

CHAPTER ONE

GENERAL ORIENTATION OF THE STUDY

1.1 BACKGROUND OF THE STUDY

The status of women in society has been highly contested over the years, with arguments centred on the secondary status assumed by woman supported by previous policies and legislations which deliberately marginalized this group (Scheepers, 2013). As a result of this marginalization, uneven allocation of resources and power was witnessed between men and women, hence certain occupations and sectors such as mining and construction were specifically designated to males based on socially constructed ideas of what men and women ought to be (Reeves & Baden, 2000; Holmes, 2007; Khunou, 2009; Nimbark, 2013). Nevertheless, as South Africa came into democracy, much effort was invested in fostering transformation not only within the society but within workplaces too. The attainment of democracy led to the introduction of females in occupations such as mining, where they were previously barred (Botha, 2013) and this move was perceived to be challenging the traditional occupational culture of mining (Benya, 2009). Hancock (2014) boldly asserts that women are mostly disadvantaged by legacy issues which are persistent throughout the mining industry.

Given some of the initiatives which have been proposed and implemented to make women more equitable in society, the study focused specifically on the mining industry to gain a better understanding of the experiences of underground female mineworkers. The mining sector is known to be one of the main contributors to the South African economy as well as to the Gross Domestic Product (GDP), foreign exchange earnings and overall job creation in the country (Benya, 2009; Moyo, 2011; Scheepers, 2013). Frankly, Moyo (2011) reports that the mining industry alone crucially contributes approximately sixty percent (60%) of total foreign exchange earnings, ten percent (10%) of the total GDP and five percent (5%) and more to formal employment in the Southern African Developmental Community Region (SADC). Additionally, the workforce of the South African mining industry is estimated at 460 000, with a further 400 000 employees linked to suppliers of goods and services to the extractive industry. However, regardless of the wealth the region owns in minerals, high prevalence of poverty and inequality are evident, with women unfortunately being on the receiving end of these injustices (Moyo, 2011; Botha & Cronje, 2015).

It is with this background that the study was conducted to probe further into the occupational encounters of women within the mining industry through an exploration of the motivations behind women penetrating into this field; some of the constraints and opportunities they are faced with within the industry; coping mechanisms employed to successfully progress within the industry as well as getting a better understanding of the response of the mining industry in making their workplace more gender sensitive.

The introductory chapter presented intends to offer a brief background on the problem statement on women in mining to assist in substantiating the relevance of the study and what it aims to achieve. This will be coupled with the research question which gives indication of what the study intends to explore. It will be followed by definitions of key concepts that are relevant to the study.

1.2 STATEMENT OF THE PROBLEM AND RATIONALE FOR STUDY

Extractive industries such as mining have been accused of being gender-blind, with little representation of women reported within the workforce worldwide (Lahiri-Dutt, 2011). Women in Mining UK (2013) have reported that women comprise approximately 10% of the mining workforce in the globe. This comes because of women having been previously barred from pursuing careers in the mining industry and this was formalised through legislations such as the Britain 1842 Mines Act and the International Labour Framework (ILO) Convention 45 of 1935. Growing numbers of scholars have shown interest in the topic of women in mining on an international scale to address the shortage in the skills pool within the mining industry because of lack of gender diversity (Hughes, 2012; Women in Canada, 2010; Singer, 2002). However, much focus has been directed towards the inclusion of women in mining communities into the industry as well as capturing socio-economic impacts experienced by women within mining communities (Musvoto, 2001, Lahiri-Dutt 2011, Rachod, 2001). Emerging literature in Africa has shown that the inclusion of women is key to ensuring sustainability not only within mining communities but in mining organizations too (Musvoto, 2001; Rachod, 2001). This comes with the perception that women may likely improve performance of mining companies as they are regarded to be a devoted group (Rachod, 2001). Musvoto (2001) further asserts that women employees are an asset to the mining industry and could be of assistance in creating a safer working environment given their vigilant character.

The South African mining industry is reportedly haunted by legacy issues which impact on women's ability to thoroughly benefit from resource extraction, regardless of the positive contribution this adds to the economy (International Women's Forum South Africa, 2011). Women seemingly comprise eleven percent (11%) of the total workforce in the South African mining industry and that is inclusive of women who occupy nonessential roles, thus making it difficult to determine what percentage of women are employed in key mining positions, such as geology and engineering (Hancock, 2014). There continues to be underrepresentation of women in South African mines particularly in managerial and underground positions hence the industry continues to be referred to as a "male dominated and chauvinistic society" (Hancock, 2014, p.1). The new legislations which were adopted following South Africa's attainment of democracy made provisions for fair practices in the workplace; recruitment of females within the mining industry was postulated thus putting mining organizations under the pressure of ensuring that women are incorporated.

Rachod (2001) asserts that slow advancement has been witnessed in incorporating women into the South African mining industry. Thus, the integration of women into the mining sector in South Africa has been explored from the occupational health and safety challenges experienced within the mining industry (Zungu, 2012; Botha & Cronje, 2015), the extent at which labour legislations protects women in mining (Ilic, 1996) and exploring the mining culture and how it disadvantages women (Benya, 2009). Although women have never been entirely barred from working in the mines, little research has been conducted on women working underground (Benya, 2009). Additionally, Rachod (2001) mentions that, in Southern African Developmental Community (SADC) and in South Africa there is no clear strategy formulated by the mining industry to ensure the integration of women. The challenges experienced by underground mine workers and women are very complex and need further exploration (Calitz, 2004). To the present day, the mining industry has reportedly been experiencing challenges in recruiting and retaining women mine workers (Minerals Council of Australia, 2013).

Much attention has been previously directed to women in mining sitting on executive boards and being directly involved in the decision-making process (Ethical cooperation, 2015; Hughes, 2012). The significance of this stems from the assumption that women can achieve true empowerment if they are given the opportunity to be involved in the core business of mining. Although it is equally important to have women holding executive positions in

mining, Mathews (2013, p.3) argues that “the core of the mining business is hard technical skills and the pipeline of women into that is not full”. Therefore, the division of labour in the industry needs to be questioned and this has sparked the interest in contributing to facilitating transformation as well as formulating strategies for mining companies to accommodate women within the industry. This is in line with the mandate of occupational social work which is “a specialised field of social practice which addresses the human and social needs of the work community through a variety of interventions aimed to foster optimal adaption between individuals and their environments” (Straussner, 1990, p.2). The study was conducted to address the social and human needs of underground female mine workers. This study will be essential in unravelling the experiences of female mine workers, contributing to gender-related debates and making recommendations for appropriate workplace interventions for women working in the mining sector.

1.3 THEORETICAL FRAMEWORK: LIBERAL FEMINISM

Theoretical guidance has been sought from feminist scholars to richly understand and question the status quo of women within the mining industry. This is informed by the notion that feminist theory generally questions “the unequal power relations between men and women from the point of view of women who are ruled by men in many settings” (Lindsey, 2011, p. 12). Feminist discourse has been highly influential in the process of conducting this research study due to its fundamental attention on gender as well as its directive to unravel the experiences of underground women mine workers from their perspective (Boonzaier & Shefer, 2006). The specific mission of feminist scholars is to challenge the inferior position which women have been reduced to in society, through challenging discrimination women are subjected to politically, culturally, socially and economically (Samkange, 2015). Therefore, the feminist theory becomes essential in fostering the empowerment of women in different settings through advocating for the ability to regain control over the different aspects of their lives and eliminating structures that are undermining the integrity of women (Lindsey, 2011). Furthermore, the ultimate goal of the feminist theory is to combat gender inequalities and improve the status of women in the society.

There are different types of feminist scholars, each with different perceptions of how the status of women can be improved in society; however, the liberal feminism theory best fits the arguments of this study. Similarly, Samkange (2015) proclaims that although there are

different theoretical underpinnings within feminist discourse, they all acknowledge that gender has been used as an attribute to oppress and unevenly distribute resources between men and women in society. It is on this stance that feminist scholars maintain that society has unfortunately been organized in a way that it has widened the gap of inequality between men and women, resulting in women having limited access to economic empowerment and overall opportunities to effectively progress. In a similar light, Lahiri-Dutt and Macintyre (2006) maintain that the mining industry has been equally disabling to women due to the way the industry is socially constructed; in that male superiority is reinforced whilst females continue to be confined to positions that are subordinate.

Liberal feminist theory assume that gender inequality is embedded “in the structure of social order” Lorber (2010, p.10). This theory is built on the assumption that gender prejudice may likely be self-inflicted, therefore individuals affected by this ordeal need to take ownership of their will to change in order to achieve equal rights and freedom of individuals (Samkange, 2015). Giddens (2001, p. 692) on the other hand perceives liberal feminist theory as a “feminist theory that believes gender inequality is produced by reduced access for women and girls to civil rights and allocation of social resources such as education and employment”. Fundamentally, liberal feminism believes in less radical reforms of gender discrimination through the promotion of equal rights by engaging and formulating laws and policies that will ensure equality.

Marginalization of women has been reported in mining with the belief that it was informed by socially constructed perceptions of how people of opposite sexes ought to be and how they should interact with one another (Lahiri-Dutt, 2011). Therefore, structures that are deemed oppressive to women have been challenged to ensure that gender equilibrium is achieved in the mining industry and discriminatory practices have been exposed with the aim to assist in creating a gender sensitive work environment for all employees. Liberal Feminist theory has been of assistance in uncovering obstacles within the mining sector which are affecting the position of women, particularly those working underground. With the focus of liberal feminists on improving policies to ensure that power and opportunities are evenly distributed amongst men and women (Lorber, 2010), the South African legislative frameworks which have strategically formulated to reconcile previous injustices and to steer transformation in mining, such as Mining Charter of 2002 (amended 2011) and the Mineral Petroleum Resources Development Act 28 of 2002 and the Employment Equity Act 55 of 1998 have

been analysed to determine the extent at which they are implemented to drive transformation in the sector.

1.4 RESEARCH QUESTION

What are the occupational experiences of underground female mine workers?

1.5 THE AIM AND OBJECTIVES OF THE STUDY

The aim of the study is to explore occupation-related experiences of women mine workers. To achieve this aim, the following objectives have been formulated:

- i) To explore the motivations for women mine workers to work underground;
- ii) To investigate the challenges faced by under-ground women miners;
- iii) To explore coping strategies employed by women underground miners;
- iv) To explore mechanisms put in place to create a gender sensitive environment.

1.6 BRIEF OVERVIEW OF THE RESEARCH METHODOLOGY

A qualitative research approach was adopted to permit this study to richly uncover the experiences of underground women mine workers. The study took place at a gold mine in North-West Province, South Africa. A case study design was opted for to allow the researcher to study the participants in their natural context. Purposive sampling technique was employed to carefully select ten underground female mine workers as well as two key informants for the study in accordance with the selection criteria. Data was collected using individual face-to-face interviews which were guided by a semi-structured interview schedule to assist in extensively exploring the experiences of underground female mine workers.

1.7 DEFINITION OF KEY CONCEPTS

1.7.1 **Female:** This refers to being of a sex that is commonly associated with the capacity to bear or produce an offspring (Reeves and Baden, 2000).

1.7.2 Women in mining: These are women who are involved in core mining jobs underground, particularly those involved in extraction activities underground (Benya, 2009).

1.7.3 Women at mining: These are “women who work generally in mining companies” (Benya, 2009, p. 2), for example women working on surface as cleaners or administrators.

1.7.4 Underground mineworkers: This refers to people who are employed underground to extract ore, coals and other minerals from the earth through cutting and blasting (Benya, 2009).

1.7.5 Gender: refers to “the socially determined ideas and practices of what it is to be female or male” (Reeves & Baden, 2000, p.3).

1.7.6 Gender division of labour: “The socially determined ideas and practices which define what roles and activities are deemed appropriate for women and men” (Reeves & Baden, 2000, p.2).

1.8 STRUCTURE OF THE RESEARCH REPORT

To extensively investigate the experiences of underground female mine workers, the report presented has been structured into five chapters each detailing the different processes undertaken to effectively present the research study.

The structure of the research report is as follows:

Chapter 1: The first chapter sets the tone for the research study through providing background on the research problem investigated, together with a problem statement which briefly highlights the issues that the research study sought to address. The chapter further provides the rationale of the study to highlight the significance of the study. Theoretical framework, research question, aims and objectives as well as the definition of key concepts are also provided in this chapter

Chapter 2: This chapter offers a discussion of the literature concerning women in mining, with attention on the trends and arguments put forward regarding this subject matter.

Chapter 3: This chapter offers a greater understanding of the research methodology which was utilized to get explore the experiences of underground female mine workers.

Chapter 4: This chapter provides a discussion of the research findings using the data analysis method relevant to the study.

Chapter 5: The main findings, conclusions and recommendations are provided in the final chapter of the report.

1.9 SUMMARY

Under-representation of females in previously male dominated industry has proven to be a persistent issue, which has many dynamics to be interrogated. This chapter offered empirical evidence to substantiate the need for the study to be conducted through providing brief background on women in mining challenges that exist within the industry. A discussion on the liberal feminist theory was also provided to strengthen the argument on the existence of the problem. This is followed by a presentation of the research question as well as the aim and objectives of the study. Furthermore, an overview on the qualitative research methodology was provided to demonstrate its usefulness to achieving the aims and objectives of the research study. The chapter is rounded with definitions of key concepts which are of relevance to the research study as well as the structure of the research report.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

Although more women have been reported to be penetrating the mining industry over the years, the industry is still deemed a forbidden career choice for females (Lahiri-Dutt, 2011; Botha & Cronje, 2015, Botha, 2013). However, being a global industry, mining has over the years been heavily criticized on their efforts to keep up with global trends and one crucial one being enforcing gender mainstreaming in the workplace. With that said, the chapter presented will explore the body of literature on the gender imbalance within the mining industry, paying attention to the nature of underground mining and the incorporation of females in this regard.

Gender forms the basis of this paper thus calling for a further exploration of how this demographic attribute possibly places women at risk of being discriminated within the workplace. This section of the paper will commence by providing a brief overview of how mining culture and the industry perpetuates gender division of labour. This will then be followed by a section where a thorough understanding on gender is provided through looking at different perspectives from which gender has been viewed, with attention to how socio-historical factors influenced the prescription of men and women's roles in society. This will be coupled with the conceptualization of gender within the workplace and how societal gender norms have spilled into the workplace, influencing the work culture.

2.2 REINFORCEMENT OF GENDER DIVISION OF LABOUR IN THE MINING INDUSTRY

The mining industry has seemingly been known to be an industry exclusively reserved for men based on the understanding that the nature of core mining jobs is known to require physical strength and is associated with high risks, thus making the male mine worker a more representative labourer (Botha & Cronje, 2015). The desire of employing more males in underground mining than females comes with the exaggerated personification of what a

miner ought to be i.e. tied in with hegemonic masculinity attributes (Botha, 2013). Lahiri-Dutt and Macintyre (2006) hold that this belief perpetuates capitalist and patriarchal ideology given that many females within the industry are appointed to positions that are supportive to the main roles carried by their male counterparts. Given that the industry is generally male-dominated, various scholars have shown how the work culture makes females prone to masculine stereotypes thus making it difficult for them to progress or build firm careers in mining (Lahiri-Dutt, 2011; Hughes, 2012; Benya, 2009). Based on this, females within the mining industry experience sexism-related challenges whilst working underground (Zokwana, 2007).

The industry has been referred to as a pioneer of the “greybeard phenomenon” insinuating the imbalance in gender, race and age of the workforce in the mining industry (Hughes, 2012, p.10). The industry has since been making means to bring about transformation and make the mining industry more attractive to women. Efforts are constantly being made to persuade women to consider careers in mining and employing them in core mining positions which are equivalent to their male counterparts (Botha & Cronje, 2015). Conversely, Botha (2013) argues that although efforts are being made to accommodate women into the industry, the overall mining environment is less accommodative of women and their specific needs. MacDonald, Sainsbury and Maher (2015) have observed an interesting contrast in the experiences of female mining engineering students in Australia, with the study suggesting that female students in this field have less positive experiences in the workplace than they did during their university years. The challenges are reportedly beyond structural issues, such as having inadequate facilities but “much of their discomfort comes from the perceived need to ‘act as men’ or adapt to the ‘boys club mentality’ in the traditionally masculine environment” (MacDonald, Sainsbury & Maher, 2015, p.12). This therefore, presents restrictions that make it difficult for women to actively advance within the industry (Hughes, 2012). Lahiri-Dutt and Macintyre (2006, p. 149) continue to emphasize that “the way the mining industry was socially organized imposed unequal and social relationships on women and men and led to the subordination of the position of women, both within the mining industry and within the communities outside it”. This presents an enormous challenge when addressing gender inequality within the mining industry, given that there are external forces which have contributed to the under-representation of women in mining and which therefore need to be equally confronted.

Gender equality and equity is a topic not only applicable in the workplace but in communities as well, this is done in a quest to unravel past injustices and the discrimination of women. Thus, number five of the seventeen Sustainable Development Goals aims to promote gender equality and empower women and girls (United Nations, 2015). With that said, Botha (2013) argues that the global mining industry is faced with the need of making women more visible particularly in large-scale mining operations, to enforce the inclusion of women in mining. It is therefore essential to further explore the topic of the integration of women within the mining industry to gain rich understanding of the experiences of women given the new legislative frameworks that have been developed globally and locally to ensure transformation within the mining industry. In support of this, the executive director of Anglo American Khanyisile Kwenyama in 2014 alluded to the issues of diversity and promoting gender equity during her speech at the third annual Mining Lekgotla by stating that “employment equity is a way of working together and it is borne of a company and societal culture that recognizes the business value of equal opportunity, diversity, respect and the worth that women can add to traditionally male-dominated environments”. This suggests that equal opportunities should be afforded to members of the society regardless of their gender, with the focus being more on the perceived value they may bring to the mining business. It is therefore essential to conceptualize gender to ensure that a solid understanding of the concept is provided when exploring the experiences of underground female mine workers.

2.3 UNDERSTANDING GENDER

Gender is a complex concept which transmits different understandings from context to context and time periods (Nimbark, 2013). Equally so, the concept of gender has been used interchangeably to denote an individual’s sex which is known to refer to “the biological characteristics that categorize someone as either female or male” while gender is known to be concept that is socially constructed and used to determine standards at which an individual becomes male or female (Reeves & Baden, 2000, p.30). Additionally, Lindsey (2011, p. 4) posits that sex is a term used mainly to highlight differences in males and females through “chromosomes, anatomy, hormones, reproductive systems and physiological components” whilst gender dwells on the social, cultural and psychological meanings constructed to differentiate between men and women, thus making it more complex to comprehend.

2.3.1 Theoretical underpinnings on gender

Theorising the concept of gender is problematic too, given that gender issues cut across many discourses thus diverse meanings may be provided across different disciplines based on their different theoretical perspectives (Lindsey, 2011). Consequently, it is essential to explore the different perspectives from which gender has been viewed to provide a comprehensive understanding of the construction of the concept. This will be of assistance in broadening the understanding of the concept to unravel how competing explanations may be provided on gender even within the same discipline.

On a broader spectrum, gender has been perceived as a factor born out of the human body; hence it is entrenched in our institutions, actions and beliefs and shaped by our social realities (Zimmerman and West 1987 as cited in Eckert & McConnell-Ginet, n.d). Therefore, gender infers that men and women can be distinguished not only by their biological makeup but by the roles they are expected to assume within society (Reeves & Baden, 2000). Nimbark (2013, p.44) maintains that the concept of gender “was used as an analytical category to draw a line of demarcation between biological sex differences and the way these are used to inform behaviours and complexes which are then assigned as masculine or feminine”. Association to masculinity is commonly viewed as being strong and tough whilst femininity is viewed as being soft and weak.

With that said, theory becomes essential in substantiating the roles acquired by different genders although different theories provide differing stances on how gender is essential in achieving social order. Three sociological perspectives will be explored in the section that follows, to thoroughly explain the different meanings gender conveys, namely; functionalism, conflict theory and social interaction theory.

2.3.1.1 Functionalism

Functionalism has also commonly been referred to as “structural functionalism”. This is a sociological perspective which views society as comprising of many “interdependent parts, each of which contributes to the functioning of the whole society’ (Lindsey, 2011, p.5). The objective of this theoretical perspective is to achieve social equilibrium, without overlapping roles in households and the society by ensuring that all the different elements of society are assigned basic functions which will be essential in meeting basic social needs. And this they maintain can be achieved when common values are shared in society. This notion partly

supports the biologically essentialist theories which maintain that gender is innate and that men are naturally made to be more dominant due to their genetic makeup, which contains hormones that are naturally more aggressive (Goldberg, 1993). Like Functionalists, biological essentialists are of the belief that the social order has been influenced by the hunting generation whereby men were given more competitive and aggressive roles outside of the household while women's roles were confined to the household and childbearing.

