idea of what my line of enquiry was. The topics pursued are those that flow from the participants' replies throughout the interviews and the researcher must be skilled enough to subtly direct the course of the conversation without biasing the answers or steering the direction too strongly (Babbie, 2001). Having extensive experience in conducting interviews with candidates in the work place gave me an advantage, as I am both skilled and comfortable in this area. I began the interviews by introducing myself and trying to make the participants feel comfortable. Thereafter, I opened up each discussion by asking each participant to tell me about herself and her experiences in the context of work. This then led to participants sharing openly about various experiences. I would then probe on certain topics where I wanted more information, and reiterate and paraphrase sentences on which I wanted clarity. In general, the participants did the bulk of the talking and I would occasionally interject to investigate further. Interview lengths varied between forty-five minutes to two hours.

1.6.3.5 Recording of Data

Each interview was recorded in two ways, through a voice recorder as well as through notes taken manually during the interviews. Both methods were used concurrently in order to enhance the data recording process. The voice recorder enabled the interview to be recorded without the distraction of the researcher trying to capture in writing every spoken word (Terre Blanche & Kelly, 1999). Permission to record was requested from all participants and most of them, after the first few minutes, became de-sensitised to the recorder's presence. The manual note taking was used to record analytical notes, thoughts, emotions and other behaviours displayed by the participants that could not be captured by the voice recorder.

All the material recorded from the interviews was then transcribed verbatim to facilitate the process of data analysis.

1.6.3.6 Data Analysis

Grounded theory data analysis was used in this study, specifically coding procedures from grounded theory which are by definition the operations by which data are broken down, conceptualised and put back together in new ways (Strauss & Corbin, 1990). This enables theories to be built from data (Strauss & Corbin, 1990). In grounded theory, concepts are the basic units of analysis, and incidences, happenings and events are taken and analysed as potential indicators of phenomenon and given conceptual labels (Corbin & Strauss, 1990). There are three main coding types: open coding, axial coding, and selective coding. As stated earlier, data collection and data analysis are interlaced and occur concurrently, as the analysis is used to direct the sampling of data (Strauss & Corbin, 1990). As a researcher, I was constantly in a state of reviewing, refining and directing the data in order to add depth and strength to the emerging concepts in the research.

The first coding procedure used was open coding. In brief, this required the naming and categorising of phenomenon through the examination of data. This initially entailed conceptualising, which meant taking apart paragraphs, sentences, ideas and events that represented specific phenomenon (Strauss & Corbin, 1990). All recorded data was transcribed verbatim in Microsoft Excel, enabling me to sort and manage large volumes of data with great efficiency. Data was examined line by line and each sentence and paragraph was given a code describing the phenomenon it represented. After this initial process, I had a total of 171 codes.

Once the phenomenon was identified, I grouped it into concepts, this is known as categorising (Strauss & Corbin, 1990). The categories were then further developed in terms of their properties and dimensions and similar categories were collapsed into one. This further grouping of similar concepts then reduced the total number of categories from 171 to 21. A brief description of each category was then given.

Axial coding was then utilised to put back the data categorised in open coding in new ways. This was done by making connections between the categories as well as utilising a coding paradigm involving conditions, context, action/interactional strategies and consequences. In brief, it was putting back data in a relational form (Strauss & Corbin, 1990). After this process, the categories were further broken down into three major themes and their related sub-themes.

Lastly selective coding was done by selecting the core theme and systematically relating it to the other themes, validating those relationships and filling in themes that needed further refinement and development. This process integrated the whole theory and was similar to axial coding but just done at a higher, more abstract level of analysis, leading to rudiments of a theory. Validating my theory against the data then grounded the theory (Strauss & Corbin, 1990). I then illustrated the core category and related sub-categories into a conceptual framework on the experiences of women working in male-dominated professions and environments.

1.6.3.7 Strategies employed to ensure data quality

The worth of any research endeavour is evaluated by peers, expert reviewers and readers (Krefting, 1991). In this study, the quality of data was assessed using trustworthiness criteria, this included credibility, transferability, dependability and confirmability (Guba & Lincoln, 1994).

The credibility of the study was ensured by making certain that information-rich participants were adequately identified and described. The transcripts were checked against the live recordings several times in order to ensure the credibility of the data. The comprehensive description of the research process, along with thick detailed descriptions in data of the context of the study, may facilitate transferability. Confirmability, whereby the findings of the study can be confirmed by the findings of another study, was ascertained in the integration of the findings with relevant literature. Other strategies that were employed to ensure the rigour and quality of the data collected were peer and research supervisor reviews at various stages of the process.

Internal consistency (Neuman, 2000) refers to whether or not the data are plausible given all that is known about a person or event, eliminating common forms of human deception. The data satisfied internal consistency as the pieces of information given fit together into a coherent picture and the participants' actions and data were deemed consistent. Reliability in qualitative and field research is dependent upon my insights, awareness, suspicions and questions as a researcher (Neuman, 2000). I asked myself questions such as "Does the person have a reason to lie?", "Is the participant in a position to know this information?" and "Is she just saying this to please me?"

1.6.3.8 Reporting

The reporting style used in the research is derived from the principle of selective coding in grounded theory techniques. Initially, is the "story" which is a narrative about the central phenomenon of the study. From there on the story is told analytically, i.e. made into a "storyline". This is conceptualisation of the story with a focus on the core category which is the central phenomenon around which all other categories are integrated (Strauss & Corbin, 1990). Due to the richness of the data collected during the interviews, the data analysed were grouped into three major themes which consisted of several sub-themes. Each theme and subsequent sub-themes were described in detail, with relevant literature integrated into the discussion of themes and sub-themes. These discussions were then followed up by verbatim extracts from the data collected. The findings were followed by a discussion and the development of a conceptual framework depicting the experiences of women working in male-dominated professions and environments.

1.6.4 Ethical Considerations

There were several ethical considerations for this study. Consent was only required from the research participants as they participated in their personal capacities. Three ethical principles which were considered and crucial to the research process were autonomy, beneficence and justice (Orb, Eisenhauer & Wynaden, 2001). Autonomy includes the recognition of the participants' right to be informed about the study, the right to freely decide whether or not to participate, and the right to withdraw at any time without penalty (Orb et al., 2001). Beneficence is doing good for others and preventing harm. Researchers must be careful not to take beneficence to the extreme, to the extent that it becomes paternalistic as a paternalistic approach may indicate the denial of autonomy and freedom of choice (Orb et al., 2001). The principle of justice refers to equal share and fairness, one of the crucial and distinctive features of this principle is avoiding exploitation and abuse of participants (Orb et al., 2001).

Anonymity had to also be maintained in order to avoid any exposure of the research participants which may result in undesired outcomes. Any personal identification details such as personal and organisational names were removed. Other considerations included full disclosure to the research participant with regard to the commitment requirements i.e. time, length of the study, nature and aims of the research. As the researcher, I also needed to ensure that the interpretation of the data was in line with what the research participants meant and any information with which the participant was uncomfortable was removed.

1.6.5 Findings

The findings were reported in the form of the major themes and sub-themes, as well as through a conceptual framework.

1.6.6 Discussion

In Chapter 3, a discussion of the research findings outlining the major themes and sub-themes is presented and integrated with the relevant literature.

1.6.7 Conclusion, Limitations and Recommendations

The conclusion, limitations and recommendations were reported at the end of the research (see Chapter 4).

1.7 CHAPTER LAYOUT

Chapter 1: Scientific Orientation to the Research
Chapter 2: Literature Review
Chapter 3: Research Article
Chapter 4: Conclusions, Limitations and Recommendations

1.8 CHAPTER SUMMARY

In this chapter, the background and motivation for the study was outlined. The problem statement was generated as well as the general and specific aims for the research. The chapter provided a foundation from which to understand the context of the study. The paradigm perspective was detailed, along with the research design. The research design included an outline of the research approach, research strategy and research methods. Ethical considerations pertaining to the study were also specified. Overall, the chapter illustrated the scientific orientation to the research.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The objective of this chapter is to collate, review and analyse literature pertaining to experiences and factors affecting women who are working in historically male-dominated professions and environments. Due to this study being exploratory in nature, no specific constructs were discussed, as this may have pre-empted the research findings. Rather, the literature was used to analyse and reveal prevalent trends and themes that are reflected both in current and past literature.

The chapter begins by discussing social factors pertinent to women, these ultimately affect their entry into male-dominated professions. An analysis of women's careers is then presented, specifically in terms of women's career patterns and the organisational context. Furthermore, there is an examination of trends, themes and patterns pertaining to women working in male-dominated professions and environments. This examination is categorised under the following sub-headings: the nature of male-dominated environments, the acceptance of women in male-dominated environments, the support they receive, the career growth of women within male-dominated environments, and an assessment of whether or not there is solidarity amongst women working within these fields.   The chapter concludes with a summary of the literature.

2.2 THE SOCIO-ECONOMIC IMPACT ON WOMEN AND WORK

The position of women in society and subsequently within the organisation can be predominantly explained through patriarchal systems and structures.   Finnemore and Cunningham (1995, p.186) summarise the definition of patriarchy:

> *Patriarchy may be defined as the legal, political, economic and social system that validates and enforces the dominant role of the male head of the family over other members. In addition it prescribes women's subordination to other male figures in personal, religious, educational, work and other community interactions. This results in men occupying positions of power and control, as well as owning the major resources in society and resisting any change to the patriarchal status quo.*

Due to the cultural and institutional devaluation of characteristics and activities associated with women, men have had very little incentive to move into very often badly rewarded traditional female activities (England, 2010). These activities include homemaking among other primarily female-dominated occupations (England, 2010). There are, however, powerful economic incentives for women to move into historically male-dominated occupations (England, 2010) despite issues of inequity in the remuneration levels of women as compared to male colleagues in similar jobs. A study on the gendered nature of poverty in the northern part of Ghana found that the effects of general poverty are experienced more by women than their male counterparts (Wombeogo, 2007). This includes the calculated deprivation and marginalisation of women (i.e. inadequate education of females), lack of access by women to productive resources, limited decision-making power and ultimately powerlessness (Wombeogo, 2007). Men have long dominated positions of power in the economic and political spheres, the legal system, religious and educational institutions as well as most community organisations (Finnemore & Cunningham, 1995).

Women are often confined to self-employment, the informal sector, or subsistence agriculture as seen in post-apartheid South Africa (Casale & Posel, 2002; Finnemore & Cunningham, 1995). Although there has been an increase in the labour force participation of women, this has mostly been confined to the aforementioned areas (Casale & Posel, 2002; Finnemore & Cunningham, 1995). Forces that have possibly pushed more women into the labour force include changes in household structures by means of increased female-headed households and the decline in access to male income (Casale & Posel, 2002). Increased access to education has allowed women to challenge past practices and stereotypes and equipped them to enter the workplace for paid work on a more competitive basis (Finnemore & Cunningham, 1995). Confining women to culturally determined "women's" jobs is seen as contrary to the full utilisation of labour and an infringement on the rights of women to work in personally chosen occupations (Finnemore & Cunningham, 1995).

Intersections of race, class and gender roles play a pivotal role in shaping women's expectations about their participation in paid work (Damaske, 2011). For example, the history of the development of South Africa has led to many divisions in the country, resulting in a skewed distribution of resources based on class, race, sex and urban/rural divide (Finnemore & Cunningham, 1995). A study that investigated the influence of family, individual differences and cultural factors on the choice of gender-dominated occupations amongst female students in some tertiary institutions found several pertinent issues. Female students who chose the engineering (male-dominated) occupation were from high socio-economic status homes and those from lower socio-economic homes chose nursing (female-dominated) as an occupation

(Salami, 2007). Similarly Ecevit, Gunduz-Hosgor and Tokluoglu (2003) found that most women in high-status professional positions in male-dominated computer programming occupations in Turkey had highly educated parents.

This suggests that middle class families are better positioned to help their daughters take advantage of the cultural shifts that have made women's workforce participation more acceptable. Middle-class women interviewed in a study were able to delay the consideration of work–family conflict and form early expectations of continual workforce participation, which led them to gain important work skills (Damaske, 2011). Females from higher socio-economic backgrounds appear to have more exposure, opportunities, information and resources, enabling them to explore and bravely venture into unconventional occupations.

Government and tertiary institutions must make concerted efforts to provide more diverse sources of information to lower economic-status schools regarding the various career opportunities, with a specific focus on some of the unconventional career options for women. It has been suggested that special support to bring women to higher academic positions may play an important factor in creating a female-friendly culture in institutions of higher learning, specifically in male-dominated faculties like engineering (Daudt & Salgado, 2005). This is especially important because the more female role models there are, the greater the chances of attracting and reducing the drop-out rate of female students from male-dominated faculties.

Other factors that were found to be good predictors of choice of gender-dominated occupations for female students were cultural factors (positive attitudes towards religion, work values), and individual difference factors (achievement motivation) (Salami, 2007). A study on female architects revealed that the majority felt inclined to study architecture from childhood or had been influenced by family or friends working in the construction industry (Caven, 2004). In South Africa, women's career opportunities in the construction industry are driven by government initiatives and availability of bursaries (Madikizela & Haupt, 2009). In the same vein, Malach-Pines and Kaspi-Baruch (2008) investigated the influences of culture and sex on the choice of a management career amongst male and female MBA students. They found that cross-cultural differences (defined according to Hofstede's four culture criteria) even more than sex-role influenced the aspirations associated with a career choice in management, the study revealed that the sex-role differences found in all variables were much smaller and less significant than the cross-cultural differences (Malach-Pines & Kaspi-Baruch, 2008). This, therefore, implies cultural factors have a significantly stronger bearing on women's career choices than actual sex differences.

Social factors play an important role in the decisions that women make regarding their careers. Not only are cultural issues influential but establishments such as government and tertiary institutions must play a more visible and compelling role in influencing and exposing females to a wide range of career opportunities. The empowerment of women is seen as a necessary prerequisite to the economic advancement of any country, as female empowerment releases new energy into the economy and utilises the skills of its entire people (Finnemore & Cunningham, 1995).

2.3 WOMEN AND THEIR CAREERS

The following discussion begins by examining the career patterns of women and highlights that the trajectories of their careers differs significantly from that of men, mainly due to child-rearing responsibilities and other related factors. Women in professional occupations are often treated as secondary workers (Wass & McNabb, 2006). Organisations should be cognisant of this and create environments which accommodate women's unique career patterns, alleviating prejudiced practices that penalise women. Organisational cultures, structures, policies, merit and reward systems tend to work against women and their unique work/life balance requirements. Rewarding careers that move in a linear and hierarchical direction should not be the only means qualifying as success within the organisation.

2.3.1   Women's career patterns

Super (1975) differentiates between an occupation and a career, the former is what a person does to earn a living and the latter is the sequence of positions which constitute a person's work history. This sequence is a crucial aspect when women's career patterns are the point of focus, as the course that their lives run differs, to a large extent, from that of men. Factors that have been found to be related to women's career advancements include years of work experience, work hours, ambition, education level, training and development and career breakthrough opportunities (Metz, 2005). Patriarchy emphasises the special biological role of women as reproducers, mothers and custodians of the family (Finnemore & Cunningham, 1995). Women who enter the workplace are still expected to do the majority of the cooking, shopping, housework and childcare (Finnemore & Cunningham, 1995). Given that women remain the primary caregivers within the family unit, while simultaneously juggling the demands of their workforce participation, merely encouraging young women to obtain male-type professional qualifications may be insufficient for eliminating inequality between the sexes, as discovered by Danziger and Eden (2007). During the freshman year of university,

both sexes shared a similar pattern of aspirations and goals; however, during their later academic years females reduced their occupational aspirations and revealed a stronger preference for a convenient balance between work and other facets of life (Danziger & Eden, 2007). Women are often expected to subordinate their own interests to those of the family, they therefore battle to choose between their various life options of marriage, motherhood, job or career – or a combination of these (Finnemore & Cunningham, 1995).

Women's career development issues, concerns, tasks and responsibilities are moulded by the work-family pressures they experience and are therefore distinctly different from those of men (O'neal & Bilimoria, 2005). Career development models should specify systematic sex differences in career success outcomes (Orser & Leck, 2010). Women's roles, specifically as mothers, have an effect on their career trajectories and the role of motherhood has been found to be a potential source of bias both in anticipated competence assessments and in screening recommendations (Heilman & Okimoto, 2008). Motherhood can indeed hinder the career advancement of women. Internal networks within the organisation have been found to be negatively related to the advancement of women with children and unrelated to the advancement of women without children (Heilman & Okimoto, 2008; Metz, 2005). Spending less time at work than non-mothers, mothers have smaller and fewer close internal organisational networks than women without children. Having children weakens the positive relationship between work hours and women's managerial experiences as men undoubtedly have the ability to work longer hours than women (Metz, 2005; Wass & McNabb, 2006).

Parents' work hours and utilisation of flexible arrangements are positively related to their job level and career satisfaction, specifically if flexible work arrangements such as working from home enables them to work more hours while attending to their child rearing responsibilities (Dikkers, van Engen & Vinkenburg, 2010). Ambitious mothers find a way to sustain their ambitions while also taking care of their children by working more hours and utilising other flexible arrangements (Dikkers, et al., 2010). The study concluded that the utilisation of flexible work-home arrangements and work hours are positively related to job level, parents working flexible and/or more working hours are (objectively) more successful compared to those who work at regular times and those who work fewer hours per week (Dikkers, et al., 2010). This is contrary to a study of accountants where women at senior management level found that part-time and flexible working hours carried with it penalties in relation to both earnings and organisational status (Lyonette & Crompton, 2008). Even in a female-dominated industry like nursing, assumptions about women's role in the family resulted in the belief that part-timers were not committed to their careers (Lane & Piercy, 2003).