Gender from this stance has been shown to be one of the crucial factors used to determine sexual divisions of labour, based on the assumption that men and women are made to assume different roles in society thus reinforcing the exaggerated patriarchal system of power which convinced women into accepting that they were best suited for subordinate roles. Reeves and Baden (2000) posit that cultural ideologies have been highly influential in determining the rights, responsibilities and socially acceptable behaviours of men and women, resulting in extended control on access and allocation to resources as well as inclusion and/or exclusion from the decision-making process being reinforced. This conception of gender has been critiqued for being disadvantageous to women, as it is likely to perpetuate male dominance and female inferiority (Nimbark, 2013).

Other Sociological theorists have been influential in gender debates too, with theorists such as Durkheim validating the distinction between men and women, holding the stance that men and women are made differently biologically, therefore they are made to specialize in different roles in society which results in a strengthened and well-organized division of labour (Holmes, 2007). This is further affirmed by Tolcott Parson, the American Sociologist who argues that the division of labour between men and women needs to be maintained to ensure that there is equilibrium between reproduction roles, which are mainly assumed by women and production tasks which are assigned to men (Holmes, 2007). Religion has also perpetuated the belief that men and women, although equally valuable, are innately made to be different, but with complementary purpose (Rebuli, 2008). This reiterates the difference between men and women and the different roles they ought to assume in society, which are made to support each other.

2.3.1.2 Conflict theory

Conflict theory has similar assumptions on social order as functionalism; however, the striking difference in the two perspectives is embedded in the argument that social order can

simply be maintained through an agreement on shared values which in turn prescribes different roles and responsibilities to be assumed by men and women. Conflict theorists dismiss this notion by maintaining that social order is “preserved involuntarily through exercise of power one social class holds over another” (Lindsey, 2011, p. 7). It is further assumed that this theoretical perspective is informed by Marxist understandings of class, power and dominance within society. Based on Marxist perspective, social order is influenced by capitalist thinking whereby the power is unevenly distributed, with the ruling class (bourgeoisie) being in possession of the means of production and therefore more power and have the proletariat (workers) feeding off their productions to ensure survival in society. With the interest of the ruling class being to remain in a position of power through exploitation of labour from those below them, Marx and Engels posit that proletariats may emancipate themselves from the oppression of the proletariats by forming a united front to challenge the inequitable distribution of resources. Engels (1942, as cited in Lindsey, 2011, p. 8) further asserts that “the emancipation of women will only be possible when women can take part in production on large social scale, and domestic work no longer claims but an insignificant amount of her time”. This relates to the process which Freire (1970) terms conscientization, which refers to a process in which people engage in critical consciousness, which could be achieved through seeking liberation by critically challenging the systems which are deemed oppressive.

The discrimination of women has been embedded in so many social institutions that it has been perceived as normal (Eckert & McConnell-Ginet, n.d). Women’s role was previously confined to the household, child bearing, nurturing and housekeeping while men were more actively involved in economic activities and expected to do more physical work, such as mining, woodwork and hunting, being the sole provider for the home (Benya, 2009). Zaretsky (1976 as cited in Benya, 2009, p.12) further maintains that the “division of labour in society was informed and directed by the notion of a masculine external-productive world and a feminine internal-emotional world”. This conception of gender roles influenced the barring of women from being involved in any economic activities outside the household, whilst other societies barred them from working in certain occupational sectors, such as mining and construction (Halford & Leonard, 2001; Benya, 2009; Eckert & McConnell-Ginet, n.d). Reskin and Padavic (1994 as cited in Benya) maintain that making certain occupational sectors exclusive to males contributed to giving the labour force a masculine appearance.

2.3.1.3 Social interaction

The social interaction perspective on the other hand affirms the notion that gender is embedded in societal institutions which flexibly hold different meanings from context to context based on peoples' interactions. Lindsey (2011, p.9) alludes to the words of Herbert Blumber (1990-1987) known to be the originator of the concept of symbolic interaction, when he asserts that "people do not respond directly to the world around them, but to the meaning that bring they to it. Society, its institutions and its social structure exist in a social reality that is bestowed only through human interaction". In this regard gender is not only viewed as a trait that is born out of the human body but rather develops as an individual interacts with others and eventually creates their own meaning of gender. Gender is perceived as an act which males and females performs through social interaction thorough which meanings are derived and interpreted in line with their societal norms. Holmes (2007) further affirms that social interactionists hold the belief that people's acts are influenced by their understandings of the different expectations in specific contexts. It can therefore be argued that due to the dominance of males within the mining environment, females ultimately become socialized into 'acting as men' given the expectations set on thriving in the sector (MacDonald, Sainsbury & Maher, 2015).

As societies progressed, new ways of thinking were encouraged, which saw customary definitions of gender being challenged and commonly eliminated where they propagated inequality amongst men and women (Selebano, 2014), particularly undermining the ability of women to contribute positively to the economy as they have been depicted as tactless and weak (Khunou,2009; Halford & Leonard, 2001). This not only reinforces the system of patriarchy but strips men of their human element as their identity is reduced to just being a worker, that is aggressive, fast, strong being able to withstand any challenge (Khunou,2009). These gender norms which are socially constructed have influenced the social organization of humans, with the differences being a tool to determine masculine and feminine identities (Cheng, 1996). Encouraging such difference is perceived as problematic as it has also been shown to spill into the workplace, thus influencing the occupational culture through prescribing ways of doing things, which commonly suppress females and privilege men (Benya, 2009). To reinforce this, Zarestsky (1976 as cited in Benya, 2009, p.13), argues that "male dominated jobs particularly masculine traits such as strength, danger and dirt tend to be revered, emphasised and attributed significance".

The complexity of conceptualizing gender remains; however, the ideologies discussed above have shown the fluidity of the concept. Mead (1935) supports the stance that gender should never be viewed as a rigid concept given that as the world evolved the roles which were deemed universal to men and women have been challenged with more and more societies being open to blurring out the lines between ‘men’s’ and/or ‘women’s’ work. With that said, the world has progressed in such a manner that extremely gendered societies are deemed problematic due to the rigid standards set for men and women given that they reinforce the superiority of one gender (males) over the other (females). Holmes (2007) reiterates that it is this notion that prolongs the effects of patriarchy even in present days, making it challenging for women to successfully progress in male-dominated environments.

2.4 CONCEPTUALIZING GENDER IN THE WORKPLACE

In the process of gaining deeper understanding of the experiences of women in the mining industry, it is essential to explore some the gender debates in the workplace with interrogation of the status of women in male-dominated environments.

The twenty first century presents an interesting paradigm shift of gender roles, which brings with it complex challenges in communities and workplaces. Whereas men have traditionally been viewed as providers, given masculine expectations of the roles of men (Khunou, 2009), more women are reported to be entering the labour market, thus assuming the breadwinner role within their families and pursuing careers in industries previously preserved for men (Halford & Leonard, 2001). The inclusion of women in the labour market is viewed as one of the initiatives that greatly pressurises organizations into transformation, particularly in South Africa. Even so, the developments made to ensure gender equality in the workplace are proven to have shortfalls as “familiar patterns of difference and discrimination persist, with research showing that women continue to assume secondary status in the workplace” (Halford & Leonard, 2001, p.2). Whilst globalization has played a crucial role in the alteration of the economics of the globe, the labour market and social understanding the role of men and women; gender still appears to be one of the major divisive factors within the workplace hence, there continue to be certain roles and occupations that are classified as ‘women’s work’ or ‘men’s work’ (Ralushai, 2003; Halford & Leonard, 2001). Sadly, Halford and Leonard (2001) posit that women are commonly the most affected by gender discrimination within the workplace, as they are under-represented in positions of authority

and over-represented in roles of subordination. Ralushai (2003) further reiterates that unequal gender norms within the workplace has a larger impact on women than it does on men, and thus has potential of affecting overall productivity within an organization, due to lowered morale.

Literature has argued that the introduction women into the labour market has led them being commonly placed at the bottom of the hierarchy in the workplace. The status accorded to women within the workplace reflected in their incomes and the overall value attached to the jobs done by women (Benya, 2009; Halford & Leonard, 2001). In support of this, Nimbark (2013) makes mention that reports have shown that women are most likely to be contained in lower paying jobs, with limited access to empowerment and advancement opportunities as compared to their male counterparts. Traces of patriarchy cannot be denied in the workplace (Selebano, 2014), particularly in allocation of tasks within male dominated spheres (Botha, 2013) where it is rare to find men and women performing the same tasks given that tasks are allocated not only based on skills and educational background but personal traits too (Bradley, 1989). Holmes (2007) further argues that power within the workplace is still not equally shared and this affects not only women but also men of different racial groups, class, ethnicity and so forth.

With that said, gender-based discrimination is one of the factors which are believed to be embedded within the mining institutions and with the influence of social customs, barriers were thus created for women to not actively participate in the industry (United Nations Women, 2016). Valenziano (2008, pp.3-4) affirms that “in an overwhelmingly traditional male-dominated and orientated workplace culture, there is little awareness of diversity and even less interest in making the organization’s services and opportunities equally available and accessible to everyone.” Therefore, it can be argued that the mining industry, being an obviously male dominated sector, needs to be more open to utilizing knowledge and skills of the available diverse talent pool, looking beyond the gender norms and standards which have been shown to be discriminatory against women.

2.5 INTERNATIONAL OVERVIEW ON WOMEN IN MINING

Literature on the involvement of women in the mining industry is not new, as it unravels the strides taken by women to penetrate the mining industry and how the discrimination of

women contested from both a legal and social perspective from as early as in the 1800s (Botha, 2013). Efforts to exclude women from the mining industry were stipulated per cultural norms as well as on legal terms, and justified as a safety precaution. The exclusion of women in mining was stipulated in the 1842 Mines Act which barred women from working underground, but allowed them to occupy surface roles occupying roles which did not require much physical strength i.e. administrative and cleaning roles. To strengthen efforts to ban women from working in the mining sector, Article 2 of the International Labour Organization (ILO) Convention 45 of 1935 officiated the exclusion of women in underground work; however, an exception was made for:

“any females who occasionally have to enter the underground parts of a mine for the purpose of a non-manual occupation, females holding positions of a management who do not perform manual work; females employed in health and welfare services; and females who in the course of their studies, spend period of training in the underground parts of a mine.”

This was justified as an action aimed at protecting women from the harms of working in the mines (Botha, 2013). Non-compliance was shown in countries such as Germany, India and Belgium which allowed women to continue working in the mines until the 20th century (Benya, 2009). Bradley (1989) further posits that the increase in the employment rates of women came as a result of the World Wars, however a decline of 0, 4 % of women workforce in the mines was witnessed in the 1970s. Nevertheless, a defining moment was witnessed in 1977 in the United States of America (USA) with the adoption of the Equal Rights Amendment (Hughes, 2012); which this authorized the participation of women in underground work within the mines. With technological advancements, the work was made to be more tolerable, thus minimizing excuses to exclude women from the workforce.

Regardless of the efforts made, there are persistent challenges within the mining industry to effectively incorporate women into the industry. Thus, ILO reports that there are approximately thirteen million mine workers in fifty-five countries and an addition of approximately 80-100million people whose survival is directly or indirectly dependent on the production in the mining industry (Miranda, 2004 as cited in Botha, 2013). Women in United Kingdom (2013) acknowledge that the incorporation of women at all levels of the mining business has been a great challenge to the industry across the globe. Translated into numerical terms women are said to comprise approximately 10% of the mining workforce

globally, with no clear indication of the proportion of those who occupy core mining roles. Naidoo (2015) further reports that the fraction of the female workforce in the mining industry is alarming and is the smallest as compared to other global industries.

In essence, many companies within the extractive industry are estimated to not have more than 5% female presentation (Botha, 2013). The Australian Mineral Council (2013) asserts that the under-representation of women within the mining industry has been a challenge for many years, particularly in managerial and onsite jobs. However, data in Australia has reported an increase in the number of women within the mining industry, that is, from 11% to 14% since 1998 (The Australian Mineral Council, 2013). Women in Canada as cited in Hughes (2012) reports that although the Canadian mining industry had approximately 14% female workforce in 2006, many of the roles they occupied were not essential to the mining business, such as administrative, cleaning and culinary positions. While there is an increased number of women entering the field, Hughes (2012) holds that the mining industry still has a long way to go to ensure the integration of women in the field, and having them occupy more crucial roles. Botha (2013) airs the same sentiments, but is of the view that although female representation in mining is relatively low globally, the industry is invested in empowering more women, having them hold significant roles in mining but that overall transformation will not come without any challenges. In a quest to unravel the gender imbalance in the Canadian mining industry, Hughes (2012) discovered that much focus pertaining women in mining communities and developing states has been on health and childcare whilst neglecting the essence of how lack of gender diversity not only affects the operations of the industry, but the functionality of human resources. This compounds the need for more research to be conducted on human resource related issues within the mining industry, particularly investigating the impediments within the industry which affect the full functionality of underground female mine workers. Women in Mining UK (2013) further argue that the lack of engagement of women in core mining roles has an indirect effect on the profit margins of mining organizations, whereby those with fewer women in core decision making roles enjoy lower returns.

The effects of mining on women has been explored from many perspectives, Sharma (2010) has looked at how mining promotes and sustains patriarchy in mining communities and the effects of this on women's mental health. Although this is the case, internationally the topic of gender and its effects on organizations is not prioritized (Lihiri-Dutt & Macintyre, 2006), and as a result there is little efforts to challenge male dominance and power within the mining

industry (O' Shaughness & Krogman, 2011 as cited in Hughes, 2012). Thus, there continues to be a gender imbalance in the international mining industry due to the underutilization of female skills, and not ensuring that women are well incorporated by eliminating some of the hurdles which are embedded within industry.

In studying the shortage in the talent and skills pool and the marginalization of females in the Canadian mining industry, Hughes (2012) recommend that strategies to incorporate women in the mining industry need to go beyond meeting numerical targets, with focus directed towards six interdependent area of concern, namely transition from school to work, barriers to entry, workplace culture, work-family balance, gender pay gap and career advancement in the mining industry. This is perceived as a holistic approach which will be beneficial in improving the recruitment, retention and progression of females in the industry. Hughes (2012) reiterates the point that the mining sector needs to explore the obstacles which are discouraging women from considering careers in mining but most importantly alleviate the culture of underutilization of female talent that is currently available.

2.6 HISTORY OF WOMEN IN MINING: SOUTH AFRICA

As in many other countries, the origins of the disproportion of gender in the mining industry are attributable to South African history and the history of the involvement of women in labour in general. Buthelezi (2013) argues that the mining industry conventionally migrated males from rural areas to form part of their workforce. Moyo (2011) elaborates that many mineral rich countries in the SADC region adopted the migrant labour system which mainly employed males and barred their spouses from living with them in the mines. The hostel system which was introduced in many mining sites was notorious for the marginalization of women from the mining industry, affecting the family system and deliberately implemented to exploit women. Moyo (2011, p.62) further maintains that “women lived in rural areas and worked on land...Women were actually exploited using their unpaid labour in agriculture to subsidise mining operations”. Bozolli (1983 as cited in Alexander, 2007) rejects the conception that women were excluded from working in the mines due to the perception that the work would be too strenuous for them as there is evidence of women being engaged in heavy industrial labour in countries such as India. She further argues that the dynamics of rural South Africa made it impossible for women to migrate to other provinces, leaving their subsistence farms and families behind. Tasks designated to village men were those of hunting and fighting which respectively became less significant in the nineteenth century, thus

leaving them with more time to spare, whilst women were involved in agricultural production and activity which assisted in putting food on the table for their families. This coupled with the biological and social reproduction role of women limited their capacity to relocate.

The exclusion of women from the mining sector is perceived as a historical and social phenomenon, with different countries presenting their own unique history. This was mainly a result of the “global historical forces of colonialism or capitalism which often altered customary gender roles in mining, limiting women’s traditional rights over mineral wealth. Attitudes towards women and mining were uneven in industrial societies as well” (Macintyre in Lahiri-Dutt, 2006 p.3). In support of this, Moyo (2011) asserts that colonial policies were not the only contributing factor to the exclusion of females from mining activities but this was also fuelled by negative cultural and paternalistic attitudes. Many reasons are provided concerning the exclusion of females from the mining industry, including limited access to education and other progressive opportunities women were previously deprived of in many countries, which then nullified the possibility of women acquiring crucial skills needed for mining jobs (Botha, 2013; Moyo, 2013).

Rabe (2006) holds that women were openly allowed to work underground in South African mines in the 1990’s. The industry was heavily pressurised by new legislative frameworks such as the Employment Equity Act 55 of 1998, The Mining Charter of 2002 (amended 2010) and the Skills Development Act 97 of 1998, which were introduced when South Africa became a democratic state. Empirical Research has shown that many mining houses are struggling to achieve the goal of including and promoting more women within the industry, thus failing to meet the 10% quotas that have set in the Mining Charter (Benya, 2009; Rabe, 2006; Botha, 2013). Regardless of the challenges experienced in improving female inclusion in the mining sector, statistics have revealed a rise in the number of women in the South African mines, from approximately 20 000 in 2011 to 52 000 in 2012 (Botha, 2013). It has additionally been shown that employment in South African mines decreased by 5,1 % in 2009 due to global economic and financial crisis, however more females were recorded to be entering the field, with an improvement of 11%. Interestingly, the performance of mining companies greatly improved, contributing a further 15, 6% growth in female employment within the mining sector (Botha, 2013). This proves that the introduction of women in

mining was value-adding although little recognition was provided on the value of women in mining.

2.6.1 Initiatives to Incorporate Women into The Mining Industry

The mining industry has not been entirely complacent in extending the opportunity to incorporate women into the industry. Thus, the government along with the private sector have been making considerable strides to undo the imbalances of the past through various initiatives to attract women into mining (Naidoo, 2015). One of such initiatives is to encourage more females to consider mining as a career choice through provision of bursaries. The mining engineering school of the University of the Witwatersrand have reported an increment in female student enrolments because of this initiative with figures showing approximately 35% of female students not only enrolled in the programme at undergraduate level but many taking their careers a notch further by enrolling in postgraduate degrees. Buthelezi (2013) affirms that tertiary institutions have over the years witnessed an increase in female student intake within the mining engineering programme. This is testament to the fact that although transformation within the industry is not yet at a desirable state, progress is steadily being made to incorporate women into the previously male-dominated industry.

This optimistic view of the efforts made by the mining industry to attract more females into the field is tarnished by research proving that the South African academia is not producing enough women engineers, geologists, surveyors and electrical engineers to respond to the needs of the mining sector to meet the statistic target set legislatively (LonMin, 2009). Therefore, this implies that the ratio of enrolments by female students into mining related programmes does not match that of graduations. For this reason, the industry is urged to expand the scope of their initiatives and invest in cultivating interest among young females from primary and high school levels.

Several mining companies in South Africa took the initiative to implement structured programmes within their organizations which will not only respond to the requirements stipulated in the Mining Charter but will also be effective in responding to the needs of women within the industry. One such company is Impala Platinum, which stretched their efforts to implementing the 'Women in Mining' programme aimed at addressing the gender imbalance within the mining industry and determined to continuously monitor progress in terms of the integration of women into the sector (Benya, 2009). Furthermore, Impala became

committed to sensitise their workforce on the introduction of women into the mining industry by introducing a call centre for supportive counselling and by promoting the inclusion of women into mining through various media such as posters and videos which were played in the banks and waiting areas for cages to take workers underground. Transformation of the working environment also included the introduction of more accommodative pregnancy and sexual harassment policies, introducing separate change rooms, and providing learnership and mentorship programmes to effectively accommodate women into the sector. However, these efforts made by Impala can be said to have been in vain for by May 2007 the organization only managed to attract 5,8% women to join their organization (Impala Platinum, 2007 as cited in Benya, 2009). The gloomy picture portrayed above illustrates that mining houses are experiencing challenges in recruiting and retaining women regardless of the initiatives they have structured to steer transformation. This sparks some thought-provoking interrogations on the experiences of women in mining which presents mining organizations with challenges in retaining them.

2.7 SOUTH AFRICAN LEGISLATION ON WOMEN IN MINING

South Africa was amongst countries that barred women from being involved in underground mining activities (Benya, 2009). Alexander (2007, p.214) postulates that the ban of women from mining in South Africa was made effective by The Union of South Africa's Mines and Works Act, No. 12 of 1911 which read "no person shall employ underground on any mine a boy apparently under the age of sixteen year or any female". Doors were opened to women in 1996 to enter the mining industry without restrictions (Alexander, 2007). New mining legislations were formulated with the aim of fostering transformation and creating employment opportunities for previously disadvantaged groups in South Africa and women are included in that group (Benya, 2009; Botha & Cronje, 2015). This was stipulated legislatively in the South African Minerals Acts of 1991, which was later revised and replaced with the Mineral and Petroleum Resources Development Act as well as the Mine Health and Safety Act of 1996. All new policies were drafted following the attainment of democracy in 1994 and in a quest to address past injustices and to do away with discriminatory legislative frameworks, thus making the mining sector accessible to previously disadvantaged people, women included (Zungu, 2012). The legislative amendments were strategically drafted in pursuit of improving the economic growth of South Africa and improving the standard of living of its citizens in line with the Employment Equity Act No. 55 of 1998.