Conversely, parenthood was not found to be a liability for men in either competence projections or screening recommendations, although being a father did draw some negative reactions (Heilman & Okimoto, 2008). In general, parenthood had unfavourable consequences for the way in which both men and women were viewed in terms of expected work focus, as this manifested in lower expectations of job commitment and achievement striving (Heilman & Okimoto, 2008). This implies prominent workplace values and cultures that prejudice and are intolerant of certain roles that employees play in the family unit, such as parenthood. These roles are perceived to interfere with the dedication and commitment of employees towards their work. In light of this, Metz (2005) found that taking career breaks was unrelated to the career advancements of women whether they had children or not, this suggests that career breaks are expected in women and they therefore do not get penalised for taking them. Some women have found the utilisation of flexible work arrangements, consequently not having to reduce work hours in order to combine career and care responsibilities, allows parents (especially mothers) to cherish their ambitions and care for their children at the same time (Dikkers et al., 2010).

Franks et al. (2006) explored how 21st century career-oriented women in South Africa attach meaning to the different life roles. A few of the major themes that emerged were the decision to pursue a career first followed by a family, and the decision to cut back on working hours in order to spend more time with children. These life roles specific to women integrate to form a lifestyle which may not be conducive with fitting into and progressing in a historically male environment. Similarly, Chovwen's (2007) study revealed that women, amongst other things, stated work/family conflict, as a major inhibitor of career progress in executive (male-dominated) environments in Nigeria. Women are more inclined than men to hold a convenient job that enables them to avoid dual-role overload and to lead a balanced life (Danziger & Eden, 2007). Even before women have children, they are likely being passed over for promotion, regardless of their work participation and contribution, in anticipation that they will at some point become mothers (Metz, 2005).

Race and ethnicity can also play a role in the experiences of women in the work environment as Van den Berg and Van Zyl (2008) discovered. In their study, black and coloured women reported significantly more stress regarding their work environment in terms of task characteristics, physical work environment, remuneration and fringe benefits due to different contextual backgrounds. Women's career decisions and difficulty in penetrating male-dominated occupations can be largely part of a reaction to outdated work structures, policies and cultures that do not fit women's lives (Cabrera, 2009). Some authors (Lyonette & Crompton, 2008) suggest that things will change as older men retire and the younger men,

who are much more likely to have working wives themselves, will be forced to share childcare and domestic tasks.

The traditional career model, characterised by continuous, full-time, long-term employment and objective measures of success like promotions and salary have a profound disconnect with the needs of women workers (Cabrera, 2009). Women's careers, according to O'neal and Bilimoria (2005), develop in three distinct age-related phases, characterised by differences in career pattern, locus, context and beliefs. The three career phases are characterized by the following age groups: career phase one (ages 24-35), career phase two (ages 36-45), and career phase three (ages 46-60). Phase two was reportedly the most challenging for women. In this phase, the most negative career experiences occurred and women questioned the essential centrality of their careers in their lives given other increasing demands on their time, such as family and non-work related activities (O'neal & Bilimoria, 2005). Similarly, Prescott and Bogg (2011) found that older female participants (36>) in their study, more than their younger counterparts, felt that work/life balance policies needed improving.

Women who seek to defy conventional career patterns followed by their sex and choose to pursue careers within male-dominated occupations frequently encounter obstacles and often return to a career path more accommodating to their roles as primary caregivers (Frome, Alfeld, Eccles & Barber, 2006). A study by Frome et al. (2006) examined why some young women do not maintain their espoused occupational aspirations in male-dominated fields from late adolescence through young adulthood. This longitudinal study measured women who indicated male-dominated occupational aspirations in the 12th grade and then again at the age of 25. Eighty-five percent of these women, by age 25, had changed these aspirations into either female-dominated or gender-neutral occupations. Two main factors were measured and identified as contributing to the failure of these women to maintain male-dominated aspirations: the first factor was the desire for a family-flexible job, and the second factor was having low intrinsic values with regard to the study of physical science and maths (Frome et al., 2006). The study of physical science and maths is often required for pursuing male-dominated occupations. This illustrates that even with the inherent desire to enter male-dominated fields, women face obstacles in the very early stages of their lives which deter them from pursuing these occupations. The difficulty of pursuing male-dominated occupations thus limits the trajectories of women's career patterns in comparison to their male counterparts.

In a study by Caven (2004), diversity in career paths as demonstrated by female architects reflected a move away from the idea that career management means progression upwards through the organisation and rather towards the individual developing their own professional life in order to achieve a wide range of objectives. The next section will consider the role of the organisation with regards to women's careers.

2.3.2   Women's careers in the organisational context

Organisations are structured and function in a manner that does not always support women's career patterns and their need to integrate work with their roles within the family as primary care givers. It is both unfortunate and unacceptable that young girls and women are not always able to follow through on their desired career plans due to male-dominated occupations still being inflexible in practice even at the turn of the new millennium (Frome et al., 2006). A more aggressive approach on including gender issues in socialisation and orientation packages is necessary to initiate new comers (Chovwen, 2007). Due to the lack of representation of females in senior positions, gender issues are not often considered high priority (Finnemore & Cunningham, 1995).

In South Africa for example, there are equal opportunity policies devised to work in favour of professional women but tend to work against them by becoming a barrier to their growth and advancement (Mathur-Helm, 2005). There are government policies and legislation created with goodwill in favour of women but their success is highly depended upon management strategies. These management strategies tend to treat women differently, specifically negatively, due to social constructs, attitudes, norms, values and stereotypes determined by corporate culture (Mathur-Helm, 2005). In the construction industry, for example, women reported a lack of available funding targeted at improving the status and qualifications of female employees, a deficiency of written gender policies in place and lack of gender-based educational material. This suggests there is a still a lack of visible and tangible commitment to empower women in organisations, in spite of legislation such as the Employment Equity Act (Madikizela & Haupt, 2009).

Work structures and organisational cultures are still based on the traditional view that the ideal worker does not allow outside responsibilities interfere with working hours or job commitment. The workplace has changed very little in the last fifty years, yet the workforce has changed dramatically (Cabrera, 2009). Organisations need to support and recognise women's career and relationship priorities in order to retain and accommodate talented young

professional women. Without recognition and support for their multiple life roles, women find themselves unable to fully embrace their work responsibilities (O'neal & Bilimoria, 2005). This, then, limits them to pursuing careers that are more suited with their primary roles as caregivers in the family unit. Prescott and Bogg (2011), in their study of career attitudes of men and women working in the male-dominated gaming industry, found promotion was associated with long hours within the industry and this inherently creates difficulties for women.

Organisations need to support women by legitimising various career paths and options as well as providing a climate of acceptance and support for the responsibilities and choices that women will face (O'neal & Bilimoria, 2005) to enable them to balance both work and personal responsibilities. This is to avoid having a highly successful career in a male dominated occupation and managing family responsibility being mutually exclusive roles. Organisations that create work environments that do not disadvantage women requiring integrated lives will have a more competitive edge in keeping their talented female employees (O'neal & Bilimoria, 2005). Jackson (2001) found in her study that the majority of women do not believe their organisations successfully implement initiatives to help them overcome barriers to their career advancements. Prescott and Bogg (2011) also found that the male-dominated gaming industry does not appeal to women with families in the same way as it appeals to men and women without families, predominantly due to the long hour's culture. In the male-dominated construction industry, only women who had been with their employer for long periods managed to successfully establish some flexible working hours to accommodate other life roles (Watts, 2009). This is despite the fact that the need for flexible work arrangements has been found to be greater for women than men (Dikkers, et al., 2010). The impact of cultures such as the long hour's ethos in organisations has been shown to have both psychological and material effects on women. For these women, the need to balance career demands with the rest of life appears to be barely achievable (Watts, 2009).

Organisational politics are the masked activities through which organisations are constructed and reconstructed; their insidious nature and fragmented links to existing power systems operate to exclude those who do not fit into the culture (Davey, 2008). In a study of female graduates in a male-dominated field, Davey (2008) found that success in organisations was constructed as masculine and political. Organisational politics were found to be gendered and masculine in nature; the accounts emphasised political activity as a form of sociability based on masculine rather than feminine identity and interaction style. The behaviour described as masculine included political game playing, aggressiveness, backstabbing, point-scoring, overconfidence and stitching people up (Davey, 2008). It is very interesting to note

that even in fields considered "gender neutral" such as teaching, female principals found that after their appointments as principals, they faced difficulties in striking a balance between family and work as the traditional stereotypes still associate school principal-ship with masculinity. This then hampers women's career progression in education management (Moorosi, 2007). Sex-based stereotypes are still pervasive and might render less effective targeted social policies such as maternity leave and the right to equal pay (Mihail, 2006).

Women have to therefore behave in ways that are unnatural to them in order to get ahead. This illustrates that the platform for women to use their natural behaviours to progress is not available in organisations and perhaps not valued. Women are expected to take on male characteristics and interactional styles in order to be competitive in the organisational context, immediately putting them at a disadvantage (Akingbade, 2010). The irony is that behaviour that is not appropriate, in line with traditional gender roles, is especially problematic for women. Women who lack communality and behave in a manner that does not conform to culturally prescribed gender roles are likely to face discrimination, especially in hiring situations (Akingbade, 2010).

Men are generally extrinsically driven by a desire for status, power, money, winning power games and social comparisons, whereas women present themselves as being intrinsically motivated by a desire to do a good job and contribute to organisational functioning (Davey, 2008). Organisations need to be sensitive to these informal dynamics that are prevalent in the organisation as they play a crucial role in the interactions and social atmosphere within the organisation. Women's characteristics, natural behaviours and values need to be legitimised and given a platform within the organisation in order to level the playing field between the two sexes without discriminating against either.

Some authors (Dainty, Bagilhole & Neale, 2000) go so far as suggesting that women should not be attracted to male-dominated industries such as construction in the United Kingdom (UK) unless steps are taken to moderate their exclusionary and discriminatory cultures. This is mostly due to the fact that women have opportunities in this historically male environment oversold to them and very few have initial understanding of the environmental culture and inherent difficulties of working in such conditions. Other authors (Guerrier, Evans, Glover & Wilson, 2009) looking at the Information Technology (IT) industry have suggested that women need to find ways of adjusting to work cultures and hybrid jobs (combining technical and traditionally female skills) should be seen as a means of providing new opportunities, specifically in these male-dominated fields. The focus on these hybrid jobs, which combine technical and traditionally female skills, are suggested as a new and acceptable way for

women to work in a male-dominated environment without compromising what women see as their femininity (Guerrier et al., 2009).

Organisations clearly have a crucial role to play in making their environments more conducive for women, taking into consideration the integral part of women's roles as primary caregivers. The championing of women's issues should be at the forefront of organisational policies and practices in order to alleviate the discriminatory position that women often find themselves in.

2.4   IN THE TRENCHES: WOMEN WORKING IN MALE-DOMINATED OCCUPATIONS

This section provides an outline of the characteristics and nature of male-dominated environments from the perspective of women employed within them. An analysis of the acceptance of women in male-dominated environments, as illustrated by the literature, demonstrates that this acceptance is still lacking. Women in male-dominated environments do have at their disposal various support mechanisms to survive their environments, with one such support mechanism being mentoring. The career growth of women in male-dominated environments is then assessed, along with the various means by which these women cope. The section rounds off by assessing the level of solidarity between women in male-dominated environments.

2.4.1 The nature of male-dominated environments

The dynamics within male-dominated environments differ substantially from those in more gender-mixed or female-dominated ones. In male-dominated occupations, men have more resources and definitional power to enforce discriminatory practices, policies and ideologies (Damaske, 2011). The culture in the construction industry, for example, glorifies employees who work as if they have no personal life requirements, and this culture seems to be relentless in silencing those who may raise concerns about the personal costs of overworking and the effectiveness of time-intensive work practices (Watts, 2009). Similarly in South Africa, female students in the construction industry expressed that women on construction sites were not respected to the same extent as men, and were intimidated by the much larger number of male professionals in the industry (Madikizela & Haupt, 2009). Female pilots were found to be prejudiced against and the long term implications of sexism in the industry was the continuance of feeling highly visible and being under considerable pressure to perform well in comparison to their male counterparts (Davey & Davidson, 2000).

Women have been found to shift from male-dominated to female-dominated occupations because of their negative psychological experiences in male occupations, experiences which include sex discrimination, self-efficacy and sex role ideology (Damaske, 2011). Other experiences of women in male-dominated environments, as found with female pilots, include sexist jokes, derogatory comments about women, and on occasion, aggressive and sexist behaviour from male colleagues and even passengers (Davey & Davidson, 2000).

On a conscious level, there may be a genuine attempt to be objective when assessing women in hiring decisions especially in male-dominated fields, but when it comes to the actual hiring decisions, a bias is reflected (Akingbade, 2010). Women, as found in a study of the army, received less prejudice and were perceived as more suitable for male sex-type jobs if they had previously pursued a typical male career (Hareli, Klang & Hess, 2008). A woman, therefore, had increased chances of being perceived as competent in a male-dominated environment if she had previously been employed in a gender atypical job than if she previously worked in a typically female job.

A study on women employed in the male-dominated computer programming field found that a prominent characteristic of professional women in computer programming occupations is their youth (Ecevit et al., 2003). The median age of women who held high status jobs in computer programming was 30 years. Being equipped with new technical knowledge and willing to work hard and travel made these young women a preferable labour force. However, there are still feelings of stereotyping and under-utilisation of women in male-dominant occupations, resulting in these women feeling as if they are not taken seriously, do not receive challenging opportunities, and subsequently do not receive pay or positions commensurate with their talents (Feyerherm & Vick, 2005).

There is a perceived low status of women with regard to promotions; women feel that they are more disadvantaged than men in promotion opportunities and that men generally progress more rapidly than females within organisations (Feather & Boeckmann, 2007; Llyod & Mey, 2007). Male subordinates, more so than female subordinates, have also been found to have negative attitudes regarding women in leadership (Okhakhume, 2008). There is evidence of prejudice against female leaders in male-congenial roles in the workplace, illustrating that a stereotyping process automatically activates the concept of leadership as a masculine notion, leading to bias against female candidates' promotion to leadership positions (Garcia-Retamero & Lopez-Zafra, 2006). Males, on the other hand, have been found to feel that women are responsible for their own disadvantage and should therefore feel guilty for initiatives such as affirmative action which are perceived as reverse discrimination

towards men (Feather & Boeckmann, 2007). Other factors that can predict positive attitude predisposition towards women in leadership are age (younger subordinates) and religion (Christian subordinates had more positive attitudes than their Muslim counterparts in a study) (Okhakhume, 2008).

2.4.2 Acceptance

Acceptance by male counterparts is one of the challenges that women first encounter when they enter male-dominated occupations and environments. Factors that indicate perceived lack of acceptance towards women include subtle and overt discriminatory practices, being tagged as deviant and being perceived by male counterparts as incompetent (Chovwen, 2007). The culture within male-dominated occupations promotes camaraderie among males and women find it difficult to be admitted into these social circles. A study on construction site culture (Watts, 2007) found aggressive male behaviour and sexual harassment prevalent towards women. Female pilots encountered flight crew who were nervous with women, made sexist jokes, refused to let them operate the aircraft and behaved in an aggressive and sexist manner, signalling acceptance problems (Davey & Davidson, 2000). The men in this study, on the other hand, were immediately and easily accepted by flight crew (Davey & Davidson, 2000).

In Arab countries, women even face discrimination and acceptance problems in the workplace based on the manner in which they dressed (Omair, 2009). Women who wore the *niqab* (the face veil) faced discrimination based on their clothing, even though this was part of their cultural identity formation (Omair, 2009. This illustrates that there is a limit to the extent that religiousness is accepted at the workplace. Arab women do not have the option to gain more power and authority by mimicking male dress, as this is forbidden in Islam. In order to improve their positions in the workplace, they must, therefore, mobilise to change the general idea that Arab women's dressing gives them the image of being fragile, domestic and incapable (Omair, 2009). There is a need for women to want to associate the *hijab* (veil or head scarf) with positive meanings such as capability, strong-mindedness and all other professional traits important for leadership (Omair, 2009).

The work environment also becomes unfriendly when women are regarded as unfit or not committed to their work, such as when circumstances warrant that they take time off or are unable to travel extensively in order to attend to family or personal issues (Chovwen, 2007). Commitments of such a nature that women have over and above their work are still frowned

upon in the work place and reinforce men's beliefs that women are not suitable for male-dominated occupations (Chovwen, 2007). Therefore, women are unable to easily integrate into environments with strong male cultures due to demanding commitments in their personal lives and men are not prepared to change the environment to accommodate them.

Powell, Bagilhole, and Dainty, (2006) conducted a study of women's assimilation problems into male dominated engineering cultures in the UK. Their research demonstrated that women were reluctant to admit they had been discriminated against and frequently justified their colleague's actions, suggesting they did not feel deserving of equal treatment. Another factor that contributes to acceptance is the women's self-concepts in relation to their jobs; it is rather distressing that with self-concept being a predictor of career commitment, women in male-dominated doctoral programs reported lower self-concepts than the other students (Ulku-Steiner, Kurtz-Costes & Kinlaw, 2000). This can possibly affect their performance in their chosen occupations and subsequently their acceptance as equals within male-dominated environments.

2.4.3 Support

This section will focus on the level of support in terms of support structures and initiatives that are available to better integrate women in male-dominated environments.

2.4.3.1 General support

One of the factors that inhibit job satisfaction for women working in male-dominated environments is lack of support. This lack of support is reflected in women being isolated, not having enough information and resources necessary for effectively carry out work, and being taken for granted by male colleagues (Chovwen, 2007). Some women feel set up to fail with no support, guidance and information. Informal networks of influence are out of women's reach and denial into these networks adds to women struggling to be acknowledged and treated on an equal footing (Wilson-Kovacs, Ryan & Haslam, 2006). In male-dominated environments, the value of a women's network is appreciated by female employees, there are however legitimate concerns that this might further reinforce male-female divisions (Shortland, 2011).

Informal networking within the corporate world is also structured around predominantly male activities such as golf, cigar clubs and professional associations within those industries. For

women to be considered role models in organisations, they need to give and not ask for advice, earn organisational rewards, hold leadership positions in the organisation and maintain strong ties with other organisation members. On the other hand, for men to be perceived as role models, they merely have to participate in advice networks giving or receiving advice and maintain friendship ties (Murrell & Zagenczyk, 2006). This illustrates that women require organisational legitimacy to be regarded as role models, while men primarily rely on the strength of their social ties within their friendship networks.

Work environment qualities that have been found to be supportive of the career aspirations of women include the following: top management support; explicit use of gender in decision-making and in recruitment; career planning; employee development; the development of policies and procedures consistent with the goal of supporting women; provision of rewards for providing the required support; and finally, achieving agreed upon goals for women's advancements (Burke, Koyuncu & Fiksenbaum, 2006).

Companies have started investing considerable time and resources in mentors and developmental opportunities to actively retain their best female talent and avoid leaks in their pipelines at mid to senior levels (Ibarra, Carter & Silva, 2010). Although many organisations still do not formally include mentoring relationships in their programmes, some women develop these relationships informally because they need people to look up to (Chovwen, 2004). The mentoring relationships set up for women in male-dominated occupations have limited uses, mentors may provide a listening ear and abilities for the new level, but often they do not offer vital contacts needed to advance these women's careers beyond a certain point (Wilson-Kovacs et al., 2006). In a cross-cultural study of gender and management in universities, it was reported that men were more likely to be mentored and groomed by Vice Chancellors and other senior managers, whereas support for women was likely to come from further down the organisation and from their families (White, Riordan, Ozkanli & Neale, 2010).

The availability of female mentors in certain positions and occupations seems to be an issue in male-dominated environments (Chovwen, 2004). Even so, women do still want the provision of mentors and guides within the workplace (Feyerherm & Vick, 2005). A sample of women in the accounting field in Ghana showed that 93% had mentors even though most of these mentors were not even involved in the accounting field, supporting the idea that the role of mentors in the lives of these successful accountancy women cannot be downplayed as mentors are significant contributors to the women's success (Hinson, Otieku & Amidu, 2006). This is supported by Chovwen (2004) who reported that women perceived enhanced career growth from protégé/mentoring relationships.

Some women have reported that mentoring relationships are not leading to nearly as many promotions for women as for men (Ibarra et al., 2010). Other data has suggested that women and men appear to be more similar than different in their perceptions of the most important behaviours for mentors to engage with protégés, suggesting that mentors or those designing mentoring programs should be careful to not categorise protégés according to traditional sex-role stereotypes (Levesque, O'Neill, Nelson & Dumas, 2005, Ulku-Steiner et al., 2000). Research to investigate the relationships between specific sex-role combinations of mentor-mentee and distinct mentoring functions found few significant relationships between sex and mentoring functions (Fowler, Gudmundsson & O'Gorman, 2007).

To the contrary, Powell et al. (2006) found that female engineering students discovered that in both the engineering classroom and in the workplace their sex was inadvertently likely to ensure that they received more help and cooperation than their male counterparts. Some found this patronising while others perceived the situation positively. In the long run, additional support given to women may indicate that women are seen as less capable and as a result, may get overlooked in promotion decisions if they are perceived by employers as requiring extra help and support to succeed (Powell et al., 2006).

Overall, women seem to have a need for mentors within the workplace to help them integrate into male-dominated professions. The value and effectiveness of these mentoring relationships remains questionable as women feel the relationships are not yielding the results they should. On the other hand, women do not want to go without having mentors in the workplace, as seen by the extent that women seek out mentors themselves when mentors are not formally provided within the organisation. It is important for organisations to promote and formalise effective mentoring relationships for women in male-dominated environments.

2.4.3.2 Career growth

Growth is the perception of progress along one's career path as evaluated by both the individual and the organisation (Chovwen, 2007). Growth levels between males and females are not the same mainly because of personal factors such as work/family conflict and determination and focus levels of women within male-dominated environments (Chovwen, 2007). Women more than men are less inclined to define career success in terms of hierarchical and financial progression, but rather use a range of internal and intangible criteria such as achievement, accomplishment, personal recognition and influence in order to define

career success on their own terms (Sturges, 1999). Women do not always want to play "the organisational game" by male-constructed unwritten rules, but prefer to trust good management and system fairness for just rewards (Singh, Kumra & Vinnicombe, 2002). Women seem to prefer relying on extra high performance and commitment for visibility to their seniors rather than networking, ingratiation and self-promotion strategies engaged in by males (Singh et al., 2002). The importance of informal processes in promotion systems cannot be disregarded; males in particular use impression management in an almost natural manner and females in particular do not wish to use impression management at all in spite of recognising its potential (Singh et al., 2002).

Despite having the same qualifications, women in accountancy and women solicitors have been found to not progress through organisational and occupational hierarchies to the same extent as men, and also earn considerably less (Lyonette & Crompton, 2008; Wass & McNabb, 2006). This is despite research which has found that, for women, education is possibly one of the main sources for legitimate upward mobility (Ecevit et al., 2003). In general, women in male-dominated occupations see themselves as being blocked from advancements to managerial ranks, participating less in decision making and receiving lower remuneration than their male counterparts (Bowen, Cattell & Distiller, 2008).

Women report examples of occasions where their sex is raised as an issue, for example during promotions. This is specifically with regard to comments made during interviews about marriage, children, women's ability to manage men and assumptions about lack of availability for night shift or travel (Davey, 2008). This is comparable to a study on female solicitors who were restricted from opportunities based on the expectation that sooner or later they would become mothers (Wass & McNabb, 2006). This assumption disadvantaged them from acquiring the particular experience necessary to lead to partnership and which attracts the highest pay (Wass & McNabb, 2006).

It is worthwhile to highlight that even in female-dominated professions such as nursing, negative sex-role stereotypes continue to pervade the careers of many women as they have been excluded from the upper echelons of the nursing profession (Lane & Piercy, 2003). The study revealed that the whole mind-set surrounding nurse managers was that "manager equals male". This resulted from the belief that men had innate qualities that women did not, men were assumed to have career aspirations whilst women were concerned with the caring aspects of the nursing job (Lane & Piercy, 2003). The presumption was that men entered nursing to have a career and women entered nursing to care; nursing may be a female profession but management is "male" (Lane & Piercy, 2003).

Managers should not assume that females who do not self-promote are not as ambitious or able as their male peers; in fact, managers need to guide those who trust the formal human resources management system (and not informal networking) to provide career opportunities without the undertones of gender based promotions (Singh et al., 2002). As a consequence of the traditional "breadwinner" stereotype, women are often seen as temporary job holders rather than serious, career orientated employees (Finnemore & Cunningham, 1995).

Challenging job experiences are considered important prerequisites for management development and career success (De Pater, Van Vianen & Bechtoldt, 2010). In light of this, a study of women on Wall Street illustrated that women looked like poorer performers due to the fact that they received fewer opportunities to perform (Roth, 2007). Attitudes towards women, especially mothers, and their use of work/family policies contributed to managers' assignment of the best accounts to men (Roth, 2007). In turn, managers use this to point to performance indicators to justify their further allocation of the best accounts to men even though the allocation of accounts process is biased against women (Roth, 2007). Senior managers are more inclined to assign challenging tasks to male as opposed to female subordinates under their supervision (De Pater et al., 2010). Women have been found to have fewer challenging experiences in their jobs than their male colleagues and this lack of experience may provide an insight in a proximate factor constraining women from reaching senior level positions (De Pater et al., 2010).

The organisational factors discussed above also play a part in inhibiting women's career growth, along with management practices and policies, organisational politics, lack of mentoring and strong networks (Chovwen, 2007). If women are offered fewer opportunities to develop themselves than their male counterparts, the result may be that women have fewer promotion opportunities and consequently advance slower in their careers (De Pater et al., 2010). The study of women on Wall Street illustrated that the informal culture assumed that men would fit a certain mould and women would not; as a result, organisational policies designed to facilitate work-family balance were ineffective and perceived by the women as mere window-dressing (Roth, 2007). Women felt they would be penalised for making use of these policies in light of their career progress.

Women in male-dominated fields, though perceiving themselves as highly competent, at times present themselves as being reluctant to put themselves forward for promotions as compared to their male counterparts. They perceive different responses between men and women to the apparently meritocratic process within the organisation (Davey, 2008). Concerning levels of occupational self-efficacy, differences in the male-dominated IT field

have been found to constitute significant barriers to women both choosing and persisting in non-traditional careers within IT. This was also exacerbated by men's low confidence levels in the technical abilities of women (Michie & Nelson, 2006).

2.4.3.3 *Coping mechanisms*

The mechanisms women use to cope in male-dominated environments, while including mentorship, also include the adopting of participatory leaderships styles such as being caring, fair and encouraging amongst other things (Chovwen, 2007). This is in line with the notion of women being expected to exhibit behaviours that are consistent with the female sex (Chovwen, 2007). On the contrary, in order to cope in a politically masculine environment, female graduates in male-dominated organisations reported having to adopt characteristics and act in a manner that is "unnatural" to them such as self-seeking and individualistic behaviour unrelated to organisational success in order to compete (Davey, 2008). They were caught in between resisting and accommodating masculine politics (Davey, 2008). On one hand, women are caught in between resisting the patriarchal process by remaining on high moral ground, making it difficult for them to maintain a positive self-identity. On the other hand engaging in masculine tactics to get ahead lays them open to accusations of "selling out" and engaging in activities they personally condemn (Davey, 2008). Female pilots, though, did not find any problems adapting to masculine cultures and being considered one of the "lads" (Davey & Davidson, 2000). Similarly women in the construction environment in the UK resorted to adopting work styles similar to their male colleagues (Watts, 2009).

Women have also been found to use denial as a coping strategy. Successful women in IT downplayed the significance of their sex in male-dominated environments even though they point to specific instances where sex roles clearly shaped their interactions with colleagues (Demaiter & Adams, 2009). This is supported by a number of studies. A study of women in the South African construction industry found that as women gained experience and acceptance in the industry over time, they became less sensitive to male-dominance and discrimination (Madikizela & Haupt, 2009). Construction industry women were even reluctant to label as "sexual harassment" the threatening behaviours they were subjected to by their male colleagues; they preferred instead to dismiss them as menacing incidents and occupational hazards (Watts, 2007). Such a reluctance to label these behaviours can be seen as a survival strategy towards women not wanting to see themselves as victims. Similarly, female pilots, though they admitted to encountering some problems, were generally unwilling to make a fuss. The reason for this was the fear of getting further media attention

and being singled out as being different or problematic, especially regarding sexual harassment (Davey & Davidson, 2000).

Women will often accept stereotyping in preference to fighting it, although invariably accepting these stereotypes may limit their opportunities for advancement (Whittock, 2002). This denial and refusal to acknowledge negative behaviours towards women is consistent with masculine discourse which values the ability to withstand aggressive behaviour and overcome problems without having to resort to help (Davey & Davidson, 2000). Women in computer programming occupations in Turkey, in order to cope, worked hard and became self-confident while at the same time developing pragmatic and practical solutions to make work and home compatible (Ecevit et al., 2003). The three main coping strategies they developed were working hard, postponing marriage, and even choosing not to marry at all (Ecevit et al., 2003). With the average marrying age in Turkey being 19 years, 50% of the women in the study were never married at the average age of 30 years, suggesting the delay or refusal to marry in order to accommodate their careers (Ecevit et al., 2003).

In order to cope in their male-dominated environments, women resort to strategies such as: denial of sex discrimination, adopting male-type behaviours and using female-type behaviours. The adoption of female-type behaviours is to maintain their identity as females and avoid being labelled as a deviant.

2.4.3.4 Solidarity amongst women within male-dominated occupations

The prevalent attitudes of women towards other women in similar male-dominated occupations are important to explore. The assumption is that there would be solidarity between women in these occupations given their positions as minorities and "aliens". Expectations of solidarity from women at senior levels are perpetuated and the assumption that these women should be representatives of and responsible for the progression of women remains unquestioned (Mavin, 2006). Women in the construction industry rejected aligning themselves with feminist aims or motives, even those who had some involvement with initiatives to foreground equal opportunities, as they thought that taking a feminist stance would work against the interests of women in the sector and render them less influential (Watts, 2007). Powell et al. (2006) found that women in the engineering field in the UK viewed strategies to attract more women into engineering as unfavourable, which is likely due to the fact that they viewed themselves as tokens and were not keen to support measures to increase the number of women in the industry. Women who also manage to survive in

gendered environments may de-emphasise the significance of their sex in order to fit in with their male co-workers, this contributes to a reluctance to see sex-role structures as acting against women (Demaiter & Adams, 2009). The reluctance to see gendered cultures constrains their abilities to bring about meaningful change.

Ironically, women in Powell et al.'s (2006) study illustrated that women in the engineering sector were critical of other women and adhered to stereotypical views of them. These women had doubts that other women would be capable as engineers, almost as if denying the abilities of their own sex. Their attitudes may be as a result of assimilation and socialisation into engineering cultures. Similarly, the championing of women's issues by women in senior management has not been found to be a mainstream role valued by organisations and until it is, why should women at senior levels be expected to (Mavin, 2006)? The career success of women in male dominated occupations would therefore be unlikely to promote the interests of fellow female colleagues (Mavin, 2006). There was also antagonism found towards women in senior roles who had de-stabilised the established gendered order by moving place, becoming more "male than the men" and not using their senior management position to fight the way for other women (Mavin, 2006).

Women get condemned by other women for being inappropriately feminine in male-dominated environments, as found by a study by Watts (2007) on construction industry sites. Some women, though condemning aggressive male behaviours such as sexual harassment and inappropriate humour by men towards women, felt that women who found themselves in these situations were partly to blame and cited various forms of "inappropriateness" such as wearing short skirts and too much make up. This implies that femininity should be downplayed in such an environment in order to avoid attracting any unwanted attention from male colleagues (Watts, 2007).

It is disconcerting that studies reveal very little evidence of solidarity amongst women in male-dominated professions and environments. With the low number of women in these environments, it would seem to be the probable strategy for women to stick together, but it appears that women battle on individually and do not necessarily feel inclined to support other women in similar environments.

2.5   CHAPTER SUMMARY

The literature review has highlighted prominent trends and themes regarding women working in the context of male-dominated occupations.   The opening discussion illustrated that women's status quo within the organisation can be considered a result of their assigned social roles outside of the work environment.   Other background factors that contribute to women's entry into the workplace, and specifically into male-dominated occupations, include race, socio-economic status, family, education and culture.   The analysis of women's career patterns demonstrated that their career trajectories differ substantially from men's primarily due to work-family conflict, in light of women's additional responsibilities as primary caregivers.   Organisations were also found to play a fundamental role in providing structures and practices conducive to accommodating women's unique career patterns.

The literature surrounding women working in male-dominated environments established that women are far from being completely integrated into male-dominated occupations without being marginalised, facing discrimination, experiencing sexual harassment, and overall, being viewed as unequal to male counterparts.   Women are often excluded from informal organisational networks, placing them at a constant disadvantage as these networks are valuable in terms of workplace relations and promotion opportunities. Mentoring relationships are an important tool in the career growth and support of women in male-dominated environments.   Literature revealed that women valued these relationships, to this end, they went to the extent of seeking for mentors when formal mentoring arrangements were not available within the organisation.   However, the mentoring relationships did not always yield the results that women expected as they felt male counterparts gained more from similar mentoring relationships.

The majority of literature illustrated that career progression in male-dominated occupations was still highly gendered in favour of males.   Most studies reported females progressing qualitatively and quantitatively behind their male counterparts both in terms of hierarchical level and remuneration. Women are generally not entrusted with challenging tasks which are often the means through which promotions are decided. The inability to work long hours and travel extensively also puts women at a disadvantage in terms of career progression. Finally, the coping mechanisms that are often employed by women in order to better fit within their environments include adopting male characteristics, accepting the predominant male culture, denying the prevalence of sexism and sexual harassment and accepting the status quo in order to avoid being seen as a deviant or victim within the workplace.

CHAPTER 3

ARTICLE

THE EXPERIENCES OF WOMEN IN MALE-DOMINATED PROFESSIONS AND ENVIRONMENTS IN SOUTH AFRICA

ABSTRACT

Orientation – Women working in male-dominated professions and environments face experiences that are unique to their counterparts in more gender-balanced and female-dominated professions. The nature of these experiences affects women's integration and potential success in male-dominated professions.