The new political dispensation adopted in 1994 in South Africa became the spear to bring about transformation in various workplaces and the society. The democratic government led by the African National Congress (ANC) is determined to “transfer power to the people and transform society into a non-racial, non-sexist, united, democratic one, and change the way wealth is share to benefit all the people” (ANC, 2007). In pursuit of reshaping the country, and the constitutional commitment of making South Africa a just and equitable state, several laws were introduced. These include; the approval of the Constitution of the Republic of South Africa of 1996 as the supreme law.

The approval of the Constitution of the Republic of South Africa, 1996 came from the Constitutional Court on 04 December 1996 but was only implemented on 04 February 1997. The Constitution is regarded as the supreme law of all governance in South Africa, which cannot be superseded by any other law (South African Government, 2016). The South African Constitution is regarded as one of the most progressive globally making the public and private sector subordinates of the Constitution (Botha, 2013). Seeing that the focus of the study is questioning gender equality within the mining industry, it is essential to dwell on first value of the Constitution which speaks to the attainment of equality and advancement of human rights. This is further outlined in the Bill of Rights which forms an integral part of the Constitution. The Bill of rights prescribes the rights of all South Africans and those who live in the country based on the values of dignity, freedom and equality. This supreme law of the country serves as affirmation of the efforts made the government of South Africa to rectify past injustices and create a more equitable country for all; this certainly applies to creating gender equality in society as well as in the workplace. In line with the constitution, comprehensive labour policies were formulated to specifically to respond to the needs of employees. Given the history of South Africa, the labour laws were formulated in a quest to steer transformation within the workplace and do away with past discriminatory laws. Those laws include the following: the Labour Relations Act 66 of 1995 (amended in 2002); the Basic Conditions of Employment Act 75 of 1997 (amended in 2002); the Employment Equity Act 55 of 1998 (amended in 2006) and the Skills Development Act 97 of 1999.

Although there are many legislative frameworks within South Africa to improve the overall status of women in the country, the benefits of including women in traditionally male dominated sectors has not been well received, hence there continue to be many obstacles

women face in sectors such as mining (Jahn, 2009). With that said, it is essential to explore the perceived benefits that the incorporation of more women has on mining business.

2.8 THE NEED TO INCORPORATE WOMEN IN MINING

There is a need for women to be equitably included in economic activities and this is strengthened by the argument made by the United Nations rights based approach, vouching for “women and men’s equal human right, and by the extension women’s right to be treated equally in access to education, employment, remuneration and promotion” (Rachod, 2001, p.10). This is further emphasised by the South African Women’s Charter which was adopted in 1954 on the realization that women have been marginalized particularly from significant sectors of the South African economy which are over-populated by men. The Charter explicitly highlights that women in the South African economy are mostly found in sectors that are characterized by lower wages and poor working conditions. Jahn (2009) affirms that women who are employed within sectors that are traditionally male dominated have been shown to earn approximately 20-30% more than those in sectors that are female dominated. Additionally, recognition is given to the notion that the inclusion of women in all economic activities has greater benefits in improving the world economic growth and market efficiency, thus ensuring that all human resource assets that the society must offer are well utilized and invested in.

Although the mining sector has been made more accessible to women, their inclusion is not a clear cut linear process as commonly portrayed. Peck (1996) gives an interesting analysis of what ‘incorporation’ entails, with the conception that the incorporation of women into previously male dominated fields is beyond the new South African legislative frameworks but determined by society. Peck (1996) further argues that individuals are not brought into the world with the right to be incorporated into the labour market, but elements such as societal norms, government policies and, education systems are some of the determining factors as to who gets incorporated into the labour market. Peck (1996) refers to this as a gendered process which was previously more favourable to men, as they were perceived as the only breadwinners and providers.

However, the economic realities and unemployment level of South Africa have forced communities to allow women to take mining jobs too, regardless of the risks that come with

them. Not all communities are welcoming of women who work in the mines as they continue to be stigmatized for stealing husbands and being promiscuous (Benya, 2009). Even though working in the mines brings with it unpleasant labels from the community, it does not bring them as much shame as the inability to not provide for their dependants. Benya (2009, p.47) further argues that “rather than suffering the social stigma or political marginalization due to unemployment, women prefer to work in the mines and bear the stigma attached to women in mining”. This implies that women who seek employment in the mining industry do so as a desperate move and not always as their first career choice.

Furthermore, Calitz (2004) suggests the desperation, the will to survive and the need to provide for their families as motivations for more women to seek employment within the mining sector based on the perceived financial benefits. Heemskerk (2002, p. 5) shares the same sentiments by stating that the “participation in mining typically allows women to gain greater wealth, economic security and decision making authority”. However, Gibson and Kemp (2008) argues that most women enter the mining industry based on the need to provide for their families rather than as a desired option. Consultancy Africa Intelligence (2011) concurs with Botha and Cronje (2015) in claiming that the inclusion of females within the mining industry is essential as it allows for mining companies to benefit from the available talent pool which in turn benefits the economy and brings about a positive transformation in terms of workplace culture.

The inclusion of females in the mining field “challenges stereotypes that portray mining as being suitable for men only and therefore their presence contributes to the promotion of gender equity in the industry” (Consultancy Africa Intelligence, 2011, p.2). This is vital given the quotas set by the Mining Charter. A report compiled by Women in UK (2013) has demonstrated how in the inclusion of women in mining operations particularly at management and executive level saw an increase in profit margins and this was validated by a study conducted by a Non-Profit Organization (NPO) by the name Catalyst and Credit Suisse Research Institute. In addition to this, companies with a high female board representation have been shown to be enjoying “higher return on sales, higher return on invested capital and higher return on equity” (Women in UK, 2013, p.2). It was further reported that mining houses in South Africa are doing better than those in the United Kingdom which relatively have low female board representation steering diversity within the industry. Conversely, Motshegwa (2015) urges mining houses to not increase the absorption

of women into the industry only to meet the legislative quotas targets, but consider the overall benefit to the business. However, Motshegwa (2015) further argues that this may only be achieved through making the mining environment accommodative to women and their needs and making the overall industry attractive to women to effectively respond to the skills shortage.

It is undeniable that there has been an increase in the numbers of women entering the mining sector. However, literature shows the involvement of women more in artisanal mining which has been viewed as a less formal way of engaging in mining activities than they have in large scale mining operations due to strict measures that were put in place to regulate women's participation (Benya, 2009; Alexander, 2007; Lahiri-Dutt, 2011; Rabe, 2006). Lahiri-Dutt (2011) further asserts that the mining sector can effectively respond to the skills shortage by involving women in mining activities at different levels. Women may be involved in the actual extraction process by being underground mine workers or may work on the surface, sorting, crushing and preparing the extracted minerals as well as being office workers such as administrators and lastly women may indirectly form part of the mining industry by being community members in mining town who are responsible for ensuring sustainability and carrying out reproductive roles that can grow the workforce in the town.

A paradigm shift can be witnessed in recruitment of the labour force within the mining industry, where previously women stood no chance of being employed particularly in underground mining. Now mining companies are more than eager to rectify this past injustice by prioritising the employment of women, given their vigilant character, a trait that is important when doing underground mining work (Benya, 2009, Rachod, 2001, Mayes & Pini, 2014). Reasons for this shift include, simply improving gender statistics; creating a more equitable workforce with a variety of skills and the productive potential women bring to mining companies which makes an essential contribution to improving the effectiveness and efficiency of work done in the mines (Mayes & Pini, 2014). Fisher (2007, p. 739) further supports the notion of promoting a more diverse workforce within the mining industry based on the knowledge potential that could be of value in "exploration, research and equipment design". The World Bank Group have urged mining houses to lean towards the employment of more women into the industry as this translates into a long-term investment through improving working conditions, enhancing productivity, improved workforce retention and better access to the diverse talent pool (Wright, 2014; Buthelezi, 2013). This reiterates the

argument that women bring diverse perspectives to the mining industry which would be highly beneficial in the problem-solving process.

2.9 BARRIERS IN THE MINING INDUSTRY FOR WOMEN

The working conditions of underground miners are not always accommodative to women. Given the strict measures were taken to ensure that people employed in mining possess a certain level of physical strength, women have been excluded based on their reproductive health, as they are likely to fall pregnant and their absence from work would hamper productivity. Occupational health and safety has been reported to be a major concern which affects both men and women within the mining industry. However, Zungu (2012) argues that more attention needs to be directed to the incorporation of females in the industry as they report most cases of work-related diseases, due to lack of accessibility to hygienic sanitary facilities. There are reported institutional disadvantages, which impact on the full incorporation of women in the mining industry, regardless of the well documented frameworks which have been formulated (Benya, 2009; Hancock, 2014). The section that follows will explore some of the obstacles embedded with the mining industry which are perceived to be disadvantageous to the development of women.

2.9.1 Physical barriers

The innate genetic make-up of men and women has been referred to be one of the biggest hurdles towards women performing core mining jobs, particularly the manual jobs that require higher degrees of strength and endurance. Schutte and Edwards (2012 as cited in Botha and Cronje, 2015) confirm that indeed women are more likely to experience severe physical strain as a result of the manual labour performed, making them more prone to being fatigued which is operationally defined as “reduced muscular ability to continue an existing effort” (Ashworth et al. as cited in Botha and Cronje, 2015, p.3). There is increased danger in having fatigued workers working underground because this does not only affect their overall productivity but makes them prone to incurring injuries or causing accidents. Zungu (2012) further adds that there are high numbers of people suffering from back related injuries and musculoskeletal disorders, affecting the human body movement because of the manual jobs being performed underground. High incident rates are commonly reported among women than men.

The incorporation of women and their reproductive roles such as pregnancy and breastfeeding is one of the ongoing challenges which mining companies are presented with (Zungu, 2012, Botha & Cronje, 2015). Women who are of an employable age would mostly be in their fertile years. Their fertility continues to be perceived as disadvantageous, particularly in underground mining roles, given that they would need to be removed from working underground to working on the surface when they are approximately four months pregnant (Rabe, 2006). However, the South African workplace legislation is vital in ensuring the protection of pregnant women. The Employment Equity No. 55 of 1998 section 6 protects pregnant women from being discriminated against, and further advocates for women employees who are pregnant or nursing a child to not perform work that could be potentially hazardous to the child or the mother, and for employers to offer alternative roles which will pose less danger to the health of the mother or the child.

The inclusion of females has been compromised on many levels, including on providing them with comprehensive protection particularly when performing underground roles. Zungu (2012) asserts that it has been a great challenge to incorporate women within the industry as this sector has been previously known to be reserved for men only. It is for this reason that even the Personal Protective Equipment (PPE) within the industry is designed to best suit the structure of men. This confirms the assertion that men and women are made to be different, as it has been shown that women generally have shorter feet, smaller bodies; narrower shoulders and wider hips as compared to their male counterparts. As a result, women are not only left wearing ill-fitting PPE which compromises on their comfort and efficiency to carry out their tasks, but they are also exposed to greater environmental danger as they are not adequately protected. Furthermore, the safety clothes include a one-piece jumpsuit, which becomes problematic for women when going to the toilet as they need to remove the entire garment before utilising the toilet (Consultancy Africa Intelligence, 2011).

However, This is Gold (n.d) argues that, mining houses have taken recognition of the adverse risk posed by lack of proper fitting PPE and how this affects the productivity of women, and have collaborated with The Mine Health and Safety Council (MHSC) to design PPE which are more suitable for the body structure of females, offering them comprehensive protection and comfort while carrying out their duties. Given the unique working environment presented by underground mining, Calitz (2004) holds that mining houses cannot afford to compromise

on the protection of any of their employees, whether male or female, because the environment presents very hazardous conditions to work in and thus ultimate protection needs to be provided.

Rachod (2001) asserts underground working conditions are adverse to both men and women but more severely affects women given the high temperatures they work under, which becomes extremely uncomfortable during menstruation where their body temperature becomes higher than normal. Men underground workers tolerate the heat better as they have the privilege of going topless whilst women cannot, given that they will be exposed to harassment and rape. In addition, the nature of the sanitary systems in underground mining environments are reported to be in a very bad state, thus affecting the overall hygiene of women and affecting their overall health (Zungu, 2012).

2.9.2 Institutional Barriers

Despite the good legislative frameworks which have been introduced, particularly to steer the introduction of females into the industry, progress in ensuring transformation has been very slow (Martin & Barnard, 2013) and enforcement of the lawful necessities has been unsatisfactory (Moyo, 2011). Benya (2009) echoes these sentiments with the argument that structural challenges within the mining industry persist, severely disadvantaging women, regardless of the legislative frameworks which have been promulgated.

As a result of the negligence given to women issues, harassment, rape gender based violence, and HIV are some of the challenges which have been reported by females working in underground mines (Raluha, 2003). Mayes and Pini (2014) further adds that workplace gender inequality continues to persist within the industry, thus leading to the women enjoying fewer benefits and earning less compared to their male counterparts. Given that household duties continue to be assumed by women, it is difficult for them to achieve equilibrium between their work and family lives because of the lack of flexibility embedded within the mining system (Worldwide Recruitment Solutions, 2014). Working extended and unsociable hours affects both men and women in the industry, however given that women are associated with the primary care giving role, they are reported to have difficulties balancing childcare and work. Rachod (2011) further adds that inadequate and/or poor housing conditions perpetuate these challenges because women cannot stay with their families, whereas men can share hostels away from their families.

Furthermore, union representatives within the industry are reported to be mostly men, who are not as knowledgeable about challenges faced by women, thus leading to issues relating to women not adequately resolved (Benya, 2009; Consultancy Africa Intelligence, 2011). Benya (2009) further reports that this has a ripple effect on the holistic well-being of women, affecting the benefits and wages they receive as well as their family life as they are likely to experience immense stress.

2.9.3 Social Barriers

The introduction of women into previously male dominated industries such as mining poses many threats to women and has also been perceived as undermining the traditional mining culture instilled in the system (Benya, 2009). These originate from the traditional gender divisions and hierarchies constructed through the different structures within society with the family unit being viewed as a powerful force which reinforces the dominance of the male gender (Martin & Barnard, 2013). It is unfortunate that the same trends and gender expectations commonly influence policies and culture within male dominated workplaces thus resulting in women maintaining marginalized roles and being victims of gender-biased organizational culture. With that said, Benya (2009, p.17) argues that the mining industry is one of the many industries which are not gender neutral, and sadly “gender expectations are embedded and reproduced in interactions”. This stems from perceptions mostly held by black traditional men who view women as not belonging in the industry and view them as being disrespectful to the traditional gender norms (Benya, 2009; Martin & Barnard, 2013). Stereotypical attitudes in certain countries have also perpetuated the exclusion of females from the mining industry, this coupled with superstitious beliefs and societal expectations of the roles men and women ought to hold (Lahiri-Dutt, 2011; Botha, 2013; Benya, 2009; Calitz, 2004). Moyo (2011) further supports this conception with the argument that there are many factors which were embedded in the colonial era which propagated marginalization of women in mining. Gender stereotypes persist particularly in underground mine work, where women are viewed as being too soft which affects productivity and strips them of their femininity.

2.10 CONCLUSION

Literature has shown that regardless of the legislative frameworks introduced to ensure transformation within the mining industry, women continue to have undesirable experiences within the industry, affecting their retention. The gender imbalance has proven to be at the root of the masculine work culture within the mining industry which in turn affects the social functioning of the underground women mine workers. It is for these reasons that this study was undertaken through conducting an in-depth exploration into the experiences of underground women mine workers, as well as to get an understanding how they cope with some of the challenges which they are faced with.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Exploring the experiences of female mine workers called for the researcher to employ a research methodology which would allow her to obtain extensive understanding on this phenomenon from the view of the participants, hence a qualitative research approach was employed. This chapter therefore aims to provide the rationale behind employing a qualitative research approach to achieve the overall aim and objectives of the study. This chapter will further provide a detailed account on how participants of the study were recruited by looking at sampling techniques and research instruments utilized to obtain data. Data analysis procedures will be detailed, followed by a discussion on ethical principles which governed the process of the study. The chapter will be concluded with a discussion on practical limitations embedded by the research methodology employed as well as those experienced by the researcher in the field.

3.2 RESEARCH APPROACH: QUALITATIVE APPROACH

To gain a thorough understanding of the experiences of female mine workers, a qualitative research approach was adopted. Rubin and Babbie (2011) postulate that a qualitative research approach is most desirable for a research study that is aimed at understanding experiences and perceptions of participants as well as unravelling meanings attached to a social phenomenon. Ehrlich and Joubert (2014, p. 349) add that “these methods allow researchers to understand how subjects of a research study perceive their situation and their role within the context”. The contextual element was essential to this research study, given that the researcher stepped into a world that is unknown to her with the eagerness to gain deeper understandings on the experiences of female mine workers. This was done by gaining access to visit the specific context where the research study was conducted in order to learn about the female mine workers “lives, behaviour and knowledge on their subjective experiences” (Monette, Sullivan & Dejong, 2011, p. 219). It was vital for the researcher to seek permission from the mine’s management through the submitting full background on the study prior to

interviewing the employees of the mine. This was crucial for this research study as it allowed the researcher to comply with the ethical standards and to extensively gain detailed understanding and unravel meanings of the experiences of the research participants with regards to the nature of their work.

The qualitative research approach is born from an interpretive paradigm which is of the view that social phenomena are not better studied quantitatively, but that studying research participants in their natural context presents the researcher with more valuable findings because it goes beyond what is presented on surface to unravelling meanings and feelings that are attached to the social phenomenon under study (Rubin & Babbie, 2011). Taylor, Bogdan and DeVault (2016) further support this, by mentioning that a qualitative approach is most suitable for a research study that seeks to produce thick descriptive data uncovering the social realities of participants as presented by them and the researchers observations. Rubin and Babbie (2011) further assert that a qualitative research approach is not only concerned with the production of thick descriptive data but has an essential interpretive element which requires the researcher to adopt an inductive approach by developing concepts and understanding of the data collected through further probing and identification of patterns.

As the study sought to gain in-depth understanding on the social phenomenon; the reality of the experiences of female mine workers were accepted and interpreted from the perspective of the research participants not that of the researcher, thus urging the researcher accept the subjective views of participants to best understand the phenomenon under study (Marlow, 2005). This challenged the researcher to take a naturalistic role through engaging in the research process, interacting with the participants in a manner which allows the researcher to adequately learn the motivation behind the participant's behaviour and meanings instead of "collecting data to assess preconceived models, hypotheses or theories" (Taylor, Bogdan & DeVault, 2016, p. 7). This simply implies that the researcher was not a distant object during the research process but she put the human factor forward by taking cognisance of the participant's feelings as well as empathising with the participants when the need arose (Babbie & Mouton, 2010). This further required the researcher to holistically study the experiences of female mine workers, by not only interacting with the participants but also engaging with the setting to thoroughly assess the potential obstacles to the development of females within the mining sector.

3.3 RESEARCH DESIGN: CASE STUDY

A case study research design was utilised, to enable the researcher to extensively study the experiences of the individual participants. Ehrlich and Joubert (2014) states that a case study design is useful for research studies which intends to explore social issues within its real context. A case study design is commonly associated with qualitative research studies and can be defined as “a systematic inquiry into the event or a set of related events which aims to describe and explain a phenomenon of interest” (Bramley, 1990, as cited in Zucker, 2009, p. 2). Baxter and Jack (2008) further mention that a case study research design is vital in facilitating a thorough exploration of a social phenomenon in its natural environment utilizing various data sources to enable the researcher to study the participants from more than one perspective, revealing different meanings and understandings through which the phenomenon may be interpreted. Gathering and assessing literature which has been written on women in mining globally and locally was fundamental in placing the data that was presented by the participants into perspective and in relating it to the specific context in which the women exist. This was helpful as the researcher was not only reliant on the data gathered in the field but also unravelled meanings and identified patterns using existing literature to substantiate points made by the research participants.

Yin (2003) offers four instances in which a case study design should be considered for a research study: (a) when the focus of the study is to answer “how” and “why” questions; (b) when the researcher cannot manipulate the behaviour of those involved in the study; (c) when the research study aims to cover contextual conditions because of their relevance to the study; or (d) the boundaries are not clear between the phenomenon and context. The researcher opted for the case study design with the aim not to study the underground female mine workers in isolation but to gain deeper understanding on the setting in which they function to examine how this impacts on their development within the industry. The case study design was preferable for the research study as it allowed the researcher to closely study the experiences of female mine workers in greater detail within their context. To support this, Zainal (2007) states that a case study research design ought to be based on real life issues and based on a limited sample which will be richly explored and investigated by the researcher.

A case study design may take different forms, but this research study deliberately undertook a holistic single case study design with the intention to provide detailed understanding on real

life experiences of underground female mine workers within the environment in which they function with no intention to compare (Baxter & Jack, 2008). With this design, the researcher could thoroughly learn of the experiences of underground female mine workers in the environment in which they function. Because the underground mining working environment is considered unusual for women to go into, this intrigued interest in learning more on their motivations to enter the industry, challenges they encounter as well as the coping mechanisms they employ to effectively function within the mining industry.