Research purpose – The purpose of this research was to explore the challenges and coping strategies of women working in male-dominated professions and work environments.

Motivation for the study – To enhance employment equity in historically male-dominated professions and environments, an understanding of women's experiences in such environments is beneficial. This will enable the identification of effective employment equity strategies geared towards women who pursue male-dominated professions.

Research design, approach and method – This exploratory qualitative study was conducted within the interpretive research paradigm. A purposive sample consisting of five women working in identified male-dominated professions and environments was utilised. In-depth interviews were conducted and data was analysed using grounded theory.

Main findings – The main findings indicate that the central theme pertaining to women working in male-dominated professions and environments are the types of challenges inherent in their work settings. The main challenges found were the following: discrimination and bias, physical and health related difficulties experienced, negative self-perceptions resulting from working in male-dominated environments, lack of real transformation and work/life balance. The coping strategies these women employed to succeed in their professions consisted of: the use of femininity, adopting male-type characteristics, and mentorship. This led to the motivation for these women to remain in current male-dominated career. A conceptual framework depicting the findings was developed.

Practical/managerial implications – The findings may guide organisations in developing and implementing effective and well informed policies, strategies and initiatives geared towards the attraction, integration, retention and appropriate support of women who are or who wish to be employed in historically male-dominated professions and environments.

Contribution/value-add – This study provides current insight into the plight of women working in male-dominated professions and environments in South Africa.

Key words: qualitative research; grounded theory; male-dominated; women; work

INTRODUCTION

Key focus of the study

The experiences of women within the work context differ distinctly from those of their male counterparts and have, to date, been explored from a very narrow perspective. According to Finnemore and Cunningham (2005), the history of women and work has predominantly been recorded through the eyes of men. Studies of women in employment have historically focused on investigating preconceived concepts and themes, and these studies were predominantly conducted in environments where women are conventionally employed, such as domestic work and in education systems (Kretzschmar, 1995). Very few locally published studies in South Africa have taken a purely qualitative approach towards the experiences of women employed in historically male-dominated professions and environments in order to determine current emerging trends and themes. This study explores the plight of women working in historically male-dominated professions and identifies how the field of industrial psychology can add value to helping such women integrate and succeed.

Background to the study

The difficulty women may face in attempting to successfully penetrate historically male-dominated environments emanates from traditionally prevalent gender hierarchies and norms in family and social units. Historically, the inability to take into account the impact on women in the drafting of economic policies, originated from men dominating the process of national planning in business, government and labour sectors (Taylor, 1997). Still, despite the

emergence of capitalism in the fifteenth to eighteenth century threatening patriarchal control as it broke down many old institutions, the household unit has been traditionally structured in a manner that continues to make males the dominant sex (Hartmann, 2010). Hartmann (2010) therefore argues that male workers play an important role in maintaining gender divisions in the labour process.

Increased access to education has allowed women to challenge past practices and stereotypes, equipping them to enter the workplace for paid work on a more competitive basis (Finnemore & Cunningham, 1995). There are powerful economic incentives for women to move into historically male-dominated occupations because the cultural and institutional devaluation of characteristics and activities associated with women have often resulted in poorly rewarded traditional female work activities (England, 2010).

Women who aim to defy conventional career patterns followed by the female sex and choose instead to pursue careers within male-dominated occupations are frequently met with obstacles and often return to a career more accommodating to their roles as primary caregivers (Frome, Alfeld, Eccles, & Barber, 2006). Previously, due to the lack of representation of females in senior positions, gender issues were not often considered high priority (Finnemore & Cunningham, 1995). Organisations are still structured and function in a manner that does not always support women's career patterns and their need to integrate work with family responsibilities (Frome et al., 2006). It is both unfortunate and unacceptable that young girls and women are not able to always follow through on their career plans due to inflexible male-dominated occupations, even at the turn of the new millennium (Frome et al., 2006).

Generally, men are extrinsically driven by a desire for status, power, money, winning power games and social comparisons, whereas women present themselves as being intrinsically motivated by a desire to do a good job and contribute to organisational functioning (Davey, 2008). Women's characteristics, natural behaviours and values need to be legitimised and given a platform within the organisation, thereby levelling the playing field for both sexes without any discrimination.

Research purpose

Historically, research of women's employment, specifically in South Africa, has been conducted using the approach of studying specific pre-defined phenomenon such as: the work-home interaction of working females (Van Aarde & Mostert, 2008); stress in high level

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career women (Van Den Berg & Van Zyl, 2008); gender perspectives on career preferences (Urban, 2010); women and affirmative action (Mathur-Helm, 2005); challenges facing woman principals in South Africa (Moorosi, 2007); gender differences in perceptions of workplace progression (Llyod & Mey, 2007); and issues of gender and race in the workplace for South African quantity surveyors (Bowen, Cattell, & Distiller, 2008). Particular themes have also been tested through studies regarding legal and legislative policies that directly affect women (Walker, 1990; Bazilli, 1991).

Very few, locally published, studies in the South African context have taken a purely qualitative approach to experiences of women employed in historically male-dominated professions. The purpose of this study was therefore to explore the experiences of woman working in male-dominated professions and environments to determine emerging trends relating to the challenges these women face and discovering new ways of coping within these environments.

Trends from the research literature

Studies relevant to the foregoing discussion have been conducted both locally and internationally. The dynamics within male-dominated environments differ substantially from those in more gender mixed and female-dominated ones. In male-dominated occupations, men have more resources and definitional power to enforce discriminatory practices, policies and ideologies (Damaske, 2011). Given that women remain the primary caregivers within the family, while they simultaneously juggle the demands of their workforce participation, merely encouraging young women to obtain male-type professional qualifications may be insufficient for eliminating inequality between the sexes (Danziger & Eden, 2007). A study revealed that in the freshman year of university, both sexes shared a similar pattern of aspirations and goals; however, during later academic years females reduced their occupational aspirations and revealed a stronger preference for a convenient balance between work and other facets of life (Danziger & Eden, 2007).

In spite of government policies and legislation created with goodwill in favour of women, their success is highly depended upon management strategies (Mathur-Helm, 2005). In the construction industry, for example, women reported a lack of available funding targeted at improving the status and qualifications of female employees (Madikizela & Haupt, 2009). This suggests there is still a deficiency of visible and tangible commitment to empower women in organisations, despite legislation such as the Employment Equity Act (Madikizela & Haupt, 2009).

In order to be successful in male-dominated environments, women have to behave in ways unnatural to them. They are required to take on male characteristics and interactional styles to be competitive in the organisational context, and this alone puts them at a disadvantage (Akingbade, 2010). Success in organisations is constructed as masculine and political, as found in a study of female graduates in a male-dominated field (Davey, 2008). Organisational politics were found to be gendered and masculine in nature; the accounts emphasised political activity as a form of sociability based on masculine rather than feminine identity and interaction style. Behaviour described as masculine included political game playing, aggressiveness, backstabbing, point-scoring, overconfidence and stitching people up (Davey, 2008). Some authors (Guerrier, Evans, Glover, & Wilson, 2009) have suggested that women need to find ways of adjusting to work cultures, and hybrid jobs (combining technical and traditionally female skills) should be regarded as a means of providing new opportunities in male-dominated fields, such as in the IT industry. These hybrid jobs, which combine technical and traditionally female skills, are suggested as a new and acceptable way for women to work in male-dominated environments without compromising what women see as their femininity (Guerrier et al., 2009).

Women have been found to move from male-dominated to female-dominated occupations as a result of negative psychological experiences within male occupations, experiences that include sex discrimination, self-efficacy and sex role ideology (Damaske, 2011). There are still feelings of stereotyping and under-utilisation of women in male-dominant occupations (Feyerherm & Vick, 2005). As a result, women feel they are not taken seriously, do not receive challenging opportunities and subsequently do not receive the pay or positions commensurate with their talents (Feyerherm & Vick, 2005). On the other hand, some males feel that women are responsible for their own disadvantage and should therefore feel guilty for initiatives such as affirmative action which are perceived as reverse discrimination towards men (Feather & Boeckmann, 2007).

Mechanisms women use to cope in male-dominated environments include mentorship and adopting participatory leaderships styles such as being caring, fair and encouraging (Chovwen, 2007). This is in line with the notion of women being expected to exhibit behaviours that are consistent with the female sex (Chovwen, 2007). Contrary to this, Davey (2008) revealed that in order to cope and compete in a politically masculine environment, female graduates reported having to adopt characteristics and behaviours that were "unnatural" to them and unrelated to organisational success such as self-seeking and individualistic behaviour. Women appear to be caught between either resisting or accommodating masculine politics (Davey, 2008).

Research problem and objectives

For women, the difficulty of penetrating historically male-dominated professions, coupled with the unwillingness to accommodate them, makes the environments un-appealing for enticing substantial numbers of women into these fields. Further, a lack of understanding challenges women face and how they cope in these environments may underlie the poor integration and advancement of women in historically male-dominated professions. As such, the main research objective was to explore the experiences of women in historically male-dominated professions and environments in South Africa, specifically to ascertain the challenges they face and the coping strategies they deem effective. The findings were also developed into a conceptual framework.

The potential value-add of the study

Organisations that are trying to promote women's entry and success in historically male-dominated professions and environments need to have information on the dynamics and consequences of increasing the presence of female employees within these environments. Findings from this study will provide organisations with important information for the formulation of workable strategies and gender policies designed to ensure the success and sustainability of the co-existence of the two sexes in previously male-dominated spheres, without dominance or discrimination.

In the remainder of this article, the design followed during the research will be explained with reference to the research approach, strategy and methods. The findings will then be illustrated in terms of the three broad themes that emerged from the data namely: challenges for women in male-dominated professions coping strategies and motivation to remain in male-dominated career. These themes will be discussed with reference to sub-themes and related aspects.

RESEARCH DESIGN

Research approach

This study was qualitative in nature and the research approach was based on interpretive grounded theory. In contrast to positivism, the aim of qualitative methods is not to discover a set of causal laws to predict general patterns of human behaviour or a regular order of the

world that is agreeable and acceptable to all (Esterberg, 2002). Rather, the purpose of qualitative methods is to discover important questions, processes and relationships, not test them (Esterberg, 2002). Qualitative studies encourage informants to introduce concepts of importance rather than adhering to subject areas that have been pre-determined by the researcher (Aluko, 2006; Marshall & Rossman, 2006).

Interpretive grounded theory enables qualitative data collection, analysis and theory to stand in a reciprocal relationship to each other (Strauss & Corbin, 1990). As such, the researcher simultaneously analyses data whilst collecting data and whilst developing and exploring theories or hypotheses emerging from the data (Strauss & Corbin, 1990). Grounded theory is therefore consistent with the iterative nature of a qualitative type of study (Terre Blanche & Durrheim, 1999) allowing the researcher a flexible approach to manage and schedule data collection, interpretation and writing.

Ontological assumptions shape the kind of information captured, recorded, interpreted and conveyed as it presents the nature of reality. The ontological dimension of this study, in line with the interpretive paradigm, assumes that people's subjective experiences are real and should be taken seriously (Terre Blanche & Kelly, 1999). As such there is an internal reality of subjective experiences (Terre Blanche & Kelly, 1999).

Epistemology deals with the nature, sources and processes of knowledge and knowing (Baptiste, 2001). It is the study of what knowledge is and how it is possible, focusing on how we can obtain knowledge and how we can reason (Nel, 2007). As such, epistemology focuses on how the researcher can (and ought) to obtain knowledge, and how we can (and ought) to reason (Nel, 2007). The epistemological dimension underlying this interpretive study assumes that others' experiences can be understood by interacting with them and listening to what they say. As such, there is a subjective relationship between the researcher and the subject (Terre Blanche & Kelly, 1999).

Research strategy

The use of multiple case studies combined with grounded theory constituted the research strategy. This type of strategy emphasises detailed contextual analysis of a limited number of events or conditions and their relationships (Dooley, 2002) in an iterative and flexible manner (Strauss & Corbin, 1990). The experiences of being a woman working in a male-dominated environment were elicited through in-depth interviews. The unit of analysis in this

study was individual women working in historically male-dominated professions for a minimum of one year.

Research method

In this section, a discussion follows on the techniques and procedures used to conduct this study.

Research setting

The women participating in this study represented three organisations in the private sector and one in the public sector. In assessing the suitability of a setting, historical and current patterns in terms of the prevalence of female entry and occupation in the respective participants' professions was considered. Prior to the interview, information was gathered from the participants regarding their work settings to confirm whether or not the settings adhered to the requirement of male-domination. All settings were confirmed and acknowledged, both by the researcher and the research participant, to indeed be male-dominated due to the limited numbers of women historically and currently occupied therein. All subjects were interviewed at their place of employment upon their request, with interviews conducted in private areas ranging from boardrooms to offices.

Entrée and establishing researcher roles

In contrast to quantitative research whereby the researcher is an objective observer, the researcher in qualitative research is presumed to learn the most about a situation by participating and/or being immersed into the research (Aluko, 2006). Four of the research participants were referrals by colleagues, friends and family save for one who was approached directly via email without any intermediary. The intermediaries provided only a brief introduction to the research participants and did so in their personal capacity. Thereafter, the potential participants were approached and contacted directly for a further discussion about the study.

All the research participants signed a detailed consent form outlining all relevant parameters of the study, indicating their willingness to participate. Additionally, all participants were interviewed in their personal capacities and therefore no consent was required from their respective employers. The issue of confidentiality was reiterated to the participants prior to and during the interviews.

Sampling

The sampling used in this qualitative study was purposive rather than random. The researcher selected individuals and sites for study as they purposefully informed an understanding of the research problem and central phenomenon being researched (Babbie & Mouton, 2001). Purposeful sampling is appropriate when the researcher needs to select a sample based on her own knowledge of the population, its elements and the nature and purpose of the research aim (Babbie & Mouton, 2001).

The purposive sample was drawn from a population of females working in identified male-dominated professions and environments. Five women were targeted to participate in accordance with the recommendation of Babbie and Mouton (2001, p. 287) that an appropriate sample size for a South African master's level qualitative study is "between five and twenty to twenty five". This recommendation, along with the exploratory nature of the study, influenced the number of participants selected. The description of the research participants is tabulated below.

Table 1: Participant Details

Research Participant (RP)	Profession	Industry	Race	Years with Company	Marital Status	Children
RP1	IT Project Manager	IT	White	10>	Widowed	Adult Children
RP2	Chief Safety Officer	Mining	White	10>	Single	Minor Children
RP3	Electrical Engineering Lecturer	Education	Asian	<2	Married	None
RP4	Locomotive Operator	Mining	Black	2>	Single	None
RP5	Electrical Engineer	Energy	Black	2>	Single	None

Data collection methods

Unstructured qualitative interviews were used as the main method of data collection. In grounded theory, data analysis and collection are interrelated processes, enabling the research process to capture potentially relevant aspects of the topic as soon as they were perceived (Strauss & Corbin, 1990). Structured methods would have been ineffective due to procedural reactivity, which means that the very artificiality of highly structured methods

would have led the respondents to remove themselves from the situations in which they normally act (Wilson, 1993). The unstructured nature did not mean that the interview went unsystematically or that there was a pursuing of any topic that emerged; the researcher went in with a general plan of enquiry without steering the conversation by means of pre-set questions (Babbie, 2001).

Recording of data

The interviews were recorded in two ways: with a digital voice recorder as well as notes taken manually during the interview. Both methods were used concurrently in order to enhance the data recording process. The voice recorder enabled the interview to be recorded without the distraction of trying to capture in writing every single word spoken (Terre Blanche & Kelly, 1999) and the manual notes were used to capture detail and behaviour that did not come across verbally. Thereafter, the interviews were transcribed verbatim by the researcher into Microsoft Excel to make the data manageable.

Data analysis

Coding procedures from grounded theory were used in the data analysis. Coding refers to the operations by which data are broken down, conceptualised and put back together in new ways to subsequently enable theories to be built from data (Strauss & Corbin, 1990). The three main coding strategies utilised were open coding, axial coding and selective coding (Strauss & Corbin, 1990).

The first coding procedure used was open coding, during which I named and categorised phenomena evident from a line by line examination of data. This entailed working through each paragraph, sentence, idea and event and conceptualising sections of data representing specific phenomenon (*cf.* Strauss & Corbin, 1990). The line by line data analysis was conducted in Microsoft Excel and each sentence/paragraph was named with a code based on the idea or theme that emerged from that sentence/paragraph. From this, 171 codes emerged, where after similar codes were collapsed and grouped together to make the number more manageable resulting in 21 codes. Data saturation was reached when I could not determine any more distinctive codes in the latter interviews i.e. codes that were distinctive from those emerging from the initial interviews. Similar themes started to emerge with every subsequent interview.

Next, during axial coding, categorised data were combined in new ways by making connections between the categories as well as utilising a coding paradigm involving the

identification of causal conditions, context, action/interactional strategies and consequences (*cf.* Strauss & Corbin, 1990). This entailed putting back data in a relational form.

The last phase in grounded theory analysis entailed selective coding, during which a theme was selected as the core theme and then systematically related to other themes and their sub-categories. Through selective coding, the interrelationships amongst themes and sub-categories were thus validated and categories were further refined and developed (*cf. Strauss & Corbin*, 1990). This process integrated the whole theory and was similar to axial coding but just done at a higher and more abstract level of analysis leading to potential rudiments of a theory. The initial 21 codes were thus further broken down and combined resulting in three main themes with respective explanatory sub-categories underlying each theme. Validating the theory against the data collected then grounds the theory (Strauss & Corbin, 1990).