A case study design is understood to be embedded in the constructivist paradigm, which believes in the notion of a socially constructed reality (Baxter & Jack, 2008). This asserts that reality is relative and therefore cannot be presented from one point of view (Yin, 2003), hence the research study considered the inclusion of several mine workers to learn about their views on the nature of their work and how it is enabling or disabling to them as women. In the same light, Crabtree and Miller (1999, p.10) add that the constructivist paradigm “recognizes the importance of the subjective human creation of meaning, but doesn’t reject outright some notion of objectivity. Pluralism, not relativism, is stressed with focus on the circular dynamic tension of subject and object”. This speaks to the collaboration the researcher had to undertake with the research participants to create an enabling environment for the participants to effectively tell their stories in-depth in turn allowing the researcher to better understand their realities. The interviews were conducted in an environment which the participants were most comfortable in and were familiar with, which was their workplace.

3.4 POPULATION AND SAMPLING

Sampling formed as one of the crucial steps of conducting this research study. This required the researcher to carefully select a population whether large or small to inform the basis of the study (Doherty, 1994). Latham (2007, p. 1) explains a sample to be a subgroup of a population, which represents “the characteristics of a known number of units in the population”. Selecting a relevant sampling method was vital for the research study in order to select appropriate participants to inform the study. In addition to this, Latham (2007, p. 3) asserts that “using correct sampling allows researcher the ability to reduce research cost, conduct research more efficiently (speed), have greater flexibility, and provides for greater accuracy”. Therefore, this minimized the cumbersome process of making logistical arrangements, but most importantly it ensured that the researcher has a good sample which was effective in achieving the aim and objectives of the research study.

A non-probability sampling procedure was utilised to select relevant participants to inform the study. The choice of research participants to form part of the study using this sampling procedure was not mechanically determined where potential participants are chosen randomly in numbers, but the choice was informed by an element of judgement with the intention to carefully select participants based on specific attributes the researcher was interested in studying (Doherty, 1994). In a more elaborative definition, Brick (2014, p.1) posits that non-probability sampling “is a sampling technique where the samples are gathered in a process that does not give all the individuals in the population equal chances (equal probability) of being selected”. With that said, the sampling techniques that were employed ensured that the research study focuses on studying a small sample to inform the basis of the study with no intention of representing the whole population as this would have raised feasibility and accessibility issues. Accessibility was the core function of this form of sampling (Doherty, 1994) and obtaining formal permission was crucial not only for ethical purposes, but also to have better access to the research participants. Therefore, the researcher approached the North-West based mining house to gain access to the potential research participants by obtaining formal permission from the management to conduct the research study.

Oppong (2013) accentuates that sampling is an essential step in research which requires researchers to carefully select participants who will be of assistance in providing relevant information on the subject matter under study. The form of non-probability sampling procedure that was employed was purposive in nature, implying that it was based on the researcher’s judgement. Marshall (1996, p. 203) states that purposive sampling is a method utilized by qualitative researchers to select participants “who have experience or knowledge of the issues being addressed in the research”. It was desirable for the researcher to choose a sample based on judgement because the research study did not intend to make generalizable conclusions (Onwuegbuzie & Leech, 2007) from the data collected but to carefully select participants with necessary knowledge on the experiences of females within the mining industry to inform the study. Ten female mine workers were approached to take part in the study. A deliberate decision was made to include underground female miners to have them tell their realities as they have experienced it. This echoed the aim of the research study which was to gain better understanding of the experiences of female mine workers by having them form a core part of the study. This is in line with feminist research methodologies which are highly concerned with questioning gender dynamics with focus on women as well as women’s “own knowledge and experience” (Shefer & Boonzaier, 2006, p. 8). It was

therefore necessary for the research study to not only have key informants narrating their observations on the experiences of women who work underground in the mines but to incorporate the participants who will present first hand experiences of the social phenomenon (Shefer & Boozaier, 2006). Thus, empowering women to take ownership of their social realities and tell their stories as they have experienced them. The selection criteria required the research participants to be: women, working underground. In addition, they needed to have been working at the mining house for at least one year, preferably be proficient in Sesotho and be willing and available during data collection. The exclusion criteria were females under the age of 18.

Triangulation of data sources was applied. This implied the utilization of more than one research method and theories to study the same phenomenon (Balnaves & Caputi, 2001). This involved the use of written literature, theoretical frameworks, data collected from research participants as well as data from the key informants. Two key informants, who held senior positions underground were approached and interviewed. Kumar (1989, p. 1) defines key informants as “a group of individuals who are likely to provide needed information, ideas and insights on a particular subject”. This assisted in ensuring the trustworthiness as the two key informants provided a broader understanding on the experiences of underground female mine workers and this was strengthened further by their years of experience. Access to the female mine workers and the key informants was made possible by one of the respectable mining houses located in the North-West province.

3.5 RESEARCH INSTRUMENT

The researcher employed a semi-structured interview schedule containing predetermined questions which assisted her to prompt important data to inform the study (Ehrlich & Joubert, 2014). DiCocco-Bloom and Crabtree (2006) describe an interview schedule as a tool containing essential questions (mostly open-ended) to allow the researcher to understand the social phenomenon under study in-depth, in this case the experiences of females within the mining industry. Padgett (2008) states that employing an interview schedule allows the researcher to obtain rich data without compromising on the key themes that ought to be explored. Semi-structured interview schedules provide a little structure but also allows for flexibility during the interview process, making room for the interviewer to probe further on certain topics which may arise (Mathers, Fox & Hunn, 1998). This provided the researcher

with an opportunity to use cues and prompts to encourage the interviewee to speak openly during the interview.

It was essential to create a trusting environment with the participants during the interviews therefore the schedule was designed in a way that it begins with identifying information and later flow into more sensitive questions. Ehrlich and Joubert (2014) emphasise the importance of carefully constructing an interview schedule in a manner that it is sequential thus requiring the researcher to begin with information that is less threatening such as demographic information and continue to more sensitive questions. Furthermore, two different interview schedules were utilized for the research study, one was used to interview the underground female mine workers (Annexure C1), while the other schedule (Annexure C2) was used when interviewing the two key informants.

Moreover, the researcher was the primary research instrument as she was the principal person who collected and analysed the data (Greenstein, Roberts & Sita, 2003). Shefer and Boonzaier (2006) emphasise the fundamental role taken by the researcher throughout the research study with the acknowledgment that contextual analysis is vital in qualitative research; hence the researchers cannot effectively study the participants in isolation from their context. Shefer and Boonzaier (2006, p. 5) asserts that “rather than minimising researcher bias, qualitative approaches acknowledge that we are not removed from the contexts we study. Researchers are encouraged to examine their roles and impact throughout the research process”. Therefore, in studying the participants, the researcher was conscious of her own role, feelings, gender beliefs, class and other factors which were likely to influence the process of the data collection. The researcher acknowledged that her neutrality in the research process could be questionable given that she is a woman who was interviewing women on gender related issues within the mining industry.

3.5.1 Pre-testing research instrument

The research instruments were pretested on one individual who fits the criteria of the participants that were needed for the study to enable the researcher to identify areas of improvement. The data collected from the pre-test interview was destroyed and did not form part of the analysis. Monnete, Sullivan and Dejong (2005) hold that it is important for researchers to pre-test their research instruments as it provides the researcher with adequate

preparation for the main study, allowing her to make amendments where necessary to improve the validity of the overall study. The pre-test interview took place three weeks prior to conducting the actual data collection for the study. The pre-test allowed the researcher to strengthen the research instrument to ensure that she gathers relevant data to inform the study. It was during this process that the researcher could identify ambiguous questions which needed to be amended. The researcher could take note of areas of improvements in her interviewing techniques as well as to be mindful of question which required further probing and elaboration after pre-testing her research instruments.

3.6 DATA COLLECTION

Individual face-to-face interviews were utilised as a data collection method. Interviews were the preferred form of qualitative data collection method as they are useful in collecting rich descriptive data from a small sample (Greenstein, Roberts & Sita, 2003). This formed an integral part of the research study, given that raw data was collected through engaging in verbal communication between the interviewer and the interviewee, guided by the semi-structured interview schedule (Mathers, Fox & Hunn, 1998). It is further mentioned that this method is desirable for studies which are exploratory and/or descriptive. This was prudent for this study as it sought to explore the experiences of women who are employed underground as mine workers, getting a thorough understanding on the opportunities and constraints within their working environment.

Interviews are a common data collection method in qualitative research and require prior arrangements to be made in terms of meeting time, location and date. Edwards and Holland (2013, p. 3) further posit that although there are a variety of styles which are embedded in qualitative interviews, there are standard features which are common to semi-structured interviews. Firstly, interviews are commonly conducted in manner where the “interactional exchange of dialogue” between the respondent and interviewer is encouraged. Secondly, face-to-face interviews are commonly centred on specific topic which needs to be explored and it is from these that the collected, themes and issues of concern arise for further analysis. However, it is essential that the interview allows for fluidity and this comes with high reliance on the interviewing skills of the interviewer. Therefore, the use of different techniques such as probes, prompts and cues need to be strategically incorporated within the interview to obtain the desired quality of data (Mathers et al. 1998). The researcher maintains

that her professional training as a social worker was advantageous during the process of data collection. The professional background of the researcher enabled her to employ different interviewing skills which would ensure that she tactfully gathered the required data to inform her study. Lastly, Edwards and Holland (2013, p.3) assert that the most crucial feature of face-to-face interviews is the “perspective regarding knowledge as situated and contextual, requiring the researcher to ensure relevant contexts are brought into focus so that the situated knowledge can be produced.” This was essential for the study as it intended to not only explore the individual experiences of underground miner workers but to also get a good understanding of the opportunities and impediments embedded within their working environment in order thoroughly construct knowledge on the topic of women in mining.

Although face-to-face interviews are deemed labour intensive, they are highly regarded as one of the best methods of collecting quality data more especially for an exploratory study (Mathers et al., 1998). Face-to-face interviews allowed for the researcher to gain an in-depth understanding of the experiences of female mine workers through individual interaction with the ten respondents and two key informants. Interviews with participants took approximately 45-60 minutes and additional interviews were facilitated until saturation of data was reached. Data collection took place at a time and place that was convenient to the participants. Many of the participants made the time to have their interviews with the researcher before going underground and after they back from underground. None of the participants experienced discomfort during the interviews. However, debriefing sessions were arranged for the participants with Ms. Ntshuxeko Miyambu, who is a social worker at the Department of Social Development and her contact details were shared with participants in case they felt distressed post the interviews.

This process of collecting data commenced after ethics clearance (Annexure E) was obtained from the university. The researcher swore to the university that no one other than her and her supervisor will have access to the tape recordings. The necessary security precautions were taken to safe guard the data collected by storing the data in a password protected computer and kept in a lockable cabinet. The data will be kept for two years following any publications or for six years if no publications emanate from the study.

3.7 DATA ANALYSIS

The data collected was analysed using the thematic analysis method. Braun and Clarke (2006, p. 6) define thematic analysis as “a method for identifying, analysing and reporting patterns

(themes) within data”. It is further mentioned that this is one of the most commonly used methods of data analysis by qualitative researchers. It entails the reduction of raw data collected through organizing it into themes which will then require a further interpretation for the findings to be unravelled. Braun and Clarke (2006, p. 10) understand a theme to be a subject which “captures something important about the data in relation to the research question and represents some level of patterned response or meaning within the data set”. Additionally, the analytic method that was employed complemented the research approach and design as it allowed the researcher to effectively identify recurring themes from the data collected in relation to the experiences of females within the mining industry. Rubin and Babbie (2001), mention that this analytic approach is essential as it allows to the researcher to empathetically understand meanings attached to participant’s experiences and to unravel underlying feelings.

Qualitative data analysis entails a process where the raw data is sifted through to produce meaningful findings and greater detail. This involves “reducing the volume of raw information, sifting significance from trivia, identifying significant patterns and constructing a framework for communicating the essence of what the data reveal” (De Vos, Strydom, Fouche & Delport, 2011, p. 397). It is during this stage that meaning was sought from the data collected. The researcher transcribed the raw data on the tape recorder and coded per themes identified; this was also linked with field notes which the researcher collected during the data collection process. The researcher made use of the open coding technique, which Sarantakos (2013) describes as a process of data conceptualization which lays the way for theory formulation. Identified themes and sub-themes were discussed in conjunction with previous literature reviewed.

3.8 TRUSTWORTHINESS OF STUDY

The following techniques were employed to ensure the trustworthiness of the study:

3.8.1 Credibility

This refers to the congruency of the research data with reality (Shenton, 2004). To ensure accuracy of the data collected, triangulation was applied, where the data captured was supported with data which has already been documented to verify particular details.

3.8.2 Transferability

The researcher acknowledges that observations that were made during the research process were specific to the unique context. However, a rich description of the context in which the study was conducted was provided (Shenton, 2004). Transferability cannot be guaranteed as the study is qualitative in nature, thus implying that the findings are not generalizable and the same findings cannot be obtained should the study be conducted with different participants in a different context (Babbie & Mouton, 1998).

3.8.3 Dependability

The researcher provided rich descriptions of the research methods utilised and acknowledged the shortfalls of the research methods.

3.8.4 Confirmability

The researcher extensively provided a description of the research processes. Additionally, the use of triangulation was of assistance in terms of reducing the researcher's bias (Shenton, 2004). This was essential in capturing the entire research process and determining the steps followed to which findings were sought and recommendations were made (Loh, 2013).

3.9 ETHICAL CONSIDERATIONS

To comply with the moral standard of conducting a social research study, the following techniques were employed:

3.9.1 Informed consent and voluntary participation:

Informed consent was obtained from the participants prior to interviewing them, ensuring that they were well informed about the content of the study. Field and Morse (1992) as cited in Orb, Eisenhauer & Wynaden, 2000, p. 94) mention that obtaining informed consent entails "that participants exercise their rights as autonomous persons to voluntarily accept or refuse to participate in the study". The participants took part on a voluntarily basis and the decision to participate was made following the detailed description of what the study entailed was provided. An information sheet was provided to all participants containing the purpose of the study before they are requested to sign the consent forms. Participants were informed that they could withdraw from the study at any time and the data collected would be destroyed

and not used. Additional consent was obtained for utilising a tape recorder as confirmation that the participants were made aware of the instrument prior to the interview.

3.9.2 Beneficence:

The research study intended to do more good than harm to the research participants (Orb, Eisenhauer & Wynaden, 2000). To this end, the risk factors as well as benefits involved in participating in the research study were discussed with the participants prior to conducting the interview. The researcher was aware that the research study may have evoked emotional turmoil in the participants; therefore, debriefing sessions after the interview were arranged and made available to the participants with a qualified social worker.

3.9.3 Deception:

Sarantakos (2013, p. 18) highlights that “deception occurs when researchers encourage people to take part in a study by deceiving them, for example by hiding aspects of the research that respondents might find undesirable”. The researcher did not provide misleading information to the research participants in the quest to get them to partake in the study.

3.9.4 Anonymity and confidentiality:

The identity of the research participants was fully protected and was not mentioned in the research report, ensuring that no information shared can be linked to a specific participant. Identifying information was omitted and was not be included in the final report (Ehrlich & Joubert, 2014). Pseudonyms were utilised in the research report to ensure full protection of the participants’ identity. The researcher was compelled to share the information during the academic supervision for guidance, for this reason confidentiality of the information was not guaranteed. However, the researcher and the supervisor were the only people who have access to the transcripts and recordings.

3.10 STUDY LIMITATIONS

3.10.1 Interviews:

The researcher experienced challenges with scheduling interviews as there are strict time slots within the mines. Therefore, the researcher targeted the knock off times to have

interviews. Interviews with participants were scheduled in the morning and in the afternoon when they were changing shifts. The researcher could not conduct the interviews underground given the induction process for safety purpose, thus all interviews were conducted on surface. This presented challenges because the researcher was not familiar with the underground environment and struggled to understand certain explanations, however permission was granted to the researcher to go underground on the last day of conducting interviews and this assisted in putting the data collected into perspective. This allowed the researcher to become more familiar and broaden understanding with the working conditions which female mine workers work under.

3.10.2 Language barrier:

The researcher anticipated language to be barrier given that the employees in mining are from different ethnical backgrounds. However, using the sampling procedure discussed earlier, the researcher was able prioritise underground female mine workers who were proficient in Sesotho, a language in which the researcher is proficient. Although this was the case, many of the participants could express themselves well in English but for those that could not the researcher had to not only apply her probing skills but also try and translate certain terminologies. This limited the research participants in their responses due to little understanding and difficulty in translating the terms.

3.10.3 Age Gap:

The researcher experienced challenges with a small number of participants who were older than her. This might possibly have affected the quality of the data collected because some participants were not comfortable enough to be open about their experiences as female who are employed underground based on the age difference between them and the researcher. Using her social work background, the researcher tried to create a trusting environment for all participants by establishing rapport but this was not sufficient with some participants.

3.11 CONCLUSION

The contents of this chapter were vital in substantiating the use of qualitative research methodology to guide the research study. Qualitative research methodology allowed for the researcher to gain a rich insight into the experiences of underground female mine workers. This was made possible using the effective purposive sampling technique to select appropriate participants to inform the study as well as the use of interviews to gather rich

descriptive data. The chapter further demonstrated the measures taken by the researcher to ensure that the study complies with ethical standards. Detailed information on the context and limitations in which the study was conducted was provided to inform researcher who may be keen to explore similar studies.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF FINDINGS

4.1 INTRODUCTION

This chapter intends to provide a comprehensive discussion and presentation of the findings from the data collected on the study. The data collected captured the experiences of underground female mine workers through an exploration of the gender barriers embedded within the mining environment. Using thematic analysis, four major themes, which relates to the objectives of the study were identified. The first section of the chapter will present the aim and objectives of the study coupled with a presentation of the demographic information of the participants of the study. The remainder of the chapter will offer an in-depth discussion of each theme along with sub-themes, and arguments will be substantiated by the responses from the participants as well as literature reviewed.

4.2 THE AIM AND OBJECTIVES OF THE STUDY

The study was aimed at exploring occupational experiences of female mine workers. In order to achieve this aim, the following objectives were formulated:

- i) To explore the motivations for female mine workers to work underground;
- ii) To investigate the challenges faced by underground female miners;
- iii) To explore coping strategies employed by female underground miners;
- iv) To examine mechanisms in place to create a gender sensitive environment.

4.3 DEMOGRAPHIC INFORMATION OF THE STUDY PARTICIPANTS

The table presented below provides a summary of the demographic information of the participants. For ethical purposes pseudonyms, have been used to protect the identity of the participants of the study.

Table 4.1 demographic information

Pseudonym	Age	Employment duration	Educational background	Job role
Mpho	40	12 years	Grade 12	Mining team member
Vicky	41	12 years	Grade 12	Shift boss
Phindi	27	4 years	Studying towards Human Resource qualification (N4)	Loco operator
Lerato	45	10 years	Grade 12	Scrapper winch operator
Otsile	26	5 years	Diploma in Safety Management	Mono train driver
Olerato	39	10 years	Grade 12	Mining team member
Setswana	30	7 Years	Grade 11	Mining team member
Gabisile	36	10 years	Grade 11	Mining team member (backfill)
Gubedu	38	7 years	Grade 12 +ancillary nursing certificate	Winch operator
Argentina	30	9 years	Grade 12	Engineering assistant
Sphiwe (key informant)	40	10 years	Diploma in Human Resource management	Human Resource manager
Cassandra (key informant)	34	13 years	Diploma in Electrical engineering	Engineering forewoman

Through the use the purposive sampling, 10 participants and 2 key informants were interviewed for the study. The sample was made up of all black female mine workers who are

employed underground and who were all at the time of the data collection permanent employees at the mining company situated in the North-West province. Although it was observed that women of different races worked within the mine, the majority that are occupying underground mining roles are black. Of the two key informants interviewed, one was designated to work underground while the other was based on surface. The participants approached for interviews complied with the selection criteria of the study as they had all been working for the mining company for at least 1 year and were above the age of 18 years. The majority of the participants could be regarded as adults as they were over the age of 35 years old whilst only five participants were below the age of 35 years old. An interesting picture emerged of the participants' educational background, with 7 participants only having secondary education and of the remaining 5 with tertiary education only 2 having qualifications which are related to the mining industry. Tracing the path which led the participants into entering the mining environment was fascinating as their journeys varied, however they were mostly brought by one common need which was the strive to combat poverty in their lives.

4.4 PRESENTATION OF KEY THEMES ARISING FROM THE DATA COLLECTED

Four main themes have been identified in line with the aim and objectives of the study. The main themes emerged through the strategic use of thematic analysis which enabled the researcher to reduce the volumes of the data collected by identifying recurring themes which will ultimately respond to the research question (Braun & Clarke, 2006). An outline of the key themes and subthemes has been presented in Table 4.2 below. Each key theme will be discussed along with subthemes which emerged from the data collected with reference to the body of literature reviewed.