Strategies employed to ensure quality data

The worth of any research endeavour is evaluated by peers, expert reviewers and readers (Krefting, 1991). In this study, the quality of data was assessed using trustworthiness criteria, including credibility, transferability, dependability and confirmability (Guba & Lincoln, 1994). The credibility of the study was ensured by making certain that information rich participants were adequately identified and described. The transcripts were checked against the live recordings by the researcher several times in order to ensure the credibility of the data. The comprehensive description of the research process, along with thick detailed descriptions in data of the context of the study, may facilitate transferability. Confirmability, whereby the findings of the study can be confirmed by the findings of another, was ascertained in the integration of the findings with relevant literature. Other strategies that were employed to ensure the rigour and quality of the data collected were peer and research supervisor examination throughout the process.

Internal consistency (Neuman, 2000) refers to whether or not the data are plausible given all that is known about a person or event, eliminating common forms of human deception. The data satisfied internal consistency as the pieces of information given fit together into a coherent picture and the participants' actions and data were deemed consistent. Reliability in qualitative and field research is dependent upon my insights, awareness, suspicions and questions as a researcher (Neuman, 2000). I asked myself questions such as: "Does the person have a reason to lie?", "Is the participant in a position to know this information?" and "Is she just saying this to please me?"

Due to the richness of the data collected during the interviews, the data analysed were grouped into three major themes consisting of several sub-categories or sub-themes. Each theme and subsequent sub-themes are described in detail in the next section. Relevant literature was integrated during data analysis and is reflected in the discussion of themes and sub-themes. Verbatim extracts from the data collected ground the findings in the data and provide credibility to the results. In reference to the verbatim extracts in the text, the research participants were allocated numbers: RP1, RP2, RP3, RP4 and RP5. The findings are followed by a discussion and development of a conceptual framework.

FINDINGS

The findings as depicted in the themes and sub-themes are outlined in this section and summarily presented in Table 2 below.

Table 2: Grouping of themes into sub-themes and related aspects.

THEMES	SUB-THEMES

Challenges	• **Discrimination and bias**
	   o Lack of infrastructure, resources and policies
	   o Spill over of stereotypical sex roles and expectations
	• **Physical and health related difficulties experienced**
	• **Negative self-perceptions resulting from working in male-dominated environments**
	• **Lack of real transformation**
	• **Work life balance**

Coping Strategies	• **Use of femininity at work** • **Adopting male-type characteristics** • **Mentorship**
Motivation to remain in current male-dominated career	• **Optimistic expectation of future career possibilities in historically male-dominated environments** • **Enjoyment of current work role and challenges** • **Successful career experiences**

Challenges for women in male-dominated professions

Women in male-dominated professions are faced with a host of challenges daily as they strive to make it in their respective careers. Their male colleagues are often unwilling to

integrate and accommodate them, and their environments seemingly determined to maintain the masculine status quo. The theme of challenges experienced by women as found in this study consisted of five main sub-themes. These sub-themes included: discrimination and bias; physical and health related difficulties experienced; negative self-perceptions resulting from working in male-dominated environments; lack of real transformation and work/life balance.

Discrimination and bias

The sub-theme of discrimination and bias as experienced by women in this study was two-fold. It was evident in lack of infrastructure and resources and in the spill over of stereotypical sex roles and expectations relating to women.

Lack of infrastructure, resources and policies

From an infrastructure and resource perspective, women seemed to struggle with basic facilities and resources, as basic as change rooms and toilets.   This resulted in uncomfortable and personally embarrassing situations as related by RP2: "*I arranged with the mine captains and they gave me their change house (there weren't any for women[1]), I had to wait until they finished, then they would give me the key and I could change. And the toilets ….I always had a guy that I asked to watch over me (there were no toilets for women)".* Even in instances where facilities were provided for women, they in this study, proved to be inadequate in relation to those of male counterparts.   RP4 recounts the struggles experienced with inadequate facilities provided for women: *"Our change house is small and the men's change house is big…you would find that when you get into the change room you don't have a locker, you have to go home with a big bag with gumboots and overalls and everything there. Sometimes when you find a locker, it's so small that you can't put your gumboots and overalls in there so you only put the clothes in there but the gumboots you try and put it somewhere".*

The over-arching need to address the accommodation of women by means of effective and visible policies, practices and initiatives did not seem to be at the forefront within the organisations that the participants belonged to.   None of the participants alluded to any

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[1] Words added in brackets are the words of the researcher added to clarify the sentence construction of the participant in the context of the discussion. Verbatim discussions included redundant wording such as "uhhmm', "you know" etc. These were omitted from the verbatim extracts also to enhance the flow and ease of reading.

specific initiatives directed at women within their respective environments that they were aware of. This illustrated that for organisations within this study, women's concerns within male-dominated professions are not being systematically dealt with. This is supported by what RP2 relayed in relation to trying to assist organisations in this regard: "*I started a company for women in mining with the first black lady that was my first black lady (employed) underground (and she) also (had) a mine overseers ticket… We started this company to be there for women more for the emotional side of the training … but at this stage the mines don't believe in the females, I had to close down and get back into a job and that's my passion (women in mining)*".

The lack of interest demonstrated by organisations with regards to women's initiatives, as experienced by RP2, is an indication that even with women entering male-dominated professions, organisations are not prioritising the allocation of resources to better enable these women. This was in spite of being presented with viable proposals by individuals who themselves have first-hand experience, knowledge and passion in this regard. According to Finnemore and Cunningham (1995), poor presentation of females in senior positions results in the low prioritisation of gender specific issues and needs. The under-representation of women has also been found in studies of the male-dominated gaming industry in the United Kingdom (Prescott & Bogg, 2011) as well as in the construction industry in South Africa (Madikizela & Haupt, 2009).

One overtly discriminatory policy towards women in male-dominated professions that stood out in the data was the practice relating to maternity benefits for underground women at one of the organisations, as relayed by RP4:

> *You are not allowed to work underground when you are pregnant, (or) allowed to be on the shaft because women when they (get) pregnant they get paid for (the first) five months (of pregnancy) and the other (remaining) months you just sit at home without getting paid. As soon as you say "I am pregnant" they make (you sign) a form and say go home. They pay you for (the first) five months (of pregnancy) and the other months (leading up to the birth and after birth) you don't get paid...After birth many women come back (and) when you go and talk to them you find out that they have money problems.*

Besides being discriminatory, this practice fails to maximise the capabilities of the labour force. Rather than being sent home at the onset of pregnancy, it is more productive to have a policy in place that enables pregnant women to be deployed to assist in overwhelmed

departments on the surface. This will enable the women to remain employed and only take maternity leave just prior to giving birth. This will also alleviate the financial distress they face under the current policies. This practice illustrated that women were still marginalised underground and their presence not significant enough to warrant fair policies as basic as maternity leave.

Spill over of stereotypical sex roles and expectations relating to women

The assigned roles and stereotypes of women in society transcend into the workplace and women were expected to adhere to them. The idea of women defying the cultural norms and entering into gender atypical roles within male-dominated professions was still a novelty to some, as explained by RP5: *"When I told my own grandfather that I was going to study engineering, he was like 'is that really work for a woman?'"* Men are still viewed as the dominant figure and the breadwinner within the family unit and the expectation appeared to be for women to be submissive to the men and assume careers more orientated to domestic stereotypes for females.

African cultural norms of female respect and submission towards males and elders were not suspended for the sake of the work context, but were still expected to apply to these women in their workplaces, as relayed by RP4: *"You know South African men want you to respect them. If you say something you must say it with respect, if you want to show them (they are) wrong don't shout (at them)".* At times, these cultural norms appeared to be used as an excuse to bring women into submission in a manner unrelated to the nature of work, and women in the study therefore applied some of the norms while rejecting others, as depicted by RP4: *"The only people that I respect (are) the elders, but if you are young, you are my age you don't have to tell me to bow down like my father".* Cultural norms that stereotype women were not only unique to African cultures but are also found amongst the white cultures, as articulated by RP2: *"As a shift boss I battled, because the guys and most of them are the white South African guys, they believe that you should be in the kitchen pregnant and you cannot do anything".*

Superstitions based on cultural beliefs also permeated the workplace to the detriment of women's ability to gain acceptance, as RP2 discovered: *"Previously they (African men) believed that if a woman visited a work place, its bad luck, people are going to die… that there would be fatalities (deaths) in that section. So I had to fight against the culture".*

Mathur-Helm (2005) found that management strategies tend to treat women differently, specifically negatively, due to social constructs, attitudes, norms, values and stereotypes determined by corporate culture. Predominant social constructions about sex roles thus seemed to bias employment policies and management strategies to the disadvantage of women working in male-dominated environments. Women still have to contend with the problem of managing themselves and fulfilling both their age old stereotypical obligations as homemakers and their obligations as paid workers (Franks, Schurink, & Fourie, 2006).

From the findings, the acceptance of women into male-dominated professions and environments appeared to be on the condition that they adhere to their assigned roles and stereotypes in culture and society. These culturally assigned roles paradoxically were also used as a basis for discrimination and bias against women in the workplace as a means of ensuring the prevailing dominant role of men remained undisturbed. The minority status of women in male-dominated professions, as is evident in the two sub-themes discussed illustrated that despite their presence in their respective organisations, women in this study were still contending with integration and success within environments where the discriminatory domination of men has not been redressed.

Physical and health related difficulties experienced

The physical nature of the work, as well as the emotional strain of working in a male-dominated environment appeared to have negative effects on the physical and mental well-being of women related to work. RP2 stated: "*I think the stress was too much for me and I started to have problems with my female hormones and I had operations... I started menopause at 42 years but we didn't know it, I was feeling very very bad and they did all the tests. They said the underground, heat, the environment and the stress levels (were) taking a toll*". Labour intensive work was taxing on the women's bodies and resulted in issues of fatigue and body pain, as expressed by RP4: "*I am less tired (working an office job) than underground, you know when I came from underground I used to sleep a lot, when I got home I didn't want (to do) anything I just wanted to sleep and somebody to massage (me)...*".

Women's monthly menstrual cycles could not be ignored as a factor in their performance in labour intensive work, as highlighted by RP2: "*I think the biggest challenge for the females is you know your monthly cycles, there's nothing that's in place for females to cope really and it influences the production site also with our hormones and our moods*". Physical and mental well-being challenges were not exclusive to labour intensive work, as illustrated by one of the subjects working in the IT environment, RP1: "*Being the only project manager before they*

employed (my boss) I actually burnt out. My body just said stop, that's it, and I was off work for a long time".

In relation to the findings, a study of medical doctors by Walsh (2012) found that female doctors were significantly more likely to experience burnout from their work than their male counterparts, exacerbated by the spill over effects of work on out-of-work activities. Similarly, health problems related to career were found to be common among females in a study by Muhonen (2011). Participants developed symptoms such as heartburn, ulcers, pain and tension in the shoulder, neck and body all in reaction to stressful situations at work. A study on female civil engineers revealed that some participants were brought almost to the point of total emotional and physical collapse due to the unpredictable nature of their work environments (Watts, 2009). This study showed the presence of health effects experienced by women as a result of the nature of their work. I find this not surprising given the perpetually stressful nature of these women's environments; environments that are without any formal coping mechanisms made available by organisations.

Negative self-perceptions resulting from working in male-dominated environments

Working in a male-dominated environment incited several negative self-perceptions for the women and were a direct result of the nature of their work environment. Feelings of low self-confidence were not surprising as the data illustrated a tendency towards low performance expectations by male colleagues in regard to their female colleagues, as explained by RP5: *"If a guy does a presentation and does it well, there is no comment, but if you do the presentation well they will be like 'oh wow, well done' like they were not expecting you to be able to do it".* Similar perceptions of female incompetence were experienced by RP2: *"They didn't believe in a female, so I had to work twice as much as a male to prove to them".* RP1 also stated: *"They sort of look down (on) you and they talk to you like you are an idiot first of all, they talk to you like you are a child secondly".*

The lack of moral support within their work environments led women in this study to experience self-esteem issues in relation to their work, as evident with RP2: *"I think the biggest problem was my (low self) esteem, the way that I thought they perceived me and the way that I perceived myself in this position".* Comparably, RP1 stated: *"They seem to look down at you, you know, you can't cope and all... I mean after a couple of years it gets to you and you do eventually break".*

One of the consequences of low self-esteem is that it led to low job self-efficacy and low competency self-perceptions in women. This in turn possibly had a negative effect on their career aspirations and the women's abilities to progress within their respective professions. A reluctance to climb the echelons of male-dominated professions seemed to be present amongst the subjects, as is evident in RP3's words: "*But you could say that maybe the two are related because I am a woman maybe I am reluctant to go into industry, so therefore they are looking at me like 'ok you have no industry experience'*". Some of the subjects resolved to stagnate in their positions to avoid the stress of pursuing a higher position in a male-dominated world, as expressed by RP1: "*No (I do not intend to go further up the ranks) I'm actually not interested. I've got no such aspirations, I should but I don't. I actually can stay there till I retire*". Other subjects concerned about their own competencies to perform in more senior roles opted to move into less demanding roles, though still willing to remain in male-dominated environments, as illustrated by RP2: "*I thought that it would be easier the higher you go up but its more challenging, it's more difficult. The challenge is more, the further I went from my team the less successful I became*". Some felt their competencies were less geared at the "hard-core" male roles and more towards service roles which are still within male-dominated environments but slightly less competitive and demanding. RP4 said: "*As for promotion, I don't want anything that has to do with production, I want something with safety because I think I am good especially with talking to people*".

Self-efficacy has been shown to be high in successful women, as illustrated by Hinson, Otieku, and Amidu (2006) in their study of female accountants in a male-dominated accounting industry, the belief in their self-efficacy was a factor that was found to enhance their career success. Female employees have been found to have fewer challenging job assignments in relation to their male counterparts, suggesting that task allocation decisions are not gender blind (De Pater, Van Vianen, & Bechtoldt, 2010). This also supports the findings in this study that there is a lack of confidence in women's abilities.   Data in this study is also comparable to Michie and Nelson's (2006) findings. In their study, differences in levels of occupational self-efficacy between males and females in the male-dominated IT field were significant barriers to women choosing and persisting in non-traditional careers within IT, further exacerbated by men's low confidence in the technical abilities of women (Michie & Nelson, 2006).

The nature of male-dominated professions and environments caused the research participants to develop negative self-perceptions about themselves in relation to their work, perceptions such as low self-efficacy and low self-esteem. This stemmed from both overt and subtle practices aimed at demonstrating the prevailing lack of confidence in women's

competencies to perform effectively in male-dominated environments. Although none of the women in the study had any intention of leaving their male-dominated professions, they demonstrated a reluctance to progress into the more intensely competitive male roles as a result of these negative self-perceptions. Rather, they opted for the "softer" roles which were still positioned in male-dominated environments.

Lack of real transformation

There appeared to be willingness within organisations to change and accept women on a superficial level, but in practice, the women in this study experienced very little genuine accommodation and found themselves having to adjust to fit in with their male counterparts.

The data showed vindictive and punitive attitudes and behaviour towards the women in this study who determined to succeed in male-dominated professions. Remarks from male colleagues were present in regard to the need for women to prove themselves worthy of their male-dominated jobs as well as demonstrate that they could carry their weight as articulated by RP4: *"Coming to work it was tough because men wanted us to work like them, they won't say that 'you are a man I will give you two rails and (you are a woman) I will give you one rail' ..No, its two (rails) each"*. Some even vindictively refused to offer assistance in an effort to show women that there is no place for gender leniency. RP4 provides an example: *"Some (men) are stubborn, even if he passes you and sees that you are struggling (he) will not help you. They (men) say you said you wanted equality, this is the equality that you wanted"*.

Further evidence of a lack of real transformation was illustrated in sabotaging behaviour by men towards some of the subjects. Women were purposefully isolated in a manner that was detrimental to their careers, as evidenced in the words of RP2: *"They don't share their knowledge, I think they feel threatened, I don't know and they will nail you to get rid of you. Your head of department also doesn't believe in you, so where they can nail you, they nail you, so it's a battle the whole time"*. According to RP2, the lack of transformation was also manifested in the underlying refusal to assist women in succeeding in male-dominated professions: *"There was no assistance for you as a newly appointed mine overseer. There was no practical guidance or someone that (could) look over you. What made me afraid is that I (was) taking decisions that (could) influence someone's life and I (could) kill people and that made me afraid"*.

Women are prejudiced, at the organisational level, by traditional and deeply embedded patriarchal values and practices that devalue transformation processes aimed at achieving

gender equity (Chisholm, 2001). Authors like Chovwen (2006) assert that without transformation in the organisation's social and cultural infrastructure, especially through the inclusion of gender issues in socialisation and orientation packages, it may be increasingly difficult to retain incumbent and attract new comers. Yet the data revealed an unwillingness of men to relinquish the masculine culture in order to incorporate female colleagues. There appeared to be resentment by males towards female colleagues, who through their entrance into the environment were ultimately threatening to upset the prevalent masculine culture with their presence and their abilities.

Work/life balance

The different roles that women play emerged as a source of conflict in relation to their careers; they regularly need to balance being primary caregivers, having domestic responsibilities and being a career woman.