Table 4.2 Summary of themes and subthemes

Themes	Sub –themes
1) Motivations to work in the mining industry	1.1 Unemployment 1.2 Lack of further educational opportunities. 1.3 Better working wage 1.4 Mining bursaries offered

2) The challenges faced by underground female miners	2.1 Job allocations 2.2 Limited learning and development prospects 2.3 Macho mining culture 2.4 Inadequate resources for women 2.5 Biased infrastructure 2.6 Sexual harassment 2.7 Health and reproductive rights
3) Coping strategies used by female underground miners	3.1 Embracing masculine characteristics 3.2 Acceptance 3.3 Dating men in leadership roles
4) Mechanisms to create a gender sensitive environment	4.1 Women in mining committee 4.2 Labour unions 4.3 Employee Assistance programme

4.5 DISCUSSION OF THEMES

A discussion and presentation of the themes will be provided in line with the objectives of the study. The key themes identified using thematic analysis relates to the overall experiences of women in the mining industry. The themes which were identified and which will be discussed include: reasons for working in the mine, challenges faced, coping mechanisms used and mechanisms to create a gender-sensitive mining environment. An exploration of the factors which motivated the participants to enter the mining industry was made by the researcher in a quest to get a deeper understanding on whether the decision was circumstantial or whether it was in line with the participants' career prospects. Barriers which hinder the progress of women, coping strategies employed to deal with the challenges as well mechanisms put in place to create a gender sensitive working environment in the mining industry have also been explored to contextualize the overall progress made to effectively integrate women into the industry.

4.5.1 Motivations to work in the mining industry

The first objective of the study focused on exploring the motivations for women to get into the mining industry. The introduction of women into the mining industry presents very interesting dynamics with the new South African democratic legislation playing a fundamental role in advocating for the incorporation of women into this previously male dominated field. The data collected has shown that unemployment, lack of further

educational opportunities, better living wages and the availability of mining bursaries are some of the factors which persuaded the participants to consider working in the mining environment. From all those interviewed only one participant had the desire of pursuing a career in the engineering sector but never imagined that she would be presented with an opportunity to work in the mining sector. However, given the high rate of unemployment in South Africa, many of the participants made reference to this economic challenge as one of the key factors which contributed to their decision to consider working in the mining industry.

4.5.1.1 Unemployment

The data collected from the study participants has revealed that their choice to enter the mining industry was neither out of their own desire nor will but out of desperation to make means to survive and provide for their families. The researcher further discovered that although the participants ultimately made the decision to enter the mining industry it was not by choice that they were placed underground as they had very little knowledge of the different roles within the mining industry and were not given any options. Many of the participants referred to their struggle of political marginalization due to unemployment as one of the key factors which pushed them to seek a job in the mining industry. Being faced with societal pressures and the need to survive, exploring a job in the mining industry seemed viable for most participants as many originate from the area where the mine is situated. In addition to this, the struggle of securing a permanent job was also a contributing factor to entering the mining industry. A similar experience detailing the motivations to enter the mining industry was shared among most participants. The effects of poverty and unemployment had a major influence on the participants' decision to join the mining industry and this is illustrated in following quotations from study participants:

“It’s just that I couldn’t not find any job. This is the job I found while struggling to get a job” (Olerato, 39, mining team member).

“Honestly I am not going to say I decided that I wanted to be here (at the mine). I never even dreamt of working in the mines but circumstances that were beyond my control forced me to stand and try and make something happen. I am a parent and a single parent at that and I could not expect my parents to take on my responsibilities

and you can't sit at home without doing anything. It would be like you are wasting your time so I was at varsity in 2005 and my biological father was the one paying for my fees. So it came to a point where he became uninterested in paying my fees when I was supposed to go and do my second semester, because he and my mother are separated, so it was difficult for my mother to continue with paying for my fees. So because that did not work out they suggested that I get something that will keep me busy so I could make my own money and eventually do what I want (Argentina, 30 years old, engineering assistant).

“Many of the women who are employed underground do not have qualifications so many have been at home for a long time and struggle to get jobs. Most are breadwinners at home and need to provide for their children. Mining is not a normal environment to work in but they are the most reliable and dedicated group we have because they cannot afford not to be able to provide for their families, I am a woman myself so I know the struggle of staying home without an income” (Sphiwe, 40 years, Key informant, Human Resource Manager).

It is clear from the above statements that poverty and states of unemployment can lead people into career fields that they had not envisioned for themselves. The need to survive is illustrated in the findings above. Entering the mining industry is presented as a form of sacrifice which women had to make to ensure that they provide for their families over their personal desires. It can further be argued that the responses given above by the participants, refers to the narrow definition of unemployment which is a state where “a person is without work, but is currently available for work, and is seeking or wanting to work” (Barker, 1999, p. 165). Although the participants were without a stable job at that point, they were actively seeking employment though they were not finding work that was satisfactory. In their search for any employment that would enable them to be able to sustain their lives and that of their loved ones, they landed jobs in the mining sector.

This finding supports the arguments made by Benya (2009) who is of the view that the introduction of women in the mining industry may also be perceived as a form of response to the harsh economic reality of South Africa. Therefore, in a quest to get socially included

women go out of their way to get employment and to also successfully fulfil their societal roles as mothers and breadwinners (Calitz, 2004). Women generally have a challenge penetrating into the formal working environment (Naidoo, 2015) and the mining industry is no exception. The findings depict the hesitation involved in the women's decision to pursue a career in the mining industry. The industry has previously been associated with masculinity and was commonly known for its undesirable working conditions (Botha, 2013), however, the participants' adverse realities left them with very little choice.

4.5.1.2 Lack of further educational opportunities

Availability and accessibility of further education can open job opportunities for an individual. Having formal education is commonly perceived as a gateway out of poverty and as access to better employment opportunities. From the demographic table presented earlier in this chapter, it is evident that most study participants had a Grade 12 certificate. However, from the interviews, it was clear that lack of further academic opportunities saw them pursuing a career in mining. This was further compounded by the fact that there were bulk recruitments happening and one only required basic education to be recruited. The following extracts from the research participants represents the views of many in terms of securing a job in underground mining:

"I didn't choose, I was looking for a job everywhere and also my education is low, Matric is not education so I ended up entering at the mines" (Lerato, 45 years, scrapper winch operator)

I did not think I would work in the mines but circumstances forced me. So I had to find a job, because I did my matric but after matric I fell pregnant so as a parent you have to be able to do things for your child. My mother was also a single parent who was not able to do everything for us so I had to help her out because I was the eldest (Gabisile, 36 years old, mining team member).

"For me, I came from a very large family and some could not be taken to school. So I was one of the unfortunate ones, when it was my turn to go to school there was no money, so I had to get up and make ends meet. I did a lot of jobs; I applied

everywhere, this is not my first job, I also worked in the factories so when I called here I saw it an opportunity, that's how I ended up working here” (Setwana, 30 years old, Mining team member).

The findings from the study show that having a secondary school certificate only might hinder one from accessing certain jobs. The role of further education in improving an individuals' capacity to access specialized employment opportunities has been supported previously in other studies by Altman (2001), which is in line with the classical labour market theory states that suitability for a job is determined by an individual's level of experience and qualifications (Benya, 2009). This study argues that there is a correlation between the level of education and employment, thus meaning the higher your educational level the better your chances of being employed. However, the findings from this study partially refute the notion that an individual is more likely to secure employment if they are in possession of a tertiary level qualification. The data from women working in underground mining has shown that although mining is a highly technical sector (Benya, 2009, Rachod, 2001, Botha, 2013) an individual does not need any formal education to be employed in underground mining and that the skills required can be learnt on the job. Humphrey (1987) and Bradley (1989) confirms that many women involved in underground mining are classified as unskilled labourers as they are mostly not in possession of formal training or specialized knowledge on mining and thus they are commonly found right at the bottom of the hierarchy in the workplace. Malakwane (2012, p.19) agrees with this finding that “the level of education does not translate into an automatic employment opportunity” particularly in South Africa where the levels of unemployed graduates are high.

4.5.1.3 Better working wage

Better earning capacity was one of the key drives which led the participants into joining the mining industry. Learning about wages offered by mining organizations for unskilled workforce assisted the participants into making their decision. Therefore, mining did not only offer the participants permanent employment but it offered them an opportunity to earn a considerable wage which would enable them to sustain their lives and that of their loved ones. The need to survive and meet the basic needs of the participants and their families was a theme which persisted when exploring the reasons which attracted the participants into the mining although expressed in different ways. The following responses provided by the

respondents' show that mining as compared to other informal industries which commonly absorb unskilled labourers appeared as a more reasonable option for the many of the participants as it offered lucrative wages for people with no formal educational background.

“You know coming here to the mines; I just came because I stayed unemployed for a long time. When I tried looking for a job, I would find cleaning jobs of a domestic worker and the money was too little. And you know I am a mother and I have responsibilities, I have to take the children to school and the family too. So mining is much better, the money is way better than what I was getting, it's close to R5000 and it can cover everything that I need” (Mpho, 40 years old, mining team member).

“Because you know what, finding a job where I stay is very scarce, so I didn't have much of choice. So around where I stay its either you work in the hospital or else the mining industry or otherwise you can go work in the shops and there is no money there” (Phindi, 27 years, Loco operator).

Macintyre (2006) supports the above findings with confirmation that finding employment in the mining industry provides individuals with improving their quality of life as the environment provides them with higher living wages. Findings from Benya (2009)'s study revealed that most women working in the mining sector are sole or secondary breadwinners therefore securing a better paying employment was essential to them as their wages would enable them to not only attend to the needs of their immediate family but that of their extended families too.

4.5.1.4 Mining bursaries offered

There were some respondents who were particularly drawn to the industry due to the bursaries and scholarships associated with the mining industry. The bursaries offered by the mining industry presented the women mine workers with a beam of hope in building solid careers within the industry. Although the means to survive was at the heart of many, other respondents had a clear intention which would ultimately assist them in developing their careers. The following responses details the different ways in which the respondents joined the current mining organisation they are currently working for:

“I needed a job, I dropped out of school, I was young at the time so I needed a company that would take me back to university, a company that could fund me. So at the time I found a mining company, I saw that they could take you back to school and there are bursaries and everything. So I came here with the intention of studying” (Otsile, 26 years, Mono train driver).

“Honestly speaking, it was not like it was my dream to work in mining. It’s just the studies that I have done at the college. Actually, I liked engineering since high school, but in my mind, I wanted to work at Eskom and all those companies. But you can’t choose, if there is no space at Eskom I cannot say I cannot work somewhere else. I can say fortunate enough, by the time I was about to complete my studies then this company as a whole came to the schools, they wanted learners and I was one of those so that is how I got the opportunity to be in the mine. Like as I said, the first time I went underground YOO!!!, I was even thinking of resigning, I was even thinking of going to school again because I didn’t think I chose the right career. I thought of going back to do something else, because I felt it was not me. But along the way, you start to get used to it and you start to enjoy it” (Cassandra, Key informant, 34 years, engineering forewoman).

The findings show that bursaries seem to attract more young people who are eager to pursue mining related careers. Grobler and Bruyn (2011, p.63) refer to this phenomenon as “talent war” where more companies are revising their strategies to not only recruit the best talent but to also employ innovative strategies to attract and retain young people within formal work structures. Over the years mining has made efforts to become more attractive to women by offering learning bursaries which will in end assist companies increasing the female labour force and retain this skills pool (Moyo, 2010; Botha, 2013).

4.5.2 The challenges faced by underground female mine workers

In the pursuit of understanding the experiences of underground female mine workers, the researcher interrogated the challenges embedded within the industry which impede the progress of females. Exploring the data gathered revealed various challenges which women face within the mining industry. The challenges which seemed to have the most impact on the underground female mine workers which formed part of the study were: job allocations,

limited learning and development prospects, macho mining culture, inadequate resources for women, biased infrastructure, sexual harassment as well as the suppression of women's health and reproductive rights.

4.5.2.1 Job allocations

The attainment of democracy in South Africa called for redress of not only race and class discrimination but also sexist social orders. Many of the participants revealed that upon being absorbed into the mining industry, they were not aware of the role which they would occupy due to the bulk recruitments of underground work. Most of the participants had very limited knowledge on the industry and what different underground roles entailed. However, upon entering the mining environment, they slowly came to the realization that many of the roles they occupy are subordinate to those of their male counterparts. Dissatisfaction was expressed by many who believed that although their physical strength does not match that of their male counterparts, they had the knowledge which would enable them to lead and achieve the desired results for tasks allocated. The unfair nature in which jobs are allocated is shown in the following responses:

“what I can say it that men are strong physically but we women don't have that much, when you have the skill, how to talk with the people, how to plan for the job, how to control. You just need to use your mind it is not that you have to be strong physically, you just use your mind you be able to plan, control and engage with the people and tell them what you want from them” (Vicky, 41 years old, shift boss)

We (women) don't have the same strength as the men and whatever they do, we also do but we have more brains than them. They use their strength and we use our brains. I didn't choose, when I came here (to the mine) I didn't know anything about mining I saw just looking for a job. So if the mine wants a mining team crew when you get here you get trained for that (Gobedu, 38 years, Winch operator).

Empirical evidence has shown that mining companies have been progressive in absorbing more women into the mining sector, however the challenge remains with allowing women to occupy core mining roles, particularly underground (Dlamini, 2016). A study conducted by Benya (2009), supports the findings presented as it concludes that the process of allocating jobs within the mining industry is highly gendered in nature which places women at a disadvantage for selection is commonly made based on an individual's physical abilities

above anything else. In addition to this, the study affirms that women are typically given supportive roles in underground mining. This means that they are regarded as helpers to their male counterparts as they mainly occupy roles which are not only subordinate but fall right at the bottom of the underground occupation hierarchy with the least benefits and salary. This phenomenon witnessed is termed vertical or hierarchal segregation in the labour market literature, where by there is over-representation of certain group of workers (men) at the top of the hierarchy and over-concentration of another group of workers (women) at the bottom of the hierarchy (Meulders, Plasman, Rigo & O' Dorchai, 2010). This has also been attested by the demographical information provided; of all the 12 participants, only the 2 key informants and 1 participant are occupying leadership roles, the remaining 10 participants are occupying supportive roles in underground mining.

Although women continue to occupy low status job in underground mining, the selection criteria for underground work are reportedly the same for both men and women. The process is systematic and mostly entails submission of job applications at TEBA (a mining recruitment agency) where applicants are called when there are vacancies that need to be filled, particularly underground. All applicants' need to go through a Heat Tolerance Test (HTS) to determine their ability to work under hot temperatures as well as medical examinations to determine their medical and physical fitness. All participants interviewed were well aware of this process of incorporation into underground mining. Many felt that although the process is highly strenuous it is fair as it is done across the board. The process of being accepted into underground work for all mine workers is clearly indicated in the following responses:

"Fitness is on top of the list; you must be fit for you to work underground. So in order for you to work underground, there is a certain process that you need to follow, like they take you for medical examination, where they check the fitness and the health. Then they check if you will be able to work under the hot conditions underground, so they take for a Heat Tolerance Test (HTS). They put you in something like a steam room and there is a step where you have to climb up and down, up and down and they give you a specific time and they take your temperature before and after and if they can see that you are within the temperature that they want then they can see that your body can withstand the temperature underground. And another thing because some jobs require you to pick up heavy loads, they want to see if you will be able to do that. If you can do most of those things, then they can say that you are fit to work

underground. But it doesn't mean that its only women that go through this, even the men go through the same process, because you will maybe you will be doing the same job” (Cassandra, 34 years old, Engineering forewoman, Key informant).

This marks the first incorporation into underground mining for all parties and “failing these examinations renders one incapable of being part of the mining industry and thus ineligible for allocation” (Benya, 2009, p.30). Those that make it through this stage further go for training which is aimed at preparing them for work underground.

4.5.2.2 Limited learning and development prospects

Training and development was believed by the participants to be essential for them to progress within the mining industry. The majority of the participants joined the mining industry without any prior exposure or training in the field but this changed as the years went past and they discovered the possibilities of growing within mining. Although the participants unanimously agreed that the opportunities for growth are made available to everyone on paper within the mining organization, they however felt that the progress in developing women is terribly slow. The selection criterion for senior positions has been questioned as there continue to be fewer women assuming leadership roles in this mining organisation. Many of the participants had received the training desired to perform certain jobs but have since lost hope in the process as they have not been aligned with their training prospects within the organisation. The following responses are a good representation of how many of the participants felt about the limited learning and development prospects within their organisation:

“Honestly, progress is there but for my side I feel that it is very slow, because I don't know how many years it took for us to have a woman shift boss. We only have one women forelady in this whole mine hence I feel the progress is very slow. Like we have many shift bosses, 30 plus and mostly male but from all those numbers we only have one woman who was appointed as a shift boss only this year (shaking head). And we have many women miners who qualify to be shift bosses but they are not considered. Somewhere somehow I can say that they doubt the capabilities that women have. Even the workers (men) themselves they are still very behind, they never believed that women can work in the mines or that they would have a woman supervising them” (Argentina, 30 years, engineering assistant).

“They say there is development but I have not seen it, the 7 years that I have been here, I have gone from one office to the other trying to get assistance with going to school and I have not been assisted. I think it depends on the sections you are in and the HR you are working under. 7 years chasing after one thing, I have been trying to go study to become a safety officer, submitting development plans. All I get are excuse, sometimes they can’t find my development plan, and sometimes they tell me about the budget. We are fighting for the development of women in the company, because sometimes they even tell you to go get it outside and that is very expensive” (Setswana, 30 years, mining team member).

I have been trained as a stope team leader by 2010 and I have got level 2 development team leader, so I just stay there, no development. I really don’t know why they don’t develop us I have been asking why all the team leaders are men and why they trained us because they train us we stay at the back. Maybe the team leaders are over compliment but my problem is that they are men. There are some team leaders of women but they are not the stope team leaders they are the development team leaders (Lerato, 45 years, Scraper winch operator).

Upward mobility in any industry is essential as it ensures career growth for employees and the employer. Training and development eliminates the frustrations of stagnation and ensures that there is an enhanced workforce for the employer. The notion of development of employees within a workplace is supported legislatively by the Employment Equity Act 55 of 1998 and the Skills Development Act 97 of 1998. The Mining Charter is also recognized as one of the crucial policy documents which obligates mining companies to foster continuous training and development of their employees. Training and development prospects are some of the mechanisms used to attract and retain employees in different workplaces. Nel *et.al.* (2006, p. 380) assert that “effective training and development could enhance productivity, personal satisfaction and job enrichment”. With that said, the findings reveal that the inadequate training and development prospects for women affects their morale and has left them feeling hopeless in growing within the mining industry. This is particularly true for the adult participants.

What has been presented thus far shows that there are few development prospects in the mining industry, particularly for women. The process of getting developed proves to be a very difficult and unjust one for women in the mining industry. All participants were aware

of the training and development process whilst many had already received training but are not being promoted to positions which match their training background and experience. Martin and Barnard (2013) affirm that this is a general trend with women who are employed within male-dominated occupations. The study maintains that the male-model of progression is maintained in male-dominated environments where performance is measured mainly per working more hours and presenteeism. This obviously presents a greater challenge to women and results in the marginalization of women employees as they have caregiving roles they are expected to fulfil within their households and are thus at a disadvantage in not being able to work extended hours.

4.5.2.3 Macho mining culture

The occupational culture of the mining industry has been perceived to be a hindrance to the full integration of women. The value of gender diversity within the workplace is not felt by the underground female mine workers regardless of the transformation policies in place. Based on the experiences of the participants interviewed, the stereotype attached to the mining industry being a career field exclusively reserved for men is rife to the present day. This is based on the inability of the mining industry to ensure the full incorporation of women by addressing the very nature of the masculine culture to ensure progressive transformation. Underground female mine workers interviewed generally felt excluded from formal and informal networks within the workplace. The culture embedded within the industry is portrayed in a manner in which it conceals the power of women through reinforcing male superiority and female inferiority. The participants expressed dissatisfaction at the way the capabilities possessed by women are undermined, not only by their male counterparts but also by management. This has ultimately affected the morale of the underground female mine workers as they are made to constantly go an extra mile to prove their capabilities compared to their male counterparts. The unpleasant experiences to which women succumb because of the mining culture is expressed in the following statements:

*“I hate the fact that they (management) make decisions for us, they never want to hear what we say. They should speak to us. The mine does not have problems; I don’t mind working here (at the mine) the problem is with the culture. They should use the values they claim to go by... **“we value our diversity; we respect each other”** I don’t see any of those things here.”* (Setswana, 30 years, mining team member).

“you can never totally change people and some people have been here for 30 years and more and when you try to show them the way they will tell you that they have been here longer and have been doing this for a long time, you can’t come here and tell them about thing from the book. But I feel another way they could go about trying to change things would be through induction, but unfortunately their induction teaches us about the industry not about how people also need to learn to tolerate each other. So in their induction they tell us about the rules and regulations of the company, policies of the company, and environmental whatever like how to use properly use our PPEs and not so much about the people and the culture here, so I think they need to change their approach because that is the one chance where people sit down and listen like they are at school” (Argentina, 30 years old, engineering assistant).

The responses above endorse the notion that there continues to be an imbalance in the value added by different genders in the mining industry. Men appear to be more valued than women in underground work thus perpetuating the chauvinistic ideology. Given that the mining industry is characterised by masculine hegemony, the study conducted by Benya (2009) on mining occupational culture confirms that the mining industry generally favours men over women and this value is commonly based on the physical strength of the two genders. As already alluded to in Chapter two of the research study, the incorporation of women into the mining industry has been a great challenge which has been commonly ascribed to the macho mining culture. Organisational culture is one of the blueprints of organisations and is crucial in shaping the experiences of employees. The culture of the organisation refers to defined and undefined values, beliefs and norms which become part of organisation overtime Alshaher (2013). Lahiri-Dutt and Macintyre (2006, p.6) argue that “the way the mining industry was socially organised imposed unequal and social relationships on women and led to subordination of the position of women both in the mining industry and within communities outside it”. Benya (2009) confirms that there is negative connotation attached to women who are employed underground as they are perceived to be too physically and emotionally weak to handle underground mining. These sexist stereotypes seem to have been turned into a norm which allows for women to be viewed as less of value.

4.5.2.4 Inadequate resources for women and biased infrastructure

The introduction of women in underground mining presents a unique challenge for mining houses, where the industry must ensure that both women and men are adequately integrated in all systems within the workplace. Mining being a previously male dominated occupation is organized in a manner where it effectively responds to the needs of men more than women. The participants did not dismiss the efforts made by their employers to incorporate them into the industry. However, they were also of the view that the environment is not responsive to the unique needs of women given the state of the sanitary facilities, the inaccessibility of sanitary facilities and the lack of proper Personal Protective Equipment (PPE) suitable for the women's body structure as well as lack of accommodation for women. This has left many participants feeling that their wellbeing is not prioritized by the mining company they work for as their personal hygiene and health is compromised daily. Because of how unhygienic sanitary facilities are and the inaccessibility of these facilities many participants have reported avoiding drinking water when they go underground and suppressing the urge to go to the toilet. Above all other challenges which have been discussed thus far, the structural challenges were the biggest concern to which the women constantly referred and there were many facets to this subtheme. The frustration with infrastructural challenges faced by women employed underground is illustrated by the following statements:

“Eish the structure of a women is not really made for us to work underground, it's not ok. Firstly, the toilets are bad, they are not acceptable they don't show that there are women working in the mine underground. You can't flush them, they are always dirty and they have no water to be flushed. And our PPE for underground is not ok, we used to use the full white overalls so we complained because to go to the toilet was process for us, you have to take off everything. So they changed it and ended up getting two-piece overalls. The two pieces is better than the full overalls but the problem is with the sizes. I don't know if the fabric they used is too cheap or what because as I wash my overalls, they shrink after one or two washes. So when you take them you need to make sure you take a size that even after washing it will still fit you because you only get a new one after six months. If the size is too small it ends up affecting your work because you need to bend down when doing your job and sometimes you end up showing people what they are not supposed to see or it tears.

We can't repeat it after working, it needs to be washed and the more it gets washed the more it shrinks" (Mpho, 40 years, mining team member).

"We also have this Women in Mining committee but we still not recognized, maybe they don't take us serious because we have been complaining about our PPE for a very long time. Our PPE as you can see I have skinny legs, but you get people with thick legs and you see how this gumboot is designed? It is for unisex and there are women with big catts they have to cut off their gumboots on top because it does not fit them and by cutting it you are not complying to the safety standards if you get hurt you will be trouble because of that. We also asked them for overalls, we want overalls for women that also makes us feel like women. The only thing they have done so far are the safety goggles that's the only thing that shows that we are different from men. It's very nice and pink, they better than the men, theirs have a big frame" (Gobedu, 38 years old, winch operator).

"It's the hygiene, they are dirty, everyone is using them, they are not flushing. You don't know who sat on the toilet before and there is no tissue there, if you want to use the toilet you have carry your own roll of tissue. And then even when you are walking past, you can smell that it smells bad, because they are not flushing. What happens is that, there is a bucket, and that bucket gets replaced after a week. Just imagine in that week, we have day shift, afternoon shift and night shift and everyone is using that toilet and then you need to there as well. But there is a project that we are doing now, it's a new project, they want these toilets to flush, because we have running water underground. But I don't know how that will work because its underground so we have no sewage underground, maybe there will be pipes. Maybe they will manage, maybe it will be for the best" (Cassandra, 34 years, key informant).

"yes, no they don't have accommodation for women, you can come from the United States today and if you have to go underground tomorrow, you will have to find your own space" (Otsile, 26 years old, mono train driver).

The exclusion of women in mining seem to be embedded in the physical structure as the statements above have alluded to facilities being developed to cater for the needs of men more than women. However, with the entry of women into the mining industry all mining

organisations are obligated to upgrade and improve their infrastructure to effectively integrate women. This is one of the requirements stipulated in the Mining Charter of 2002 (amended 2010). The findings have revealed that there are deficiencies about steering the process of adequately accommodating women within this particular mining company. Although policies in mining companies are in place, there are problems with implementation and application (Botha, 2013). The study conducted by Zungu (2012) to explore the occupational health and safety challenges of women employed underground supports the findings presented, including the notion that women have unique occupational health and safety needs particularly in the underground environment.

Zungu (2012) discovered that women are not adequately incorporated into underground mining as their health and safety needs are compromised because of the conditions of the sanitary facilities. Zungu (2012) also confirms that many women who participated in the study employed the same coping mechanism discussed above (avoiding to drink water), a mechanism which further puts the health of women at risk and increases their likelihood of suffering from dehydration given the extremely hot temperatures they work under. Zungu (2012, p. 12) further emphasises this challenge by mentioning that “dehydration is also associated with generalised lack of concentration, as well as increased vulnerability to heat exhaustion and/or heat stroke”. This challenge puts the life span of women at greater risk and needs urgent attention.

The underground mining environment is considered a hazardous environment and thus requires all those who go underground to be adequately protected. Many mining organisations have introduced PPE suitable for the structure of women, ensuring that their safety underground is not compromised (Calitz, 2004). However, the challenge persists at the mining company where the study was carried out. Zungu (2012) asserts that given history of mining, PPE in many mining companies has been designed using the physical structure of a men as a guide. However, with the introduction of women this poses greater health risks as women are left to wear ill-fitting PPE which not only affects their safety but also their ability to effectively perform their tasks underground. The one-piece jumpsuit is commonly worn at this mining company and this poses challenges when women need to use the toilet as they have to remove the whole garment (Consultancy Africa Intelligence, 2011).

4.5.2.5 Sexual harassment

The harassment of women who are employed in underground mining appears to be a norm. The infringement of women's rights is a phenomenon which compromises on the overall safety of women in underground mining. The participants of this study have reported to be subjected to threats, bullying and most commonly sexual harassment. The harassment reported by the participants is not only verbal but physical too. Although this was the case, many of the participants reported verbal harassment while only two participants reported to have been victims of sexual harassment that led to disciplinary actions. This appears to be a common occurrence of which the participants expressed dissatisfaction in the mine's response to this challenge. The following statements give an indication of the level of harassment underground female mineworkers are exposed to:

“yes every time, the cage will get full and you will be pushed, some women you find that as you walk, I have never experienced that I have heard that other ladies when going with men in the same cage, they find that they have ejaculated on them when they get off and you will never know who did this in the cage because we are too many in the cage. You can't even point a finger at anyone because we are being pushed some people just pull out their penis and point it at you, when you get off you just find sperm on you. So even if they try to open a case who will you open a case against because the cage was very full?” (Phindi, 27 years old, Loco Operator).

“you know people just talk. You know the train that I told you about? Usually for us to make use of that train, I have to climb on a dustbin to get inside, sometimes there are women and we help each other inside the train. So some madala (old man) touched me in a very offensive way, he literally touched by butt and he was not even helping me up, he was entertaining other people and everyone was laughing. So I climbed back down, I could not take it I was very offended and I told him that I would open a case against you. He begged me not to.” (Otsile, 26 years old, mono train driver)

“we experience a lot of thing in the cage, being sworn at, being pushed, and the overload. You find other men that masturbate on you, immediately. And many do it through their pocket, they put it inside their pocket and help themselves. And because of the overload, you can't always tell whether what is poking you is rescue pack or

something else. We end up putting the rescue packs at the back to avoid such things but it hurts the person that is behind you, especially if it's a man” Setswana, 30 years, mining team member).

“I was sitting, but he was disciplined that men. So I was sitting, while sitting he came to me and I was starting to fall asleep so when he got there he just held my breast and kissed me. But I reported this. It was reported then, he was disciplined and it ended there” (Mpho, 40 years old, mining team member).

Women being employed in underground mining is not only a new phenomenon but they are still a minority group in the mining industry (Benya, 2009; Zungu, 2012; Botha, 2013, Calitz, 2004). As a result of the numeric gender imbalance, women in underground mining are at a disadvantage of unequal distributions of power. In support of this, Gruber (1998, p. 303) maintains that “when a workplace is dominated by men, the hostility and intimidation towards women is heightened, they (women) are prone to be touched, grabbed or stalked”. Mining is considered to be a traditionally male job and therefore one of the arguments provided for the gross harassment taking place in underground mining is because “women are considered to have infringed on men’s power and threatened the production of masculinity” (Gruber, 1998, p. 303). The ineffectiveness of the current policies and procedures in dealing with sexual harassment cases are one of the root causes of the persistence of this work culture. This notion is supported by Rospenda, Richman and Nawyn (1998) as well as Gruber (1998) who are of the view that the tolerance of sexual harassment is embedded in the structural dimensions of the organisation and in mining this is fostered by the inequality of the distribution of power among the genders.

4.5.2.6 Health and reproductive rights

The underground is commonly referred to as an environment that is naturally less accommodative to women, particularly given women’s physiological make up. In this regard, many of the participants were of the view that the industry suppresses the rights of the women. Many of the participants felt that their reproductive rights as women were not considered and that their male leaders were not very understanding of their conditions. All participants were well aware of the organization’s policy with regards to pregnancy. Although, they were in agreement with the measures taken to protect them and their unborn children, the participants also felt that the arrangements of their alternative placement during

their pregnancy was unjust as it completely moved them from occupying mining related positions to being cleaning ladies.

Women expressed that falling pregnant within the industry was a huge disadvantage with major financial implications for example heightened medical costs with regular gynaecologist visits being required as well as suffering major salary cuts because they forfeit the underground allowance for the period of their pregnancy. Access to medical care is awarded to all employees of the mine as one of the primary benefits. However, the benefits offered are reported not to provide adequate cover for all women when they are pregnant. The participants have reported having difficulty with getting ambulance assistance during their pregnancy. The following responses illustrate how women feel about suppression of their reproductive rights:

“No they can’t relate like even with this thing on our periods. It becomes a problem when you ask to knock off early, because you may find that you left home fine, but when you get underground you work very hard and end up going on your periods immediately and at the moment you don’t have a pad on you, because you know that it is not your date and when you ask to be released, it becomes a problem. If they want us to knock off in time and not affect production, they should do something for us, as they can send us safety boxes, first boxes and stuff, they must also put in some pads in there. They can have those ones that you can wash its fine.” (Setswana, 30 years, mining team member).

Benya (2009) and Zungu (2012) affirm that the reproductive nature of women is perceived as an obstacle in the mining industry as it has a major impact on productivity. Literature has however shown that there are adequate support and policies which are put in place to protect the reproductive rights of women, particularly in mining where they are prohibited from working underground during their pregnancy (Zungu, 2012; Benya, 2009; Rabe; 2006). Rabe (2006) further supports the evidence provided by participants which reveals that after discovery of their pregnancy the mine conducts tests to confirm this and the placed-on surface for the duration of their pregnancy. Furthermore, it is argued that it is difficult for men to relate to the reproductive struggles of women as they “do not fall pregnant or have monthly menstrual periods, and this renders free of exclusion” (Benya, 2009, p. 61). However, there is a paucity of literature revealing the conditions which women are put

through during the ‘suspension’ period of their pregnancy as well as the inaccessibility of effective medical care, particularly at a time of delivery.

4.5.3 Coping strategies used by female underground miners

The third objective of the study focused on exploring coping mechanisms employed by underground female mine workers during the process of being integrated into the male dominated industry. The analysis has revealed that in the process of being integrated into the mining environment women are led into embracing masculine characteristics, and come to accept the working environment in which they are employed in as well as resorting to dating men who are in leadership positions to better cope with the challenges they are faced with. All participants reported to have come to accept the notion of associating mining with men and felt that mining organizations are forced by policy requirements to take them in as women. With that said, there are many challenges that affect the social functioning of women as employees of the mine employed underground. The following statements give an indication of the extremes women go to get incorporated into the system:

It’s a men’s world, every day is a men’s day. Its’s men’s day! So I can say the government forces them because whatever you do, even when you have to study. You have to go through the Department of Education; you have to find proof even for you to obtain bursaries. Even the mining bursaries are initiated by government so they can’t grant every male the bursaries without at least 1 female or 10 % of females. So they are being forced” (Otsile, 26 years old, mono train driver).

“when I am here I sometimes even forget that I am a woman, I am just a mine worker and most of the time have to be like the men to just fit in” (Setswana, 30 years, mining team member).

Benya (2009) supports the notion that women in the mining industry opt to use their bodies to earn themselves favours and promotions from their male leaders. As already discussed, leadership positions within the mining industry are mostly occupied by men, therefore in a quest to climb up the ladder, women offer men sexual favours in return for promotion and recognition. However, although female underground mine workers have reported to have accepted the working conditions they are faced with, their acceptance is portrayed more as a sense of hopelessness. As a result of the rigidity to change women end up embracing the masculine culture which surrounds them and also succumbing to the offensive language used

underground (Lahiri-Dutt, 2011; Benya, 2009). This proves that the mining industry has a long way to go in terms of feminizing the industry.

4.5.4 Mechanisms to create a gender sensitive environment

The mining industry is constantly engaged in efforts to effectively integrate women into the industry. However, these efforts are constantly questioned as what has been presented thus far has proven that women do not feel adequately incorporated into the systems. The programmes put in place to support and ensure the wellbeing of employees include the Women in Mining Committee which was established in 2016; labour unions and Employee Assistance Programmes. Among the mechanisms mentioned, the most common one is labour unions, whilst many of the participants reported to not be aware of the other support programmes. There were mixed reactions in terms of the effectiveness of the support services in responding to the need of women. The following responses show the level of awareness of support programmes for women:

“The things the men don’t always understand our issues as women and they are faced with a lot of tasks too, they also need to check the work inside the panel and audit where the workers are. So if I complain about something to the safety officer and he does do follow up on it, I then skip him and go to the HR lady because she is part of management with hope that she will tell management about our issues as women and its much closer to relate to her because she is a women. There are many problems that we tell them about, as I said, we have monthly meetings as Women in Mining (WIM) and we tell them of our problems” (Mpho, 40 years old, mining team member).

“If ever maybe you are having problems, the HR’s door is always open, if ever maybe you are uncomfortable with whatever situation that is happening, they have got labour relations here, you can go to that department and tell them what is bothering you and they will support you. We have the unions as well, if ever you feel that you are not getting any help then you have the right to go the union, everyone has the right to be part of a union. We have got all the support you can think of, there are many doors open for you to get assistance” (Cassandra, 34 years, key informant).

The mining industry is very rich with policies that are aimed at promoting gender equality within the industry particularly given that the industry was previously characterized mostly

by men and no women were seen occupying core mining positions (Botha, 2013; Benya, 2009). The challenge remains the implementation of these policies to ensure the full integration of women. Botha (2013) assert that effective implementation of labour policies is perceived as an effort to ensure good labour relations within the organization. It can therefore, be argued that the labour relations efforts within the mining industry are poor based on the experienced provided by underground female mine workers. It is evident that there are systems in place which should be adequate in providing management with enough guidance in the decision process, however these are not sufficiently utilized hence women continue to be marginalized. The lack of women in leadership positions such as being safety officers seem to further jeopardize the ability of mining organizations to respond to the issues of women specifically as there appears to be a general notion that men cannot relate to issues of women.

4.6 CONCLUSION

A thorough discussion of the themes which emerged from the data collected was presented in this chapter against the literature that was reviewed. It has been shown that many of the challenges experienced by female underground mine worker emanate from legacy issues which promote female inferiority and male superiority. In addition to this, the mining environment continues to be deemed undesirable for females given their genetic makeup without making considerable effort to fully integrate women by making the underground environment more gender sensitive. The chapter offered an exploration of motivations for females to consider working in underground mining, challenges experienced, coping strategies employed as well as mechanisms employed by the mining organization to create a gender sensitive environment.

CHAPTER FIVE

MAIN FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The study has unravelled the experiences of women who are employed underground in the mining industry. A qualitative research methodology was employed to gather data and thematic analysis was utilized to trace the reoccurring themes against the set objectives of the study. The chapter now presented offers a summary of the main findings within each objective of the study. In addition to this, conclusions are drawn from the main findings presented, recommendations for occupational social work, the mining industry and future research is also presented.

5.2 AIM AND OBJECTIVES OF THE STUDY

The study was aimed at exploring occupational experiences of female mine workers. In gaining more in-depth knowledge of the phenomenon, the first objective of the study explored the motivations for female mine workers to work within the mining industry. This was essential as mining is commonly known to be a career designated for men, therefore the study unravelled motivations, to gauge whether pursuing a career in mining was a personal desire of the participants or whether they were forced by circumstances to consider a career in the mining industry. The second objective of the study focused on investigating the challenges which underground female mine workers are subjected to within the mining industry, particularly underground, to explore hindrances which affects the social functioning underground female mine workers and their ability to successfully perform their duties as expected. Given that many challenges were presented the third objective of the research study also explored the coping mechanisms which underground female mine workers employ to navigate around the industry which is known to not be friendly to the needs of women. The fourth objective of the study explored the efforts made by the mining company to integrate women into the mining industry. This was done through learning about the mechanisms which have been put in place by the mining company to make the underground working space a gender sensitive environment.

5.3 SUMMARY OF MAIN FINDINGS

5.3.1 Motivations to work in the mining industry

With the introduction of democratic laws in South Africa, more women were seen being employed as underground mine workers. Given the intensity of work underground and the general exclusion of women from working underground, the first objective of the study thus focused on exploring women's motivations to work in the mining industry. The data collected has shown that unemployment, lack of further educational opportunities, better living wages and the availability of mining bursaries are some of the factors which persuaded the participants to consider working in the mining environment. The reality of unemployment in South Africa led many of the participants to pursue a career in the mining industry as a means of survival. The findings which were supported by literature further revealed that motivation of working in the mining industry was intertwined with fear of political marginalization (Benya, 2009). In addition to this, the participant's lack of further academic opportunities increased the likelihood of employability in the mining industry as the nature of the work is highly technical and an individual does not need any formal education to work underground but can acquire the skills on the job (Benya, 2009; Rachod, 2001, Botha, 2013). This finding refuted the assumption made by labour market theory as it proved that industries such as mining do not always require an individual to be in possession of tertiary qualification to be employed (Guiliano & Tsibouris, 2001; Benya, 2009). Furthermore, the participants of the study revealed that they were attracted by the wages offered by mining companies offered to the unskilled workforce to enter the mining industry. The mining industry was presented as a viable route for the participants to improve their standard of living through the improved earning capacity. Lastly, there were some participants whose entry into the industry was based on their desire to build sound careers within the mining industry. The effectiveness of offering bursaries to attract women into the mining industry applied mainly to younger participants.

5.3.2 The challenges faced by under-ground female miners

The second objective of the study focused on learning about the challenges which underground female mine workers are faced with during their process of getting integrated into this male dominated industry. The findings have revealed that there are persistent legacy issues within the mining industry, particularly in underground work, which hinder the efforts

to successfully integrate women in underground mining. The data gathered revealed that the main challenges which the women in this study face within the mining industry are challenges with job allocations, limited learning and development prospects, macho mining culture, inadequate resources for women, biased infrastructure, sexual harassment as well as the suppression of women's health and reproductive rights. Empirical evidence has shown that mining companies have been progressive in absorbing more women into the mining sector, however the challenge remains allowing women to occupy core mining roles, particularly underground (Dlamini, 2016). Many women who are employed underground within the mining sector are disadvantaged when it comes to job allocations hence they occupy roles which are subordinate to their male counterparts.

A study conducted by Benya (2009), supports the findings presented as it concludes that the process of allocating jobs within the mining industry is highly gendered, which places women at a disadvantage. Selection is commonly made based on mainly masculine abilities. This finding supports the notion that the mining industry is sexist and discriminates against women. Women are regarded as helpers and have reported to be occupying low status jobs underground. Furthermore, the mining industry has been reported to be slow in ensuring the learning and development prospects of women. The participants showed general awareness of the opportunities and processes of receiving training within the industry but there was general concern with not being promoted to positions which match their training and experience. This finding supported the study conducted by Martin and Barnard (2013) who have affirmed that women who are employed within male-dominated occupations commonly struggle with getting adequately developed to grow and establish solid careers in mining. The challenges are compounded by the mining occupational culture which reinforces male superiority in underground mining and suppresses women. Based on the experiences of the participants interviewed the stereotype attached to the mining industry being a career field exclusively reserved for men is rife to the present day.