Some interesting data emerged relating to work/life balance. Three out of the five participants did not have children and yet this did not exempt them from issues and concerns relating to work/life balance. Even in the absence of children and marriage, women still had a prominent role to play within the household, and this spilled over into their work. RP5, who was not married but living with her partner, highlighted that she still had duties that she had to attend to domestically. She expressed how balancing work and home was overwhelming with men, for the most part, still maintaining that the obligation of domestic duties was towards women. RP5 relayed the following:

> *We both get home at the same time...at like 7pm, then he can go and sit on the couch and then I still have to now start slaving away at the stove, washing dishes and whatever and if I say 'please can you do this' he will be like 'why am I supposed to do that?' I had now dedicated Saturday mornings to clean…and after six months I was like 'we are getting a helper or a cleaner' I need some time to take a chill pill. So I think that worries me more, the dynamics (at home) worries me more than in the office.*

RP3, who was expecting her first child, articulated how, career-wise, she could not progress at the same pace as her male colleagues. She felt this was due to her not having as much time available after hours to put into her work as compared to her male colleagues. Her time at home was often spent fulfilling household duties: "*I may still be able to do what the males do but it may take me longer because I have got other responsibilities when I get home. You*

know when I get home, I cannot focus on (work), I have got other things to focus on. Basically my time at work is all I have got". RP2 had similar observations with regards to work/life balance issues being a potential inhibiting factor of career progress for women: *"There are a few females that are really making a difference, but most of them (are) moving out of the production site the moment they get children because it's very difficult for you as a mum. I mean I was a single mum at that time (and) that's the biggest challenge".* Others had the perception that being unmarried and having no children made them more desirable to their employer as this would presume higher levels of commitment and less distraction emanating from work/life balance issues. RP4 states: "*The time that we got hired they saw that this one doesn't have a baby and she is 25 years old…".*

Metz (2005) supports RP2 and RP3's perceptions about the effect of children on career advancement; having children was found to weaken the relationship between working hours and managerial advancement. Further support of the negative relationship between children and career advancement was also found in a study of women on Wall Street which illustrated that attitudes towards women, especially mothers, contributed to managers' assignment of the best accounts to men (Roth, 2007). This, in turn made women appear like poorer performers owing to the fact that they received fewer opportunities to perform (Roth, 2007).

RP4's experience of struggling with work/life balance issues, despite being unmarried and without children, is sustained by Moorosi's (2007) study of females in male-dominated school principal professions. It was found that there is a cultural expectation for females to still perform family chores at home, regardless of their marital or motherhood status. It was evident in this study that role conflict exists for women as they are culturally expected to perform core household duties, regardless of differing marital statuses and whether or not they had children. There was also an acknowledgement that career advancement and attaining work/life balance were mutually exclusive, meaning neglecting aspects of one in order to focus on the other.

Coping Strategies

In male-dominated professions, women employ various strategies to cope and ultimately attempt to survive as well as attain some form of success within their environments. Due to the dynamics in these environments differing from those of more gender-neutral and female-dominated ones, women who follow male-dominated careers tend to be more creative, crafty and occasionally use unconventional means in an effort to survive their seemingly harsh

environments. The three sub-themes elicited were: use of femininity, adopting male-type characteristics, and mentorship.

Use of femininity at work

The data illustrated that women felt some of their more feminine attributes had a place and could be employed in an advantageous way in their male-dominated environments, evident in this statement by RP3: "*Everything is indoors, you are doing practical work, you are building circuits, you are doing things like that but sometimes maybe being a woman in (building circuits) is better because you are more delicate in a way"*. Another participant, RP5, was inspired and expressed appreciation at her female boss's efforts to bring a feminine touch into their male-dominated environment. She stated:

> *She (the female boss) made an effort to find out when our birthdays are and she sends out little emails saying happy birthday to so and so, thank you for your work. She took the effort to find our contact details and an emergency contact as well and she sent the list to everyone so that if you are looking for someone, you have their phone number there. She has just something motherly (about her); there is something nice about that.*

Others demonstrated some of their more domestic side in order to bond with their team members, as relayed by RP2: "*I spent the whole time bringing them sweeties".* Having an approach that was different to the men was not necessarily detrimental to women's positions in male-dominated environments, as believed by RP2: *"I think that as a woman you see the big picture. Not to be discriminating against men but they are more (narrow minded) and that's a big problem because you (as a woman) see the big picture and they don't see it, they will do for a hundred years the same thing".* There was even encouragement for women to embrace their femininity on the job, as one subject felt she had missed out on enjoying her femininity in an attempt to fit in. RP2 explained: *"What I do with my ladies is that I tell them, keep your feminine side… try to keep your feminine side because I have missed ten years of my life trying to be one of the males. If I could do it differently, I would have tried to change (my) image a bit but not (my) feminine side*".

Some women, on the other hand, used their femininity in a more manipulative manner by using sexual prowess in order to gain acceptance, as relayed by RP1: "*You have to be, what do they say.. 'eye-candy', put it that way, and then you are in the 'in' cliques. I might have a brain but as long as you're nice to look at you can be in the 'in' clique*". Another participant,

RP4, expressed anger at how other women at her work place used their menstrual cycle to manipulate male managers into giving them leniency or time off work: "*Some (women) come with excuses like 'I am on my period' (to get away from work), she is going to take advantage of the men because she knows that men don't know anything about us women. So she will come up and say I am on my period, (and) if its only men they will say 'ok go home'*".

For women, deciding on whether to display feminine or masculine characteristics as a coping strategy can be difficult, as discovered by Ragins, Townsend, and Mattis (1998). Women in their study reported that a perception exists that adopting a "feminine" managerial style brings the risk of women being viewed as ineffective, while adopting a "masculine" style makes them receive criticism for not being feminine enough. Interestingly, Watts (2007) found that women get condemned by other women for being inappropriately feminine in male-dominated environments, such as on construction industry sites. Some women, though condemning aggressive male behaviours such as sexual harassment and inappropriate humour by men towards women, felt that women who found themselves in these situations were partly to blame and cited various forms of "inappropriateness" such as wearing short skirts and wearing too much make up (Watts, 2007). The use of one's feminine side was found by women in this study to work to their benefit in certain instances, as these feminine characteristics could be used to gain ground and hence assist in their coping.

Adopting male-type characteristics

From participants' views, it was evident that they, at particular times, adopted male-type characteristics to such an extent that this became second nature to them. One of the women, RP2, recounted how she stunned herself when she came to a realisation of exactly how embroiled she was in this male-type behaviour: "*All the shift bosses were sitting in the office and a female passed that was nicely dressed, and usually what they do is that they just jump and check her out and I found myself also jumping up to check her out (laughs)*". Other characteristics adopted were the use of foul language, as relayed by RP1: "*Swearing is one of them (male characteristics) I have gained, I can swear like a sailor… there is a lot of swearing and I think you pick up on that and you eventually swear with them*". Adopting behaviours atypical to their sex seemed to help women fit better into their environments. RP2 stated that she observed women changing, diluting their femininity, in order to fit in with the men: "*You will see that all the females getting into a shift boss position they all got this thing, walk like a male, talk like a male*". RP2 had herself used this similar coping strategy in an attempt to gain acceptance and fit into the male-dominated environment: "*I was like them, I walked like them, talked like them, sweared like them*" she further stated: "*I think that the way*

that I coped the first time was the wrong way. I started drinking with them and partying with them".

Another indirect way that women took on male-type characteristics was through moderating and "diluting" their feminine looks. This was specifically doing away with anything that sexualised their looks in an effort to avoid unwarranted sexual attention or objectification by their male colleagues, as expressed by RP2: *"The main thing was that I didn't dress nice, I didn't put make up on so they don't see me as a sex object… if you look nice, the guys like to get into your pants and they don't see you as a working person".*

Aggressive behaviour usually attributed to male colleagues (Llyod & Mey, 2007; Okhakhume, 2008) was also assumed by some of the women as a strategy to survive, as illustrated by RP4: *"They (men) like to bully, they will make you do everything to prove to them that you want to be half as (good) as they are, and I will say No No No I am not going to work for (your) pay, everybody must work for their pay."* Other participants such as RP2 saw it as one of the only means to be taken seriously by male colleagues: *"I started with being very aggressive with them, stood up in meetings and told them straight what I like".* She further stated: *"Underground… the way that they perceive you makes a difference, you need to look aggressive and a challenge for them (if not) they will walk all over you, they are not going to listen to you".* RP1 expressed similar views: *"You know I actually don't think twice (about) giving somebody a pat on the shoulder or shoving them or doing something, you know we are fooling around when we actually do it".*

Similar to the experiences of some of the subjects, Davey (2008) found that in order to cope in a politically masculine environment, female graduates in male-dominated organisations reported having to adopt characteristics and act in a manner that was unnatural to them. In the same vein, women are required to take on male characteristics and interactional styles in order to be competitive in the organisational context and this alone puts them at a disadvantage (Akingbade, 2010). Going against the status quo or displaying behaviour considered deviant to the prevailing environmental norms is a position women in this study, for the most part, did not want to take. In order to fit better in an environment which was not willing to change to accommodate them, the women saw it fitting to adopt male-type characteristics in order to redress their feminine attributes, attributes perceived to be generally unsuitable and unacceptable in their male-dominated environments.

Mentorship

Mentorship was seen by women in this study to be one of the legitimate means within the organisation to gain support, guidance as well as attain career success. Mentors were viewed as support systems that assisted women in mitigating their often hostile environments and also as an effective coping strategy.

RP2 recounted how she went out of her way to provide mentorship for the younger women in her organisation. Her lengthy tenure within a male-dominated profession had provided her with much insight and valuable lessons learnt that she felt were important to pass on in order to assist the younger women to be more successful:

> *I was like a mentor for most of them (younger women in the company). A lot of the challenges are the same but I try to tell them exactly what happened with me, how I reacted and what I did wrong, because I did a lot of things wrong. I could have made it very easy for myself if I changed my attitude. So I try to assist them, when I see the same characteristics then I tell them 'no you are going wrong here, don't do this, try this'".*

Other women in this study had formal mentoring relationships that had been set up by their respective organisations and they conceded these mentoring relationships were of great value. This was in spite of the fact that the mentors were male. RP3, for example, said: *"And in the modules that I teach I have got two mentors, there are two modules and two mentors…they help me a lot and they are both males".* Male mentors seemed to provide adequate support and guidance where work was concerned. They were, however, unable to provide emotional support, nor were they sensitised to other concerns and issues pertaining to women such as work/life balance. As PR4 illustrates: "*(The mentoring relationship) is interesting, he (mentor) has ideas right but he is not the kind of person that you can talk to about everything. I think a woman would be more helpful because they can understand your work/life balance issues, so with this guy it is all about career A, B, C, D - this is where you are and this is where you need to be - very formal".* Despite having a male mentor, RP4 did find the mentoring relationship to be helpful as it guided her to make certain important career decisions: "*That is why I ended up changing jobs in the first place, at least he understands my career objectives".*

Women shared the desire to be able to discuss issues other than the nature of work with their mentors, issues of an emotional nature that have a direct effect on work. RP4 stated:

"*My emotional side was very difficult to cope (with). The physical was difficult but I could handle it, but the emotional I didn't have a mentor, there was nobody to look up to and that was the difficult part because emotionally I couldn't handle it".* The desire to get mentorship and guidance on non-work related matters was also evident in RP3: *"Now that I am having a baby you know, none of the other men can relate that. I am going to be on maternity leave and none of them have ever taken that. So if I need advice on something like that then who do I go to in this particular department?"*

Mentorship, as evident from the data, is one of the mechanisms that women use to cope in male-dominated environments (Chovwen, 2007). The availability of female mentors in certain male-dominated positions and occupations seems to be an issue (Chovwen, 2004), as was confirmed by the scarcity of female mentors in this study. Despite this, women do still want provision of mentors and guides within the workplace (Feyerherm & Vick, 2005) as reported by the participants. Although their mentors lacked knowledge in certain aspects, the women still found them to be useful in their careers. Mentorship emerged to be a useful coping strategy for women in male-dominated environments, as illustrated by the data.

Motivation to remain in current male-dominated career

Although male-dominated professions were found, in this study, to be for the most part challenging for women, many began to embrace them as they learnt to acclimatise. They even grew to enjoy the unconventional challenges and managed to make their mark amongst their male colleagues. The three main sub-themes were: optimistic expectation of future career possibilities in historically male-dominated environments, enjoyment of current work role and challenges and successful career experiences.

Optimistic expectation of future career possibilities in historically male-dominated environments

The women in this study had a positive outlook on the future career possibilities of women in male-dominated professions despite adversities as mentioned by RP2: *"Let me tell you one thing, there are still a lot of the males that don't accept women but we are working them out. We don't need a person like that because the way that the mines are changing and are treating people, there is no space for the old male dominant type of character. So they are changing… slowly, but they are. There is a lot of resistance still but you can see the whole mining environment is changing".* Other organisations have programs geared at increasing the number of women in their male-dominated professions and it encouraged the women to

see their companies making an effort to place more women in these environments. RP1 explained: "*We have got a few learners now (in the department) that are ladies as well, so it's getting better*".

There were men within male-dominated environments who were making an effort to accommodate and provide support for their female counterparts. This encouraged women in this study to believe that not all their colleagues were hostile, but some were in fact pioneering the way towards acceptance and integration of female colleagues. RP2 relays: "*There are people that I have got a lot of respect for - a lot of males and the moment that you win them (over), they will stand up and fight for you, and they will fight like a dad and a brother for the rest of your life*". Furthermore, RP4 shares about a male colleague who took it upon himself to help orientate her and other new female hires: "*That guy was sweet, he helped us (and) he showed us everything. He taught us he was like a supervisor to us he (showed) us (how) to do this (and) do that*". RP3, being the only female in her department, found herself receiving special support and encouragement by certain of her male colleagues to help her grow in her career "*As a woman, they (male colleagues) encourage you more …because it's such a minority you don't find many women doing research they encourage you to do it and so I do have the opportunity. They say being a woman shouldn't get into your way*".

A study by Bowen et al. (2008) revealed that most female quantity surveyors would unequivocally recommend their profession to others. This, in support of the findings, illustrates that women hold optimistic views about their and other women's place in male-dominated spheres.

Enjoyment of current work role and challenges

Data provided evidence that the women grew to enjoy the nature of their jobs and became accustomed to them. Even those who initially disliked their environments started to embrace them, making them part of their identity. RP4 shared the pleasure she derived from working beneath the earth, despite despising it when she started in the position: "*It's nice (working) underground you know, if you don't know it you can't see what I am saying, but if you stay there for a long time like two years you will see that underground is a nice place to be*". RP4 also expressed her satisfaction with her current role: "*I am actually so comfortable and I really like what I am doing now*". In the same vein, RP5 took every opportunity she had to experience some of the more technical and physical work tasks outside of her duties. These were activities that her female counterparts were often reluctant to perform: "*I really had fun*

when I was out in the field. There is a time that they gave me this project to put meters at some stations of ours and every chance I would get when the guys tell me they are going to a certain substation to do the installations, I would be like just tell me the date that you are going ... I am going to come".

Women in this study derived motivation from overcoming challenges in their environments. There was a common thread amongst the participants; thriving on the challenges thrown at them and deriving pleasure from overcoming the odds against them. RP2 related gratification for going against the odds and proving women's capabilities: "*I believe in women and the challenge that they gave me (when they told) me that women won't make it. I like a challenge, so I think that's the main thing".* The enjoyment of challenges also presented itself in women taking part in unconventional tasks and activities, defying stereotypes, as is evident in RP2's words: *"I was a very active type of person driving trucks and forklifts and things like that, I love the challenge",* and similarly RP5 noted: *"...more often than not when they have had female learners they refused to climb, but I was like 'hey bring it on' when else am I going to get a chance to climb on a transformer".* One of the participants, RP4, enjoyed the challenge of being nominated a safety representative and taking on the accompanying responsibilities. This meant she had to perform her job as well as execute the safety representative duties not formally part of her work obligations. She states: *"It's hard to do both (jobs) at the same time because at the end of the day the mine captain will want you to do his job, the job that you are paid to do and the one as a safety representative you do not get paid. You have to do both (jobs), it was hard but I loved it".*

In the male-dominated quantity surveying profession in South Africa, surprisingly females more than males had positive strong feelings regarding their levels of job satisfaction and felt their career expectations had been met, and would consequently choose the same career again (Bowen, et al., 2008). This supports the findings in this study that women in male-dominated professions can and do attain career satisfaction as well as enjoyment in their gender atypical roles.

Successful career experiences

This study found significant career success experiences in the data which motivated these women to remain in their male-dominated professions. The successes that women could refer to were sources of inspiration and provided them with the assurance that it was worth their while to remain in these professions. Some of the women made monumental strides

and pioneered for other females that came after them. One such example was RP2, the first woman allowed to work underground for the company at which she is employed:

> *In 1998 when the legislation changed and females could go underground, the general manager said that nobody will allow women underground. I challenged them and asked them if they will give me a trial and then we could decide if a woman could make it or not. So for six months I had to do all the underground occupations like the drilling, the timber and everything and it was tough for me…and then after six months every underground job that I did, they signed me off and usually the general manager came and visited me and see if I can drill, can put timber in etc. It was a big issue for (the company) to see if a woman can be successful and then after six months they offered me a learner official job.*

Other career successes included recognition from male colleagues who even went to the extent of nominating a woman as their safety representative, a position of authority, as relayed by RP4: *"If you are humble you can even do anything because they started electing me as their safety representative. As a safety representative I am supposed to (instruct) them everything (about safety); (so you need to always be like) 'do this' 'don't do that' 'I don't like this' 'this is not right', 'you, stop that' and they listened and they would come to me and say how can we do this etc".*

Career success experiences did not have to be big or even formally acknowledged by male colleagues or the organisation to be of value to the women. Some of the successes were small and more subtle, such as experienced by RP5 when winning over a difficult client: *"There came a time now when he (male colleague) could not make it for the (client) meetings, so I went for the meetings by myself and I found the more they (client) had a chance to deal with me directly the more they realised and understood that 'ok she is actually here for a reason, she does know what she is talking about and she is not just someone's right hand person'".* Similarly, RP1 also found a way to win over clients: *"When you start talking back, they sort of step back and think wait maybe she actually knows what she's talking about".* Others also received affirmation of their success from colleagues, as was experienced by RP2: *"A lot of the males, with a lot of the women coming in, will come back to me and say 'you know what, you were great man, that time you (worked in production) you were great'. So I think they changed, there is a great change in the perception of the males because there are good females that are coming in".* RP4 also illustrated that women were

getting more recognition as contenders in their environments: *"People like us are lucky to have people like Mr Modise[2], I am here because of him you know, he is the one who spotted me from the safety representatives' meeting and said this one has potential. So I am lucky to have a person like him".*

In a study by Sturges (1999), women were found more likely than men to describe what success meant to them in reference to internal criteria, especially accomplishment and achievement and intangible criteria, in particular, personal recognition. Women were less inclined to define career success in terms of hierarchical and financial progression. This study demonstrated that women had a sense of pride and motivation gained by experiences they considered to be indicators of success. This success was not only defined in objective terms, but also in the women's own subjective terms.

DISCUSSION

Main objectives of the study

The main objective of this study was to explore the experiences of women working in male-dominated professions and environments in South Africa, as well as to develop a conceptual framework of these experiences by integrating the related themes and sub-themes, as illustrated in Figure 1.

The framework gives an illustration of the emergent central themes depicting the *challenges* women experience in male-dominated professions. These challenges then lead women to employing various *coping strategies*, and the resultant outcome becomes their *motivation to remain in current male-dominated career.*

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[2] Name changed to protect anonymity of individual.

Figure 1: A conceptual framework of the experiences of women in male-dominated professions and environments.

Challenges

- **Discrimination and Bias:** Discrimination and bias towards women in this study is two-fold; it is evident in infrastructure and resources and in the spill over of stereotypical sex roles and expectations relating to women.

- **Physical and health related difficulties experienced:** Women reported experiencing some adverse physical and health related issues due to the nature of their work.

- **Negative self-perceptions resulting from working in male-dominated environments:** The difficulty of working in male-dominated environments cause the women to develop negative self-perceptions such as low self-esteem, low job efficacy and feelings of incompetence.

- **Lack of real transformation:** There seems to be willingness to change and accept women in male dominated environments, but only at a superficial level. Women are required to adjust to the masculine environment as the environment will not adjust to accommodate them.

- **Work/life balance:** The different roles that women have at work and home appear to be a source of conflict in relation o their careers. Women often need to find ways to balance these often conflicting roles.

Coping Strategies

- **Use of femininity at work:** The use of female-type characteristics are tools that are employed to gain advantage and at times to manipulate.

- **Adopting male-type characteristics:** Becoming "one of the boys" in terms of mannerisms, behaviour and attitude is prevalent.

- **Mentorship:** Both formal and informal mentorship adds value towards the success of these women.

Motivation to remain in current male-dominated career

Optimistic expectation of future career possibilities in historically male-dominated environments

Enjoyment of current work role and challenges

Successful career experiences

Integration of findings with literature

The conceptual framework developed in this study seeks to tell a story and provide a revelation of how different dynamics in male-dominated environments engage with each other to produce several outcomes. The framework illustrates the three main themes in a sequential manner. It firstly depicts the *challenges* women face in male-dominated environments; emanating from these challenges are the *coping strategies* employed by these women to mitigate the challenges. The ability to navigate through the challenges by means of the *coping strategies* then becomes their *motivation to remain in current male-dominated career.*

Challenges

There are various ways through which challenges faced by women in male-dominated environments present themselves. Discrimination and bias are prevalent and can be attributed to the minority status of women in male-dominated professions. Correspondingly, Davey and Davidson (2000) found that the low prominence of female pilots in their profession leads to sexist jokes, derogatory comments about women, and on occasion, aggressive and sexist behaviour from male colleagues and even passengers. There is a lack of adequate gender based policies and visible initiatives in male-dominated environments to promote the interests of women; in certain instances policies as fundamental as maternity leave are overtly discriminatory and punitive towards women who make use of them. Comparably, in a construction industry study, women reported a deficiency of written gender policies and a lack of gender-based educational material (Madikizela & Haupt, 2009). This suggests there is still a lack of visible and tangible commitment to empower women in organisations, despite legislation such as the Employment Equity Act (Madikizela & Haupt, 2009).

Discrimination is also evident in stereotypical sex roles and expectations relating to women. This emanates from cultural and societal norms which necessitate that women play a submissive role to men and follow traditional patriarchal structures within the family unit. These societal norms inevitably spill over into the organisation's structures and behavioural dynamics, thereby sustaining biased and discriminatory role allocations. The organisational culture, therefore, continues to reflect traditional patriarchal role distribution and expectations. In line with this, it comes as no surprise that Mathur-Helm (2005) found that the corporate environment in South Africa was not ready to accept women as professional equals as organisations, being the dominant economic form in contemporary society, do not exist in a cultural or social vacuum.

Physical and health related difficulties experienced by women in male-dominated environments can be attributed to the strenuous physical requirements of the work and the psychologically demanding stresses that come with a male-dominated career. The demanding nature of labour intensive work along with working in a perpetually gender-hostile environment triggers physical and mental stressors. A study by Innstrand, Langballe, Falkum, and Aasland (2011) found that overall, women reported more emotional fatigue and physical exhaustion than men across eight different occupational groups.

Bandura (1977) states that expectations of self-efficacy are based on four major sources of information: performance accomplishments (based on personal mastery experiences), vicarious experiences (inferences from social comparisons), verbal persuasion (being led through suggestion), and emotional arousal, all which are work environment related. For women in this study, negative self-perceptions such as feelings of low self-efficacy, low self-esteem and incompetence are a result of working in male-dominated environments. These negative emotions appear to be related to behaviour such as undermining of women's capabilities and perceptions of female incompetence by male colleagues. Michie and Nelson's (2006) study supports this, their findings illustrated that in the male-dominated IT field, women had less self-efficacy towards this career in comparison to their male colleagues and this was coupled with men having less positive attitudes towards the capabilities of women in IT.

A lack of real transformation is apparent in male-dominated environments. Attempts towards transformation seem to occur only at superficial levels as is evident with weak and ineffective employment equity policies. In practice, men expect and even demand that women adjust themselves to fit into the prevailing status quo. There are even hints of punitive behaviour towards women for wanting to be considered equal to men in male-dominated environments. This is supported by Dodge, Valcore, and Gomez's (2011) study of female police officers in male-dominated special weapons and tactical teams (SWAT). They asserted that the challenge of integrating women officers into the SWAT subculture required the changing of perceptions in an overall culture that continued to endorse the values of masculinity. In the same vein, Penceliah (2011) affirmed that in South Africa, transformation can only happen when both men and women have equal participation in all facets of society.

Work/life balance issues are fundamental in the lives of women. Interestingly, role conflict is not only experienced by women who are married or have children. Single women without children also feel overwhelmed by the culturally prescribed duties they are expected to carry out at home. Finnemore and Cunningham (1995) found that in spite of a woman's marital

status, patriarchy emphasises the special biological role of women as reproducers and as mothers and custodians of the family, so even women who enter the workplace are still expected to do most of the cooking, shopping, housework and childcare. Women in this study concede that being a mother slows down and at times impedes desired career growth. Simultaneously focusing on one's career progression and being a mother often clashes and a choice is often required to focus attention on one over the other. Likewise, Chovwen's (2007) study revealed that women stated that work/family conflict, amongst other things, was a major inhibitor of career progress in executive male-dominated environments in Nigeria.

Coping Strategies

The challenges rampant in male-dominated professions and environments lead women to employ formal and informal coping strategies as a means of achieving some form of success and tenure in their professions. In the wake of having few to no formal coping resources made available by their organisations, women devise their own. Certain feminine attributes were found by the women to be effective tools in male-dominated environments. The use of femininity as a coping strategy includes the displaying of motherly behaviour or utilising more democratic leadership styles. Manipulative use of femininity is also present, such as in the use of sexual prowess.

In this study, there is an apparent dichotomy of women drifting between two opposing gendered behaviours; using their femininity and also adopting male-type characteristics, with the latter being more common. On most occasions, women adopt male-type characteristics such as swearing, dressing in a masculine manner and drinking alcohol at pubs with colleagues in order to dilute their femininity, gain acceptance and avoid being sexualised. Women are caught between resisting the patriarchal process by remaining on high moral ground making it harder for them to maintain a positive self-identity, on the other hand, engaging in masculine tactics to get ahead lays them open to accusations of selling out and engaging in activities they condemn (Davey, 2008).

The findings highlighted that mentoring was one of the few formal organisational processes that is seen as a legitimate means to succeeding. Mentoring relationships appear to be a vital constructive coping strategy for women in male-dominated professions and environments. This is supported by Hinson et al. (2006), who found that 93% of a sample of women in the Ghanaian accounting field had mentors even though most of these mentors were not even involved in the accounting field. There is a consensus amongst women in this study that mentoring functions should be all-encompassing and not only provide guidance

and support relating to work matters but also attend to issues of emotional support and work/life balance concerns. The availability of female mentors in certain positions and occupations seems to be an issue in male-dominated environments (Chovwen, 2004). Women, therefore, have to manage with the available male mentors who are not sensitised to all their concerns.

Motivation to remain in current male-dominated career

This study revealed that in spite of working in highly challenging conditions, there still remain several motivating reasons that keep women in male-dominated professions and from making the decision to move into gender-neutral or female-dominated environments. This was sustained by the women having no immediate plans to leave their current jobs. Amid adverse working conditions are experiences and perceptions that the women consider to be motivational factors pertaining to the place of women in male-dominated environments. These motivations are based on current, future and past inferences.

Women in this study all held optimistic expectations of women's future career possibilities in historically male-dominated environments. The perception that there is a future and a growing place for women in male-dominated environments is supported by the identification of activities and evidence found by the women to be in support of this. Even with the absence of tangible and definite substantiation, there was a pervasive feeling that more women would enter and succeed in male-dominated environments. This is comparable to a study where women in the construction industry believed that despite the low number of women in their field, legislation such as Employment Equity Act created the platform for addressing the low representation of women in construction (Madikizela & Haupt, 2009).

This study showed evidence that women in male-dominated environments, over time, become engaged in their jobs and the unconventional nature thereof. The overcoming and experiencing of unique and gender atypical challenges and work tasks becomes a form of identity for them. There are latent inferences of the women feeling special because of their ability to work in these gender atypical roles; paradoxically, the minority status that makes them a target for discrimination and bias also makes them stand out as distinctive, unique and pioneering. The enjoyment of challenges and exhibiting daring behaviour is also a common thread in these women. Similarly, a study of pioneer women priests reported that being a priest impacted positively on their self-confidence and positive identity; these women saw themselves as heralding change to the gendered regime of the Church, challenging what it means to be a priest through their presence, language and symbols (Bagilhole, 2006).

In this study, as a motivation to remain in their male-dominated careers, the women identify and take pride in their historical career experience successes. These success experiences range from pioneering, objective and formally acknowledged success, to more personal, subjective and informal success. The achievement of any level of perceived success is highly recognised by the women as indicators of their potential and assurance of their decision to remain in pursuit of male-dominated professions. A corresponding study by Sturges (1999) found that women more than men are less inclined to define career success in terms of hierarchical and financial progression, but rather use a range of internal and intangible criteria such as achievement, accomplishment, personal recognition and influence in order to define career success on their own terms. Strategies aimed at developing women's careers are likely to be undermined unless organisations attempt to understand more clearly how women actually perceive their own career success (Sturges, 1999).

Conclusion

In conclusion, women in male-dominated professions and environments experience various types of adverse challenges and often work under difficult conditions where their needs are un-catered for due to their minority status. Very few supportive organisational processes and initiatives are at the disposal of these women and they are often left to their own devices when it comes to coping within their respective male-dominated professions. Still, women are motivated to some extent to remain in male-dominated work settings due to career opportunities, ad hoc informal support and intrinsic motivators such as personal drive for achievement.

Recommendations

Organisations which are increasingly attempting to attract women into male-dominated professions should not take for granted that these women will automatically and successfully assimilate in these environments without direct and concerted efforts on the organisation's part. The experience of being a woman in a male-dominated environment is exceedingly challenging, so formal organisational initiatives need to be implemented to create an environment conducive for women who enter male-dominated professions. The nature of organisational initiatives towards these women should include strong, visible and effective policies geared towards women, change management to create cultures where female characteristics are accepted and the provision of emotional support and training. A review of current policies aimed at women, such as maternity leave, is required along with the development of more effective utilisation strategies for pregnant women who cannot work in

hazardous environments. Furthermore, improvements of gender policies should be initiated in consultation with the women concerned and gender-sensitivity training should also be included in all employees' induction and orientation. Without strong and visible support structures for women in male-dominated professions, the likelihood of their success will be diminished.

Limitations of the study

As with most qualitative studies, the limitations of this study are the small sample of women from five different professions. The professions studied only constitute a small fraction in relation to the number of male-dominated professions that exist. The sample of women was also only spread over two provinces in South Africa and participants were selected due to their ease of accessibility. These participants were, however, confirmed to be information-rich on the phenomenon under study. English was the language medium used in the data collection interviews due to the researcher's language limitations. This may have affected the ability of subjects whose first language is not English to freely and eloquently express themselves, as experienced when using their mother tongue. Other females in male-dominated professions such as specialist surgeons and national defence force employees were difficult to access and therefore not pursued for this study. Research can be improved through confirmability which can be carried out by means of using multiple or participant researchers (Babbie & Mouton, 2001).

Future research

Future research exploring the experiences of women in male-dominated professions that have not been covered in this study, professions such as quantity surveying, architecture, surgeons and pilots, would enhance the body of knowledge that could lead to improved retention, optimal skill utilisation and overall physical and emotional wellness of female employees. Focused research could also investigate how different cultures impact on the integration of woman in male-dominated professions and work environments. In order to get a more comprehensive picture of the experiences of women in male-dominated environments, future studies could also include women who have worked in male-dominated professions but have subsequently left for more gender-neutral or female-dominated environments.

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CHAPTER 4

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

4.1. INTRODUCTION

This study explored the experiences of women in male-dominated professions and environments in South Africa. The objective of this chapter is to discuss the research conclusions, limitations and recommendations.

4.2. CONCLUSIONS

In this section, I discuss the conclusions as revealed by the study. The literature conclusions will be discussed first, followed by the conclusions drawn from the empirical part of the study.

4.2.1.   Conclusions from the literature review

The specific literature aims as outlined at the beginning of the study were to analyse studies and literature specific to women in historically male-dominated occupations, both in South Africa and other countries, in order to identify dominant patterns, similarities and differences.

A background on the socio-economic impact of women and work illustrated that patriarchal structures and systems in society played a role in women's positions in the workplace (England, 2010; Finnemore & Cunningham; 1995; Wombeogo, 2007). Women's entrance into the workplace, specifically into male-dominated professions, was found to be as a result of inter alia: changes in the household structure, increased access to education, socio-economic status and culture (Casale & Posel, 2002; Damaske, 2011; Malach-Pines & Kaspi-Baruch, 2008; Salami, 2007).

The literature on women and their careers revealed that women's career patterns were unique to those of their male counterparts and their career development was affected by several factors that can be summed up into the challenge of work/life balance (Cabrera, 2009; Chovwen's, 2007; Danziger & Eden, 2007; Finnemore & Cunningham, 1995; Heilman & Okimoto, 2008; O'neal & Bilimoria, 2005). Organisational dynamics such as organisational structure, politics, culture and norms were found to work against women for the most part (Akingbade, 2010; Davey, 2008; Jackson, 2001; Mathur-Helm, 2005).

Literature specific to studies conducted on women working in male-dominated environments covered various male-dominated professions such as pilots, school principals, quantity surveyors, specialist police officers, priests, doctors and within environments such as accounting, engineering, education, construction, IT, health, religion and heavy manufacturing (Bagilhole, 2006; Davey & Davidson, 2000; Ecevit et al., 2003; Gomez, 2011; Hinson et al., 2006; Lyonette & Crompton, 2008; Madikizela & Haupt, 2009; Michie & Nelson, 2006; Powell et al., 2006; Watts, 2007). Although the studies focused on different phenomenon and took place in different countries and on different continents, it was interesting that I could identify patterns in the themes and findings. Similar patterns found in the literature of women in male-dominated environments included a general lack of acceptance of women, lack of support within organisational structures along with exclusion from formal and informal networks, positive and limiting aspects of mentoring relationships, lack of career progress, destructive and constructive self-devised strategies to cope in their environments and a lack of solidarity amongst women in male-dominated environments.