The findings have further revealed that the environment underground is not responsive to the unique needs of women given the state of the sanitary facilities, their inaccessibility and the lack of appropriate Personal, Protective Equipment (PPE) as well as lack of accommodation for women. This has left many participants feeling that their wellbeing is not prioritized by the mining company. This is supported by Zungu (2012) who discovered that women are not adequately incorporated into underground mining as their health and safety needs are comprised because of inadequate resources and biased infrastructure. In addition to this, the

overall safety of women in underground mining is compromised as they succumb to constant harassment by the male colleagues while performing their duties. Mining is a traditionally male job and therefore one of the arguments provided for the gross harassment taking place in underground mining is because “women are considered to have infringed on men’s power and threatened the production of masculinity” (Gruber, 1998, p. 303). There was consensus among the participants with regards to the suppressive nature of underground mining environment on women’s rights hence the continued injustices and inequality which women are subjected to. This severely affects the overall wellbeing of underground female mine workers as they are faced with many hindrances which affect their ability to effectively perform their duties.

5.3.3 Coping strategies used by female underground miners

In investigating the experiences of underground female mine workers, the researcher explored the coping mechanisms which women employ to navigate this male dominated environment. The analysis has revealed that in the process being integrated into the mining environment women are led into embracing the masculine characteristics, and come to accept the working environment in which they are employed as well as resorting to dating men who are in leadership positions to better cope with the challenges they are faced with. All participants reported coming to accept the notion of associating mining with men and felt that mining organizations are forced by policy requirements to take them in as women. Resistance to change means women end up embracing the masculine culture which surround them and succumbing to the offensive language used underground (Lahiri-Dutt, 2011; Benya, 2009). This points the mining industry having a long way to go in terms of feminising the industry.

5.3.4 Mechanisms to create a gender sensitive environment

The fourth objective of the study was to explore the mechanisms implemented by mining organizations to create a gender sensitive environment for all employees. The programmes put in place to support and ensure the wellbeing of employees include the Women in Mining Committee which was established in 2016, labour unions and Employee Assistance Programmes. Of these, the most well-known one is labour unions, with many of the participants not aware of the other support programmes. There were mixed reactions in terms of the effectiveness of the support services in responding to the need of women. Literature

has revealed that there are many policies in the mining industry that are aimed at promoting gender equality within the industry particularly, given that the industry employed mostly men and no women occupying core mining positions (Botha, 2013; Benya, 2009). The challenge remains the implementation of these policies to ensure the integration of women, not just as an effort to ensure good labour relations within the organization (Botha, 2013).

5.4 CONCLUSIONS

5.4.1 Motivations to work in the mining industry

The data collected has shown that unemployment, lack of further educational opportunities, better living wages and the availability of mining bursaries are some of the factors which persuaded the participants to consider working in the mining environment. The mining industry was presented as a viable route for the participants to improve their standard of living through the improved earning capacity. The findings which were supported by literature further revealed that motivation of working in the mining industry was intertwined with the fear political marginalization.

5.4.2 The challenges faced by under-ground female miners

The findings have revealed that there are persistent legacy issues within the mining industry, particularly in underground work which hinders on the efforts to successfully integrate women in underground mining. The findings of the study have shown that women who are employed within male-dominated occupations commonly struggle with getting adequately developed to grow and establish solid careers in mining. The challenges are compounded by the mining occupational culture which reinforces male superiority in underground mining and suppresses women.

5.4.3 Coping strategies used by female underground miners

The analysis has revealed that in the process being integrated into the mining environment women are led into embracing the masculine characteristics, they come to accept the working environment in which they are employed in as well as resorting to dating men who are in leadership positions to better cope with the challenges they are faced with. This proves that the mining industry has a long way to go in terms of feminizing the industry.

5.4.4 Mechanisms to create a gender sensitive environment

The most common one is labour unions whilst many of the participants reported to not be aware of the other support programmes. There were mixed reactions in terms of the effectiveness of the support services in responding to the need of women. The challenge remains on the implementation of these policies to ensure the full integration of women.

5.5 RECOMMENDATIONS

Based on the summary and conclusions, the following recommendations can be made:

5.5. 1 For Occupational Social Work Practice

Occupational social work is “a specialised field of social practice which addresses the human and social needs of the work community through a variety of interventions aimed to foster optimal adaption between individuals and their environments” (Straussner, 1990, p.2). This study intended to address the social and human needs of underground female mine workers and based on the findings the researcher recommends that more mining organisations should employ occupational social workers to implement programmes that could cater to the needs of the organisation as well as that of the employees. A comprehensive employee wellness programme can be introduced which would be of assistance in responding to the needs of underground female mine workers. This would require an organizational development intervention where an educational strategy would be introduced to change the beliefs, values, attitudes and the structure of mining organizations to ensure that they adequately respond to the needs of women.

5.5.2 For the Mining Company

There seems to be very little awareness among workers of mechanisms in place to ensure a gender sensitive environment, therefore the mining company need to increase awareness of such support structures to all employees. In addition to this, it is recommended that learning programmes be implemented where men employees are engaged on issues of women. A well-structured induction programme needs to be implemented and follow-up sessions held to conscientise male employees of the existence of women in the mining environment and how they are ought to be treated. This will be of help to develop mutual respect and value for all employees within the mining environment.

5.5.3 For policy makers

It is recommended that constant monitoring and evaluation takes place on the implementation of all mining policies as well as Employment Equity. The implementation of policies need to go beyond reaching targets but also ensuring that women mine workers are working in conducive environments and their unique needs are being catered for. This will require a good monitoring and evaluation to be incorporated in all mining operations.

5.5.4 For Future research

Future research should consider investigating the implementation of equity policies within the mining sector. An investigation on the growth and development plans for women within the mining sector also needs to be considered.

5.6 CONCLUSION

The introduction of women in underground mining work has presented a greater challenge to the management and all employees within the industry. The study has proven that gender diversity is valued to a certain extent within the mining industry. However, women are incorporated into the core mining positions to meet the quotas set by policies but are not being adequately developed to assume leadership positions within the industry. There is no doubt that the mining industry continues to be gendered and masculine thus being less favourable to women employees. This was discovered through exploring motivations for entering the mining industry, occupational challenges faced by underground female mine workers, the coping mechanisms employed by underground female mine workers as well as the efforts made by the mining company to create a gender sensitive working environment for all employees. This research study has revealed that injustices underground female mine workers are subjected to is commonly caused by the mining occupational culture which is resistant to making meaningful organisational development efforts to fully incorporate women into the mining industry. This suggests the need for occupational social workers to penetrate the mining industry to influence employee wellness programmes, policies and overall structural organisation to ensure that the unique needs of underground female mine workers are prioritized.

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LEGISLATIVE FRAMEWORKS

Britian Mines Act of 1844

Beijing Platform for Action, 1995, UN, Beijing

Employment Equity Act 55 of 1998

International Labour Framework (ILO) Convention of 45 of 1935

ILO Convention 45 of 1935

Mineral Council Act of Australia 2013

Mining Charter of 2002 (amended 2011)

Mineral Petroleum Resources Development Act of 2002 (amended 2011)

Skills Development Acts 97 of 1998

Sustainable Development Goal- United Nations

USA Equal Rights Amendment of 1977

Annexure A: Participant Information Sheet

Good day,

My name is Sally Ledwaba, and I am a post graduate student registered for the degree MA in Occupational Social Work at the University of the Witwatersrand. As part of the requirements for the degree, I am conducting research on the experiences of female mine workers. It is hoped that this information enhance understanding employers on the experiences of females in the mining industry.

I therefore wish to invite you to participate in my study. Your participation is entirely voluntary and refusal to participate will not be held against you in any way. If you agree to take part, I shall arrange to interview you at a time and place that is suitable for you. The interview will last approximately an hour. You may withdraw from the study at any time and you may also refuse to answer any questions that you may feel uncomfortable with answering.

With your permission, the interview will be tape-recorder. No one other than my supervisor will have access to the tapes. The tapes and interview schedules will be kept in a locked cabinet for two years following any publications or for six years if no publications emanate from the study. Please be assured that your name and personal details will be kept confidential and no identifying information will be included in the final research report.

As the interview will include sensitive issues, there is a possibility that you may experience some feelings of emotional distress. Should you therefore feel the need for supportive counselling following the interview, I have arranged for the service to be provided free of charge by Miss Ntshuxeko Miyambu (social worker). To make an appointment, they may be contacted at 071 145 4575 (cell).

Please contact me on cel: 083 276 0902 and email: sallykledwaba@gmail.com or my supervisor, Dr. Thobeka Nkomo at 011 717 4481 and email thobeka.nkomo@wits.ac.za if you have any questions regarding the study. We shall answer them to the best of our ability. Should you wish to receive summary of the results of the study; an abstract will be made available on request.

Thank you for taking the time to consider participating in the study.

Yours Sincerely

Sally Ledwaba

MA Occupational Social Student

Annexure B: Consent forms

Title of study: Breaking down gender barriers: Exploring experiences of female mine workers in a mining company

i) Consent form for participation in the study

I hereby consent to participate in the research project. The purpose and procedures of the study have been explained to me. I understand that my participation is voluntary and that I may refuse to answer any particular items or withdraw from the study at any time without any negative consequences. I understand that my responses will be kept confidential.

Pseudonym: _____

Date: _____

Signature: _____

ii) Consent form for audio-taping of the interview

I hereby consent to tape-recording of the interview. I understand that my confidentiality will be maintained at all times and that the tapes will be destroyed two years after any publication arising from the study or six years after completion of the study if there are no publications.

Pseudonym: _____

Date: _____

Signature: _____

Annexure C1: Interview Schedule: Participants

Demographic information

Pseudonym	
Portfolio	
Employment duration	
Age	
Ethnicity	

Interview questions:

Introductory questions

- i) What does your role in underground mining entail?
- ii) Tell more about the division of labour in underground mining amongst different genders

To explore the motivations for female mine workers to work underground;

- iii) What influenced your decision to choose a career in mining? Explore: employment opportunity, salary scale, adventurous etc.
- iv) What opportunities are there for women in mining?

To uncover the challenges faced by under-ground female miners;

- v) What are some of the difficulties that miners working underground face? Explore: safety, hygiene, job roles, shift work etc.
- vi) Tell me if women miners go through the same difficulties.

To explore coping strategies employed by female underground miners.

- vii) How have you managed to deal with the difficulties mentioned?
- viii) What kinds of support systems does your work place have?

Conclusion

Is there anything else that you would like to tell me, which I have not asked you about?

☺Thank you for taking part in my study!

Annexure C2: Interview Schedule: Key Informants

Demographic information

Pseudonym	
Portfolio	
Employment duration	
Age	
Ethnicity	

Introductory questions

- i) What does your role in underground mining entail?
- ii) When were you appointed into a senior position?
- iii) How long did it take for you to be promoted?

Discussions

To explore the motivations for female mine workers to work underground;

- iv) What informs management's decision to employ women underground?
- v) How do you determine an employees' capability to work underground?
- vi) What are some of the strategies used to attract women into the mining industry?

To uncover the challenges faced by under-ground female miners;

- vii) What are some of the difficulties of having women doing underground mining work?
Explore: stereotypes, value placed of different sexes etc.

To explore coping strategies employed by female underground miners.

- viii) How has your company managed to deal with some of difficulties women encounter?

To examine the mechanisms in place to create a gender sensitive environment

- ix) What measures have been put in place to foster the integration of females within the mining industry?

Conclusion

- x) Is there anything else that you would like to tell me, which I have not asked you about?

☺Thank you for taking part in my study

Annexure D: Transcription Evidence- Participant

Date: 20/07/2016

Pseudonym: Olerato

Me: thank you once again for making the time to see me. Please don't focus on the recorder, pretend as if it is not here and we are having a conversation.

P: Oh ok, I will focus on the conversation at hand.

Me: Good, Uhhm so how long have you been working in mining for?

P: It been five years now

Me: the same company?

P: yes, the same company.

Me: what were you doing previously?

P: I was working generally, I was a construction worker, we were building rails underground.

Me: How old are you?

P: I am 26

Me: Oh wow, you are my age

P: Oh wow that's interesting

Me: well, I'm still 25 I'm turning 26 next year but basically we are in the same age group.

P: (laughing) then you are younger than me.

Me: (laughing) yeah I guess I am. So tell me, what is your highest level of education?

P: I have a Diploma in Safety Management.

Me: And what are you working as?

P: I am a train driver, there's a train underground, it transports material and everything so I that train. They call it a mono train because it is on one rail.

Me: tell me more about your job, does it only involve driving?

P: No, eish my job is not so lekker (nice). It involves driving, cleaning

Me: Cleaning?

P: yes, sort of like maintenance, if the train is not moving you can't just sit and do nothing.

Me: So you can't call a technician, mechanic or something to fix it for you?

P: Sometimes it is not broken, it is just that there isn't any material to be transported so you can't sit and do nothing, you will end up falling asleep, because you know underground is too hot so you easily fall asleep. So when there is no material to be transported then you do maintenance, you take a hose you clean. They call it housekeeping. So you take a hose its about 50mm its as heavy as the ones that firefighters use, it a little smaller than that its more or less the same. You wash down sand, dust, everything, everything even human waste around the areas where you work.

Me: Human waste?

P: yes you know people use every space they get as a loo

Me: why is that? Are there not enough toilets or what?

P: There are toilets but hygienically they are not good for women because you can't sanitize the seats, there not enough toilet papers, they are always full. They are those mobile toilets so you can't flush them and most of the time they are full so people can't use them even I myself, I don't use them.

Me: So do you find that it is mostly women that do not use the toilets?

P: yes, it's mostly women. You know men they don't put the seat down after using the loo? So It is worse underground, there's nobody maintaining the toilets and checking if they are clean.

Me: so are they not separated? Are there no toilets for men and women?

P: They are and the women's toilets are more convenient, that's why even the men use the women's toilets, so by the time you get there they are already messed up. It's safer not to use them, rather find a spot somewhere, where there is no light and help yourself (laughs)

Me: why do you say women's toilets are more convenient?

P: Hygienically, they are clean, there's a mirror there, and they are flushable although not completely flushable like the toilets we are used to. But at least you can see that they are for women, you can even lock them, and they are lockable rather than the men's toilets. You cannot lock men's toilets, they are ok with doing their thing without having the doors locked. So they prefer using our toilets because they damaged theirs so we end up not using them at. Haii no it's hard to survive hygienically. Even though we carry those little bags to carry sanitizers, toilet papers just for the safety of it. But as for housekeeping, this is part of house keep to clean every waste that you find there. It's not easy so as long as it's in your trail you have to clean it. It's not easy really but it's better than sitting down, because you won't last even 10 minutes sitting down, you will fall asleep, it's too hot. So to avoid getting into trouble, you keep yourself busy.

Me: (hhmmm shaking head and laughing) Now I have lost track of my thoughts I am on this human waste thing.

P: yeah (laughing) it's not easy

Me: So tell me, you have been here for 5 years right? So what informed your decision to join mining? What made you decide that I want to go into mining?

P: What I've realised is mining right, if you want to survive under the department of mining you have to have a passion for it.

Me: so do you have a passion for mining?

P: I can say I do, I've developed in over the 5 years I have been working that is why I studied safety management.

Me: so is your safety management course related to the work that you are currently doing? Do you think you are using the skills that you have learned?

P: No not yet, I am not using them yet. Right now I want to broaden my skills. You know, I can't use my Diploma without a blasting certificate or a train certificate so in order for me to

get either of those I will have to do practical work underground, which included driving a train. So right now I am expanding my skills, I am still trying to explore which one to take between a blasting ticket and a train certificate. So you have to have that passion for mining, you have to love it, you have to enjoy it, you have to find a loophole or something to enjoy it not only to see it as a death sentence. (Laughs) You know people think when you go underground you will either get injured or you will survive. So if you look at it from a different perspective like something like an exploration, then you will develop something for it and you will know there's a career there, rather than anything that is normal.

Me: what were your thoughts when you first went underground?

P: I thought I was going to die yoh, that's what I thought. I thought it was over with me, I mean I was more than 50 feet under, it wasn't easy, I hated every minute of it. But As I saw how things go, as I saw how gold has been explored then I developed an interest for it.

Me: You said you developed interest over time right, but then before then what made you come into this? Because I am assuming that you had no interest in mining.

P: Yes, I had no interest in mining, so you want to know what drove me to come in here?

Me: yes

P: Uuuhmm what can I say? I needed a joh, I dropped out of school, I was young at the time so I needed a company that would take me back to university, a company that could fund me. So at the time I found a mining company, I saw that they could take you back to school and there are bursaries and everything. So I came here with the intention of studying.

Me: How did you know about all these things?

P: I did a lot of research; I was working at a radio station at that time so these mining people came from time to time, spoke about their company and everything. So I saw that if I want to study further and I want to finish my diploma then I have to go into mining.

Me: and you were granted that opportunity?

P: yes I was

Me: So you said there are opportunities in mining, please tell me more about those opportunities and tell me whether they are accessible to women too.

P: Hhhmmm how can I put it in a more civil way? Let's say as the mining department as a whole and engineering, there is a majority of men, so I guess the government forces the mining companies to employ women and to put them in higher positions, you know this 50/50 thing that the government initiated. So now there are more opportunities for women to become artisans, miners engineers, safety officers even electrical foremen, so for women to explore skills, not only to do jobs and sitting in offices and everything. It shows that women can do what men can also do.

Me: you said that the government forces mines to employ more women, do you think that that is currently happening?

P: yes, it is I think there are about 40 % women in mining now than before and even in higher positions you will find that there are women there. Even in departments where there are no women they make interviews, they try to balance that gender equity thing. So if it was according to the mine I don't we would be here.

Me: why do you say that?

P: It's a men's world, every day is a men's day. It's men's day! So I can say the government forces them because whatever you do, even when you have to study. You have to go through the Department of Education; you have to find proof even for you to obtain bursaries. Even the mining bursaries are initiated by government so they can't grant every male the bursaries without at least 1 female or 10 % of females. So they are being forced.

Me: they are being forced? So are you saying that if they has their way they wouldn't have females working here?

P: I really don't think they would, but it's my opinion, it doesn't mean that it's true.

Me: I am interested in your opinions; I want to know why exactly they wouldn't? uuhhhh are you getting a sense that they are doing this because of the numbers?

P: Yes I can say that, you know with women, you know it is not easy for a company to employ women, let alone a mining company because mostly we fall pregnant, we can't do hard labour. There are things we can't do that men can. So I think if it were up to the company on its own, they wouldn't employ women, because they know you have to go on maternity leave; at some point you fall pregnant and there are jobs you can't do, there are

heavy things that you can't lift up. Those are the disadvantages of having women in such departments.

Me: Tell me a little bit more about how you joined the company; you mentioned that you came with an intension, you wanted to finish your diploma and all of that, so what did it take for you as women to be employed underground by this same company.

P: I had to prove that I was fit, firstly. I had to prove that I was capable of doing any work under heat. I had to prove I can tolerate heat; I had to prove that I had a clear eye sight and that I could see in dark places.

Me: So I definitely have no place in mining, my sight is so poor.

P: (laughing) No you could, there are places where there is light mostly and they usually put it in your profile that this person uses specs but in some spaces it's a disadvantage. So I had to be fit, even mentally because I didn't know what I will expect because everything is conducted here on surface so you don't know what to expect. So before all of that you have undergo all those counselling and stuff. So after I passed all of that I could that no, I can do this.

Me: what did you think of the whole process especially on women?

P: I thought it was harder, it was oppressing, it was too much, you can't expect a woman to be in a room like this filled with heat and you stand on step, go down, step and go down. Its like jogging but there's more pressure there and you can't complain, because you want the job but haai its oppressing. The conditions you have to go through are way too much for women and they are putting you through the same test as men, there is no lighter temperature for anyone, it's all the same. And you can't expect a man and a women to be equal, we are not the same physically and they expect us to be at the same level, with everything Heat Tolerance, fitness, heart rate,height even the height its very difficult to find a man that is as short as I am, you have few of them but even height counts.

Me: What do they look for exactly in the height? Do they want you to be taller?

P: Yes, you have to be a little taller, but there are stopes where you have to bend and go under to find gold there so those spaces can accommodate shorter people but mostly it is an advantage to be taller, I don't know why.

Me: I guess it is a mining thing (giggles)

P: (giggles) yes it's a mining thing we can say that

Me: what do you like about your job? Are you enjoying what you are doing?

P: Yes I like my job, in fact I overcame my fear of heights through my job, because where I work, the train that I drive is high up there. So I overcame my fear, that's what I like about my job. It's got its challenges, though they are not major, but I can overcome those challenges daily. So I haven't heard any challenge to threat it no, I am enjoying it. And the fact that I survive everyday that's a bonus.

Me: Survive in terms of what?

P: No I mean surviving the conditions underground, not every day that you come out safe and without even a scratch. Because you can be scratched by a little stone and by the time you come out, your hand is swollen. So in a day 7day basis, like for example from Monday to the next Monday, it is hard to survive. You can see even on my face that I am scratched but I try to keep up. So those are the challenges, surviving and overcoming that fear of heights.

Me: so it is an adventure that you are enjoying?

P: yes it's an adventure and I like it (giggles)

Me: That's lovely, so tell me what does it mean to you being a women and a mine worker?