In terms of differences within the literature, I found that since this topic has not yet been extensively studied as compared to other subjects in industrial psychology, there were not many stark contrasts within the literature. I believe as the body of literature on this subject increases, a wider scope and differing aspects will emerge.

4.2.2. Conclusions from the empirical study

The main aims of the empirical study, as outlined in the first chapter, were to explore the prevalent issues experienced by women in male-dominated professions and environments. The study sought to discover emerging themes and succeeded in adequately depicting the experiences of women working in male-dominated environments as informed by the data. This then enabled a conceptual framework illustrating the experiences of women working in male-dominated environments to be developed. The conclusions drawn from the research in relation to the main aims are presented below.

4.2.2.1. Challenges

Women in male-dominated professions are faced with a host of challenges daily as they struggle to succeed in their respective careers. Male colleagues are often unwilling to integrate and accommodate these women, and their environments seemingly determined to maintain the masculine status quo. There are various ways these challenges present

themselves. The theme of challenges experienced by women in male-dominated professions and environments, as found in this study, consists of five main sub-themes: discrimination and bias; physical and health related difficulties experienced; negative self-perceptions resulting from working in male-dominated environments; work/life balance and lack of real transformation.

a) Discrimination and bias

Discrimination and bias is prevalent and can be attributed to the minority status of women in male-dominated professions. This is evident in the lack of infrastructure and resources and in the spill-over of stereotypical sex roles and expectations relating to women. From an infrastructure and resource perspective, there is a lack of resources allocated to women's concerns and an inadequacy of gender policies and initiatives promoting the interests of women. There is evidence of a lack of basic facilities such as change rooms and discriminatory policies pertaining to maternity leave. Stereotypical sex roles and expectations emanate from cultural and societal norms which necessitate women play a submissive role to men and follow traditional patriarchal structures found within the family unit.

b) Physical and health related difficulties experienced

There are negative effects on the physical and mental well-being of women associated with working in male-dominated environments. Labour intensive work is taxing on the women's bodies resulting in fatigue, body pain and menstrual cycle issues. Physical and mental well-being challenges are not exclusive to labour intensive work; burnout is also an issue in a non-physical work environment, brought on by the perpetually stressful nature of male-dominated environments.

c) Negative self-perceptions resulting from working in male-dominated environments

For women, negative self-perceptions such as feelings of low self-efficacy, low self-esteem and feeling incompetent are a resultant factor of working in male-dominated environments. These negative self-perceptions emanate from behaviour undermining women's capabilities, lack of moral support and perceptions of female incompetence by male colleagues. Ultimately, consequences of these negative self-perceptions result in reluctance to be promoted and choices by these women to move into less challenging roles, though still remaining within the same environment.

d) Lack of real transformation

There appeared to be a willingness to change and accept women on a superficial level, but in practice, women in this study experience very little genuine accommodation and they find themselves having to adjust to fit in with their male counterparts. Attempts towards transformation occur only at a superficial level such as in the form of weak and ineffective employment equity policies. In practice, men expect and even demand women to adjust themselves to fit into the prevailing status quo, and there are even hints of punitive behaviour towards women for wanting to be considered equal to men. There appeared to be resentment by males towards female colleagues, who, through their entrance into the environment, threaten to upset the prevalent masculine culture with their presence.

e) Work/life balance

The different roles that women play emerge as a source of conflict in relation to their careers. They often need to balance being primary caregivers, having domestic responsibilities and being a career woman. Interestingly, role conflict emanating from work/life balance is not only experienced by women who are married or have children. Single women without children also feel overwhelmed by culturally prescribed activities and duties they are expected to carry out at home. Women in this study concede that being a mother slows down and at times impedes desired career growth.

4.2.2.2. Coping Strategies

In male-dominated professions, women employ various strategies to cope and ultimately try to not just survive, but also to attain some form of success within their environments. Due to the dynamics found in these environments differing from those in more gender-neutral and female-dominated ones, women who follow male-dominated careers tend to be more creative crafty and occasionally employ unconventional means in an effort to cope in their seemingly harsh environments. The three coping strategies that emerged were use of femininity, adopting male-type characteristics and mentorship.

a) Use of femininity at work

Certain feminine attributes were found by women to be effective coping tools in male-dominated environments. The use of femininity as a coping strategy includes the displaying

of motherly behaviour or utilising more democratic leadership styles. Manipulative use of femininity is also present such as in the use of sexual prowess.

b) Adopting male-type characteristics

For women in this study, there is an apparent dichotomy of drifting between two opposing gendered behaviours; using their femininity and also adopting male-type characteristics, with the latter being more common. On most occasions, women adopt male-type characteristics in order to dilute their femininity, gain acceptance and avoid being sexualised. Going against the status quo or displaying behaviour considered deviant to the prevailing environmental norms is a position women in this study, for the most part, do not want to take. In order to fit better in an environment unwilling to change and accommodate them, they find it fitting to adopt male-type characteristics in order to redress feminine attributes which are generally perceived to be unsuitable, undesirable and unacceptable in their male-dominated environments.

c) Mentorship

Mentorship is seen by women in this study as one of the legitimate means within the organisation to gain support and guidance as well as attain career success. Mentors are regarded as an effective coping strategy and as support systems that assist them to mitigate their often hostile environments. There is a consensus amongst women that mentoring functions should be all-encompassing, not only providing guidance and support relating to work matters but also attending to issues of emotional support and work/life balance. Male mentors seem able to provide adequate support and guidance where work content is concerned; they are, however, not able to provide emotional support and are not sensitised to other concerns pertaining to women such as work/life balance.

4.2.2.3. Motivation to remain in current male-dominated career

This study revealed that in spite of working in highly challenging conditions, there still remain several motivating reasons that keep women in male-dominated professions from making decisions to move into gender-neutral or female-dominated environments. Even in the absence of definite tangible substantiation, there is a pervasive belief by the participants that more women will enter and in fact succeed in male-dominated environments. Amid the adverse working conditions are experiences and perceptions that the women consider to be

motivational factors pertaining to the place of women in male-dominated environments. These motivations are based on current, future and past inferences. The three main motivations are optimistic expectation of future career possibilities in historically male-dominated environments, enjoyment of current work role and successful career experiences. Women in this study all hold optimistic expectations of women's future career possibilities in historically male-dominated environments.

a) Optimistic expectation of future career possibilities in historically male-dominated environments

Women in this study have a positive outlook of future career possibilities for women in male-dominated professions, despite numerous adversities. Some organisations have programs geared at increasing the number of women in male-dominated professions and it encourages women to see their companies making an effort to place more females in these environments. There are men within male-dominated environments who are endeavouring to accommodate and support their female counterparts and this encourages women to believe that not all male colleagues are hostile, but some are pioneering the way towards acceptance and integration of females.

b) Enjoyment of current work role and challenges

Women in male-dominated environments, over time, become affectionate towards their jobs and the unconventional nature thereof. The overcoming and experiencing of unique gender atypical challenges and work tasks becomes a form of identity for them. There are latent inferences of women feeling special because of their ability to work in these gender atypical roles; paradoxically, the same minority status that makes them a target for discrimination and bias also makes them stand out as distinctive, unique and pioneering. The enjoyment of challenges and exhibiting daring behaviour is also a common thread for these women.

c) Successful career experiences

Women in this study, as a motivation to remain in their male-dominated careers, identify and take pride in their historical career success experiences. These success experiences range from pioneering, objective and formally acknowledged success, to more personal, subjective and informal success. The achievement of any level of perceived success is highly recognised by the women as indicators of their capabilities, their potential and assurance of their decision to remain in pursuit of male-dominated professions.

4.3. LIMITATIONS

A discussion pertaining to the limitations of the literature review and empirical study will follow.

4.3.1. Limitations of literature review

Although literature is available on the topic of women working in male-dominated environments in South Africa, there was very little locally published literature that was conducted from a purely qualitative approach, in order to allow for the discovery of emergent themes. This therefore did not allow for a comprehensive understanding and background of this research topic and its status within the South African context.

4.3.2. Limitations of the empirical study

4.3.2.1. Sample Size

Five different male-dominated professions formed part of the sample in this study, these constitute of only a small fraction in relation to the number of male-dominated professions that exist. The sample of women was also limited to only two provinces in South Africa and participants were selected due to their ease of accessibility. Other females in male-dominated professions such as specialist surgeons and national defence force employees were difficult to access and therefore not pursued in this study.

4.3.2.2. Language

English was the language medium used in the data collection interviews due to my language limitations as a researcher. For participants whose first langue is not English, this may have affected their ability to freely and eloquently express themselves, as experienced when using ones mother tongue.

4.3.2.3. Use of unstructured interviews

Limitations of interview methods as outlined by Creswell (2003) are that interviews provide "indirect" information filtered through the views of interviewees, and they provide information in a designated "place" rather than the natural field setting. The researcher's presence may bias responses and not all individuals are equally articulate and perceptive.

4.3.2.4. Confirmability of research

Research can be improved through confirmability which can be carried out by means of using multiple or participant researchers (Babbie & Mouton, 2001). This was not done in this study as it consisted of only one researcher.

4.3.2.5. Triangulation

Reliability and validity could have been enhanced through the use of triangulation which consists of using different data sources of information by examining evidence from the sources and using it to build a coherent justification of themes (Creswell, 2003).

4.4. RECOMMENDATIONS

Recommendations are made for future studies in the field of industrial and organisational psychology as well as for organisational application.

4.4.1. Recommendations for future studies

Future research should explore women in male-dominated professions that have not been covered in this study such as quantity surveying, architecture, surgeons and pilots. The research should also be carried out in geographical locations different to the ones covered in this study, as cultures and conditions in those respective locations can make a difference to the women's experiences. In order to get a more comprehensive picture of experiences of women in male-dominated environments, future studies should include women who have worked in male-dominated professions but have subsequently left for more gender-neutral or female-dominated environments. Longitudinal studies of women working in male-dominated

environments should be conducted in order to get a developmental view of these experiences at different life stages.

4.4.2. Recommendations for organisational applications

Organisations which are increasingly attempting to attract women into male-dominated professions should not take for granted that these women will automatically be assimilated and successful in these environments without direct concerted efforts on the organisation's part. The experience of being a woman in a male-dominated environment is exceedingly challenging and formal organisational initiatives need to be established to create an environment conducive for women who enter male-dominated professions.

a) Policies

A review of current policies aimed at women is called for, along with the development or improvements of gender policies, done in consultation with the women concerned. This is in order to make these policies more effective and appropriate. It is not enough to merely have these policies existing on paper, but there must be rigorous efforts to make them visible and effective in the organisations without any latent punitive measures for the women who decide to exercise their right to use these policies. Topics to be considered in the policies can include sexual harassment, maternity leave, bullying and flexible work arrangements that enable work/life balance.

b) Induction, training and change management

Gender sensitivity training in male-dominated environments should be part of induction and orientation to ensure that gender issues are inculcated into all new employees as part of the organisational culture. This training should also be conducted with existing employees. Gender sensitivity is the building block for the promotion of gender equitable behaviours (Chovwen, 2006). Change management initiatives are also fitting in order to change masculine organisational cultures which make it difficult for women to be accepted. These change management initiatives should be directed at creating cultures where female characteristics and attributes are acceptable and also form part of the culture. Organisational gender norms can be redefined to involve gender equitable behaviours and attitudes, adopting these gender equitable behaviours should be formally rewarded and commended for positive reinforcement to occur (Chovwen, 2006).

c) Gender equity committee

A committee consisting of relevant stakeholders, established to address and oversee all gender issues and initiatives, should be a permanent structure in the organisation. By having such a permanent structure, the organisation will demonstrate that gender issues are an integral part of the organisation and its operations. The presence of such a committee will serve to streamline and direct all gender issues through a dedicated and designated channel. This committee can engage in activities which ensure the effective implementation of gender policies, oversee gender initiatives and systematically address gender-related issues that are raised.

4.5. CHAPTER SUMMARY

In this chapter, the conclusions of the study were discussed along with conclusions from the literature review. The experiences of women working in male-dominated environments were found to consist of challenges, coping strategies and motivation to remain in male-dominated career. The limitations of the study were outlined and recommendations for future studies and application in organisations were made.

4.6. PERSONAL REFLECTIONS

As a researcher, this study took me on a personal journey. I felt the participants allowed me a glimpse into their worlds, if only for a while. Through these women, I gained an appreciation of the dynamics that were at play in the various male-dominated environments and I thoroughly enjoyed the interview process and the fascinating information that came to the fore. Having had experience working in a male-dominated industry, I truly felt the voice of women in such positions was rarely heard and the subjects seemed grateful to have the opportunity to share their worlds. Most of the participants opened up more than I expected, considering the fact that all were meeting me for the first time. I felt humbled that they trusted me with their feelings and some delicate information, and trusted my good intentions pertaining to this study. As a woman, I feel I had an advantage as the women felt they were speaking with someone who related to them. It was also liberating to do an exploratory study as that allowed them to bring up topics that were close to their heart without any expectations or requirements from my side. The unstructured nature of the interviews enabled us to build rapport and encouraged these women to be comfortable with the amount of information they

were willing to disclose. The lack of structure diluted the formality of the meeting into more of a comfortable conversation.

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Informed Consent Form for Qualitative Research Study

Title of study	:	The challenges of women working in historically male-dominated professions and environments in South Africa
Institute	:	University of South Africa
Department	:	Industrial and Organisational Psychology (Masters Program).
Principal Researcher	:	Phiona Gambiza Martin
		Cell: 072 029 0699
		Email: phiona.gambiza@gmail.com
Supervisor	:	Professor Antoni Barnard
		Tel: 012-429 8212
		Email: barnaha@unisa.ac.za

Introduction:

I am currently a registered UNISA student doing a dissertation as part of my Masters in Industrial and Organisational Psychology program. I would like to explore the challenges that women working in historically male-dominated environments are facing and how these women can be better integrated and accommodated in these fields.

You have been identified as fitting the criteria for my research and I would like to invite you to participate in this study.

Purpose of this research study

The purpose of this study is to explore the challenges that women working in historically male-dominated environments are facing. The information will be used to provide recommendations as well as means through which women can be better enabled to integrate and accommodated in these male-dominated fields.

Expected duration of this study

This study will be conducted over a year. Each research subject will be interviewed until such a time that the researcher feels that data saturation has occurred. Data saturation is estimated to take place after approximately 4-5 interviews with the subject. Each interview will last approximately an hour at a time. The total estimated time required from each participant is five hours.

Your role as a participant in this study

During the research, I as the researcher will ask you a few questions and hold conversations with you regarding the challenges that you face as a woman working in a male-dominated environment. The interviews will be tape recorded without mentioning your name or any identifying characteristics. You are requested to provide this information based your personal experiences and subjective feelings.

You are not required or obligated to answer the questions. You may pass on any question that makes you feel uncomfortable. At any time you may notify the researcher that you would like to stop the interview and your participation in the study. There is no penalty for discontinuing participation.
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Procedures for selection of participants

As a participant in this study, you are required to be currently working in a historically male-dominated environment for not less than one year.

Possible risks and discomforts

There is no risk involved in this study except your valuable time as well as opening up emotionally to whatever extent you feel comfortable.

Procedures or measures in case of any negative effects or events

If you as the participant at any point in time feel the need to raise any negative effects or events resulting from this study, you are welcome to take it up with the researcher or researcher's supervisor (details provided above).

Ensuring participant's privacy

The interview location with the participant will be selected by the participant and held where the participant feels most comfortable, non-threatened and private.

Benefits to the participants

The final results of the study will be shared with the participant. You as the participant will benefit through getting an insight to what challenges other women working in male-dominated environments are facing. The benefit of your participation is also to contribute information to the field of industrial and organisational psychology regarding challenges women are facing in such environments.

Through the recommendations that will be provided in this study, you will also get information on how to better integrate into your environment. The information will also be aimed at enlightening males in your kind of environments to best co-exist with their female colleagues. At a macro level the recommendations will also be given to organisations in order to make male-dominated environments more accommodating to women.

Confidentiality

Keeping your identity private is of utmost importance in this study. The following information will **not** be shared or mentioned by the researcher in the final results;

- Name or surname
- Company name (only the industry you are in will be mentioned)
- Any information that you feel may give away your identity.

The information provided by you will remain confidential. Only the principle researcher and the researcher's supervisor will have access to it. The data may be seen by Ethical review committee and will be published in the final dissertation and elsewhere without giving your name or disclosing your identity.

Compensation

There will be no compensation for participating in the study; however a token of appreciation may be provided by the researcher at the end.

Number of participants

You will be one of approximately five participants.

Right of refusal to participate and withdrawal

You are free to choose to participate in the study. You may refuse to participate without any loss of benefit which you are otherwise entitled to. You may also withdraw from the study at any time without any adverse effect or consequence. You may also refuse to answer some or all the questions if you don't feel comfortable with those questions.

Authorisation

I have read and understand this consent form. I volunteer to participate in this research study and understand that I will receive a copy of this form. I voluntarily choose to participate, but I understand that my consent does not take away any legal rights in the case of negligence or other legal fault of anyone who is involved in this study. I am aware that I can discontinue my participation in the study at any time.

Participant's Name _____

Signature   _____

Date_____

Principal Researcher's Name_____

Signature_____

Date_____

Supervisors Name_____

Signature_____

Date_____