P: Uhhmm thinking, what does it mean?...

Me: Ok let's hold the thought; we will revisit the question towards the end. Do you feel that those tests that you go through prepare you enough to go underground?

P: No (shaking her head) they don't. They do try but the condition underground is different on its own, so I feel like nothing can prepare you. Although I believe that they do try but you still get the sense that you are on surface and you know that you are still safe. But when go down there it's when reality actually strikes, so nothing really prepares you.

Me: you kept saying, it not easy to work underground, it's not easy, tell me what makes it so difficult to work underground?

P: Rocks fall all the time, sometimes you work in conditions where somebody dies and you still need to go in there, sometimes you have that thing at the back of your mind that what if a rock falls even sometimes you can see that it's not safe, there are rocks hanging by a thread, that even the slightest move, the rocks can fall over you. The company will only be sorry but they can't bring back a life. Even travelling down there in the cage, the rope holding the cage, should that rope fall off, should that rope be cut off then you know that it's the end. So you are putting your life at risk.

Me: Tell me about your experiences in the cage.

P: Yoooh (covering her eyes) those are the worst, those are the worst. Being squeezed, smelly armpits and some areas I cannot even mention, smelly breaths because it's a small space, it used to take 45 people but they have decreased it now to 35. You just being pushed, you can't stand firmly, sometimes you can't even feel your feet on the ground and it takes about 15 minutes to go down, it's dark, it's hot and goes fast even the rope they are using you can't trust it so you have to avoid looking at it. The small rocks can go inside your eyes when the cage is going down so that is why you have to wear goggles when you go down. But whooo it's a bad experience, it's hell.

Me: So do you go underground every day?

P: yes, Monday to Saturday sometimes Monday to Friday.

Me: Do you work shifts?

P: No it's one shift, morning shift from 4 in the morning to 12 in the afternoon.

Me: Tell me more about some of the challenges that you come across as you are doing your job as a woman underground.

P: There's few of us, there are very few of us who are women, mostly there are men. The kind of language they use is very offensive; they even forget there is a woman among them. Sometimes you will be expected to do a job you don't even have the strength for; you will be expected to carry heavy objects. The air, there is polluted air, there is not enough ventilation, sometimes it's too hot to breathe. For a woman it's not good because we inhale nauseous gasses, poisonous gasses so the air we breathe is not enough ventilated. And there is not enough privacy; you know what I mean by privacy right?

Me: No, I don't, kindly elaborate for me.

P: Ok like you know with the overalls we wear right, there's a rescue kit that you wear to help you breathe if there is too much nauseous gasses. And the cap lamp that you have to put on, so sometimes you get exposed because it gets too hot and you left with only a t-shirt, sometimes you get injured or maybe there's a wire it hangs your t-shirt and it gets torn. They make fun of that, so there is not enough privacy, you need make sure that you enough clothes and you always covered even when it's hot. So they don't respect women's privacy.

Me: but all these problems that you have mentioned are they unique to women or are it something that everyone experiences, except the fact that you said there isn't enough privacy for women.

P: Actually it's something every women underground goes through. It's not only me; everywhere where a woman works they face such challenges.

Me: what are the challenges that have affected you the most in doing your job?

P: There are positive ways in which my work has affected me, like having people depend on me, driving the train if someone gets injured or ill even dies then those are the challenges where I now have to go to that place where that person died and take out that person, until the relevant people come like the paramedics and stuff, holding a corpse is one of the challenges I can. Because you knew that person, like you saw that person in morning, now you have to hold their lifeless body.

And the other thing, having work with illiterate people, I am sorry to say but haai it's a problem (giggles), because it is hard to stoop to their level. You know you find different tribes, different races and everything so there's a language they are using, Fanakalo right, so I am young, I don't know that language so having to speak that language or having to lower your calibre to that person just so you could understand them, and it's not easy. Sometimes you find that, that person has been put in charge because they are older so having to listen to that person or taking instructions from that person is not easy because sometimes you know that that person is putting you in the wrong place but you have to agree because they are the team leader and they have been put in charge. And the way I see it that is one one of the biggest challenges we are experiencing. They take illiterate people, people from outside from Mozambique, Lesotho people who use passports people they are sure that they will not a job anywhere else, they put them in higher positions to oppress the young people who have more

opportunities because they know that they will not go to management to tell that they want to further their careers. And those people are very oppressive, they are very oppressive, so you cannot level with those people.

Me: You have mentioned quite a few challenges so far, now I would like to hear what your thoughts are based on your own experiences on whether this environment is accommodative of women.

P: It's not at all accommodative; it's far from being accommodative actually. For instance we sit on hard rock for almost an hour waiting the cage. The ventilation, the heat other places are too hot for a woman to handle, the temperature is just too hot, there's too much heat. The temperature that is allowed is ok for men because even when they test the temperature they use men to go and test the temperature, but when the time for work comes, they send everyone in. The temperature is too hot, it's over 37 degrees Celsius and you have to work there for about 6 hours.

The other thing you cannot control the language that people use. It's very offensive, that really affects me. Even water, we don't have 100% clean drinking water. The pipes have rusted and mostly we women get sick, we get diarrhoea from drinking such water, unless you bring your own which cannot be enough for 8 hours. Those are some of the challenges that we face.

Me: So in terms of your job roles? You said that you are a woman and you driving a train do you it as a higher role?

P: Oh no its not, I would do something better if I had an option. Even that train itself, its not something a woman can do.

Me: Why? You are doing though (giggles)

P: (giggles) yes, I guess with the money actually. But why I am saying that is because that train is high so for me to get inside, I have to spread my legs, can you imagine how short I am? Sometimes you have to get the men to push you up, so it's not comfortable for a woman no, actually not for any position for woman underground. Not any position is good for women underground, unless if you go as a safety officer, maybe as an artisan working with electrical cables yes but not the one that I am doing. It's not suitable for a woman because I

can't jump as a man can, you have to literally jump when you get into that train, because the step ladder is high, you can't climb like a lady.

Me: where do you prefer to work, on surface or underground?

P: On surface definitely on surface because its more comfortable and there's more money on surface and I can use my phone on surface. Even the air we breathe, because you will go to a doctor maybe after 6 months and you will find that you have small stone particles in your lungs, so we get affected in a very bad way. Even our wombs sitting on hard rock, it affects them badly. So, besides the train, like the other job I did before, lifting those heavy metals it's not healthy for women. There are winches, the machines that they use to pull dirt out in order for them to get gold are not either, and none of them are actually. Even the drilling machines, they are not good for women, you can't stand after drilling so there is no friendly space underground unless you have a training certificate like I said.

Me: Ok I don't mean to intrude your privacy, but I have noticed that you are pregnant right, do you still go underground?

P: No, I am currently on surface.

Me: was it your choice to be on surface?

P: No it wasn't my choice, when you fall pregnant they automatically put you on surface.

Me: does it affect your salary?

P: Yes, in a very big way, its gets less. The salary, my benefits that I got when I was hired, everything is affected, it's like I am on suspension, it's very low.

Me: what benefits are being taken away from you?

P: No they are not being taken away; they are being decreased, like my unemployment benefits, my medical benefits. And remember now that I am pregnant I have to see a gynaecologist every month. My medical aid is being used up more often.

Me: How do you disclose about your pregnancy?

P: I didn't

Me: but did they notice that you are pregnant before you could even say?

P: There's a doctor, there's a hospital and a small clinic which the mine provides. I did my own test at home but I had to still prove to the company that I am really pregnant so I had to go to their hospital and their clinic, for them to take blood test, urine tests to prove that really this person is pregnant. So you have to go through all of that for them to confirm. I am allowed to use my own gynaecologist but they have some of their own. So I have to use their gynae on my medical aid so they could confirm how far along I am. So I can't lie and say I am six months now, that gynaecologist of theirs will confirm how far along I am.

Me: At what stage do they take you out of underground?

P: As soon as you have taken your tests, it can be a day, it can be weeks.

Me: oh really, so there isn't a specific time as to when you need to go out.

P: No that is the good thing about them, as soon as you have tested positive for pregnancy they take you out.

Me: So how long have you been on surface?

P: It has been five months now, no actually it's been 6 months because I came out in February

Me: and how is it for you?

P: Eish it's quite, its peaceful, its more than I get like on my normal job. Here we just come and do small jobs like cleaning and then we sit the whole day. And the good thing is that, the hours are not the same, normally I would do 8 hours and 45 minutes and now it's only 6 hours so it's a good thing.

Me: did you know about the benefits being decreased before you disclosed?

P: Yes, yes I knew

Me: so you didn't have to hide it

P: Yes, because I knew it would be risk so I didn't want to take that risk for the sake of money.

Me: I hope I did not make you feel uncomfortable, I was just interested in hearing how your experiences are now that you are pregnant and whether you still go underground, especially based on challenges you have mentioned so far.

P: No, no, not at all

Me: good. And how do you relate to the men underground?

P: some of them are friendly, some are respectful, they are older and they are young. But I guess it is to accommodate them, accommodate every tribe because they are different. Some of them will treat you with the respect you deserve and some of them will treat you like an object and its very offensive but well the point is in accommodating them, getting through every day, although it's not easy, sometimes you end up going through a fight verbally. Sometimes you end up getting that person fired, and you feel guilty for getting someone fired for the offensive things they have said.

Me: have you gotten someone fired before?

P: No, although I wanted to, many times I wanted to.

Me: what had happened?

P: (laughs) you know people just talk. You know the train that I told you about? Usually for us to make use of that train, I have to climb on a dustbin to get inside, sometimes there are women and we help each other inside the train. So some madala (old man) touched me in a very offensive way, he literally touched by butt and he wasn't even helping me up, he was entertaining other people and everyone was laughing. So I climbed back down, I couldn't take it I was very offended and I told him that I would open a case against you. He begged me not to.

Me: How did you deal with the entire thing?

P: everyone stepped in, the team leaders, the miners even the supervisors that were underground at the time. So they spoke to him and you know we get bonuses every month so they gave him a counselling form to let him know that they will cut his bonus. But if I had opened a case at security he would have been fired immediately because I had witnesses that saw what he did. Then I decided not to.

Me: that must have been traumatic.

P: Yes it was, imagine in front of everyone, people laughing, people talking.

Me: How have you managed to deal with other situations, like the lack of toilet facilities which you have pointed out, and the conditions you get underground, how do you deal with them underground?

P: There are trade unions on surface that accommodates such things, so we report such things to trade unions especially when someone suffers a fatal injury or gets amputated there are trade unions that we report such things. Even the safety department their door is always open when you have something like that even though they don't do much about certain things like the heat but it's better to have reported it, in case something happens.

Me: what do you wish could be done?

P: I wish they could decrease the temperatures if they could, the working condition and wish they could supply more ventilation because there are some places where you can't even breathe. Bring inspectors at least on a monthly basis to inspect such places, health inspectors. Initiate for hygienic facilities like toilets or places where we can wash our hands, there should be soap, there should be sanitizers to avoid more people getting sick because even when you have a wound it easily gets infected because of the rust. I wish they would change such things especially the temperatures, if it was according to me I would have plants there, you know when you have plants it's usually cleaner and healthier, but unfortunately they wouldn't survive too.

Me: Do you think there is any form of additional support needed for women mine workers?

P: Yes there is. Like medically and psychologically, maybe there should be psychological facilities.

Me: You don't have that?

P: no we don't and fitness support too, I don't know why we are gaining so much weight but we are gaining a lot of weight so if they could provide such things then I guess it would be better and we would tolerate the working conditions better. I would also like for them to provide educational facilities that is a must. They do have ABET facilities but they mostly accommodate men because they are in the hostel. If you want to study on your own, there is a study loan, its not a bursary it's a loan.

Me: so you have to pay it back

P: yes you do

Me: Through service or in cash?

P: You have to pay back the money, but there is a reimbursement if you study something that will benefit the company so you can't study anything besides something that is related to mining.

Me: So you work 8 hours 45minutes underground, do you get a chance to eat while you are there?

P: Yes we do, although there is an allowance they give us, you are not allowed to sit and eat for more than an hour. It's just R900 and it comes with your salary, they call it a meal interval allowance.

Me: Do you bring your own food or do they supply?

P: No we bring our own, they supply food to the men since they stay in the hostel and we must bring our own food from home.

Me: so there are no hostel facilities for women? You need to find your own accommodation?

P: No, we don't have it only for men.

Me: Interesting, I was not aware of that fact

P: yes, no they don't have accommodation for women, you can come from the United States today and if you have to go underground tomorrow, you will have to find your own space.

Me: is it free accommodation or do they pay for it?

P: No they pay for it, they deduct it from their salaries and for us since we don't have hostels they add the allowance to our salaries.

Me: is there anything else you would like to change about your job?

P: I would like to work on surface, I think I deserve to actually because I have been studying, I did my Diploma and graduated. They've put all my qualifications in the system and I am still waiting, but I will see once I come back from maternity leave, I wish by then they will

have something for me. I wish we didn't have to go such a long process for us to get appointed.

Me: Do you feel like it's something that is across field or do you feel it more because you are a woman?

P: Its mostly because I am a woman. You can study with men and they get appointed quicker because they use their hands and they know how to use their hands than they do with their brains. So I feel I have not been given enough opportunity and development because I am a woman. The fact that you studied does not count here, how you use your hands, how you bend, how you sweat that's what they look at. If they could initiate education more and encourage people to study rather than promote people only based on what they can do.

Me: So you feel that development here is only based on what you can do physically.

P: Yes than mentally, if you have higher qualifications that is even where they will oppress you more. So if they could just overlook that a little and balance that then we will know where we are going and we will know that there is a future for women in mining.

Me: You don't think there is a future?

P: If you have not studied, you are not studying and have no qualification, then there isn't any future for you, truly speaking there isn't.

Me: Now back to that tricky question (giggles)

P: (giggles) I thought you had forgotten the question.

Me: what does being female and a mine worker mean to you?

P: It means facing everyday challenges, overcoming those challenges and surviving and also appreciating the value of education. That's it for me, that is as far as I can go and yes if they could expose more opportunities to everyone more especially women.

Me: One last one before you leave, do you feel valued as a woman?

P: No I don't

Me: why don't you?

P: If they could enhance those things that I mentioned then I would feel valued. If I could teach people about how to treat and appreciate women, then I would feel valued but as for now, I don't feel valued.

Me: Ok, thank you once again, wish you all the best with your future plans 😊

P: thank you, shuu we've been talking (laughing).

Annexure E: Transcription Evidence -Key informant

Date: 20/07/2016

Pseudonym: Cassandra

Me: Thank you once again for making the time to see me. So tell me how long have you been working in mining for?

P: Ok, I started here in 2003 as a learner artisan at Siyavuka mine, this is Mponeng I was doing learner artisan and then I completed that training in 2006 , actually to 2010 because we were learning a lot of things from underground plant. Then in 2006 was when I qualified as an artisan.

Me: How old are you?

P: I am 34 now and then as I started in the mine it was not easy. Honestly speaking it was not easy, I have never worked underground before and the first day I had to go underground, I just said, is this what I am going to do? Like every day? Underground? The conditions is soo hot yoh difficult, and as a women its difficult to sit with the men and all the languages that they are using then you have to accommodate that. But it was not easy but along the way I got used to that condition, that situation, that environment. Then I started to enjoy working underground, with those men, as an artisan. I worked as an artisan from 2006 and that was when I was transferred to Mponeng mine as an artisan. And from 2006 to 2011 I was an artisan doing electrical most of the time.

Me: So what are you currently doing?

P: Currently I am an engineering supervisor, they call it frontline manager

Me: ok then if that's the case then I have different questions for you because I thought you were working more as a general worker. So because you are assuming a senior role my set of questions to you will be different.

P: Oh ok yes, in laymen's terms I am actually a foreman and I am the only one at this mine

Me: ok so please tell me about what you do as an engineering supervisor.

P: Ok my daily job is to check the compliance, especially on the equipment that they are using and to ensure that almost 100% of the equipment they are using is maintained and

working properly. The reason for us to maintain these is because we don't want any failure especially because we are in production and we don't want the production to stop because of the equipment. Another thing is to ensure that the artisan have got their daily job, their work orders. To also make sure that the safety as you know that safety is the first value here at the mine, whatever they are doing, they must put the safety first. Another thing with my role, I have to do the follow up on those things, because even when they training and all of those things I still need to follow up to make sure that they are still following that safety procedure in everything that they are doing. And they way that they are doing that is in a form a PTO (Planned Task Observation) you give an artisan a job, you say you are going to do a particular job but at the same time, you need to be there to make sure that he is doing that as planned. And another thing is to do the plan inspection, let's say you give an artisan the task to inspect any equipment then you as the supervisor needs to follow up on that, using your checklist to make sure that everything is done accordingly. Another thing, the budget, you must know they budget as you are working with the people, you need to understand the budget, how you going to buy the spares, the overtime all those things then you need to be in control of the budget to make sure that you are in line with the budget to make sure that you spending accordingly. When it comes to Sunday labour, that's the job that is done on Sundays. It's not the routine work, ;like the one that they are doing, like maintenance or whatever, we call it Ad Hoc work, the work that you plan to do at a specific time, where there is no one to work and there is no interruptions, then, with that you need to know, have the understanding of what that Sunday labour means, because there is a certain job that they are doing and you can see that it's not part of their Sunday labour and the company is very strict with that. Even DMR is hammering us when it comes to that.

Me: what is DMR?

P: DMR is the Department of Mineral Resources because in the mines we have a lot of accidents, accidents are happening because we are working in a risk area. For example if something happens and you are working on a Sunday and it's not part of Sunday labour then they can even close the mine, that's why they are very strict. And to control overtime as well to make sure that the people are not working more than necessary. Like as a supervisor, basically I can say you must in control of everything.

Me: you have mentioned a lot of things that you do as a supervisor.

P: And it's not all, I just mentioned a few.

Me: so why did you decide to work in mining?

P: Honestly speaking, it was not like it was my dream to work in mining. Its just the studies that I have done at the college. Actually, I liked engineering since high school, but in my mind, I wanted to work at Eskom and all those companies. But you can't choose, if there is no space at Eskom I cannot say I cannot work somewhere else. I can say fortunate enough, by the time I was about to complete my studies then AngloGold as a whole came to the schools, they wanted learners and I was one of those so that is how I got the opportunity to be in the mine. Like as I said, the first time I went underground YOO!!!, I was even thinking of resigning, I was even thinking of going to school again because I didn't think I chose the right career. I thought of going back to do something else, because I felt it was not me. But along the way, you start to get used to it and you start to enjoy it.

Me: what talked you of choosing another career path?

P: I can't say there is anything that stopped me. But as people, you get to sit with people and you discuss things, then I got courage from others and they told me that at first it will be like that but you will get used to it. Its your first time going underground, so obviously we are expecting this from you. Anyway you are doing engineering, its not like you are doing anything away from engineering, you are still following the right path, it is just a different environment. Then you will get used to the environment, you will see.

Me: what is it about being underground, that you did not like so much that even made you think of going back to school?

P: eish it's a noisy area, its hot, yoh, the temperature is so hot there and another thing, it's a simple thing, let's say you really want to go to the toilet to go pee, there is no bathroom there. The time I started there was no such, just imagine the whole eight hours underground and you wanted to go to the bathroom, you couldn't go to bathroom. It was very difficult, otherwise you just have to wait until you are outside for you to go underground.

Me: How is the situation now?

P: Now, it's better like most of us, like me I am not used to going to the toilet underground. But if you check, there conditions are changing, each and every place, you will see that there have put a toilet and there is male and female. Then if you want to go there, then there is nothing stopping you from going there. Then even to work with the men, like the language,

yoh the language underground, with the men shooosh is horrible because they swear and they can do whatever and they are not afraid to call you anything, whatever body part they can say that freely. Imagine you are there listening to that, it's like you can just close your ears or something, but you get to that along the way and everything else.

Me: But how do you deal with it? How do you get to a point where you say I am accepting of this thing?

P: The thing is that, if ever they are not saying that thing to you, there's no way that you can't get offended but if you are not used to people swearing at each other like that especially if you are still new then you start asking if you will cope here. And the other thing is that, its not only one men it's all of them. Eventually you get used to that.

Me: would say that there are any opportunities for women to work in the mine?

P: to work in the mine? Yes there are. But what I can say about women in mining is that most of us are afraid of challenges. You will say no I can't fit there because of pressure or something and there is nothing like that. If you can see here in the mines, I can say Anglo Gold as a whole, I am the first lady to be an Engineering supervisor and they are always asking me how do I cope there, how's the pressure and management? I say no even when you work as an artisan you will always have this question of whether you will manage, but when you get there you will work as an artisan. Most of the people are afraid of challenges and the same time they don't even know what is happening there. It's that fear of the unknown, because you are not there but as soon as you can get there, there is nothing really. Even now as a supervisor I can't say I can't be Engineering supervisor because I know that whenever that position comes I will do what the positions wants me to do. So I think if everyone could take away that fear they would be anywhere they want to be.

Me: You have been working here since 2003 you said, how long did it take for you to be promoted?

P: It didn't take long actually. Like I said I started in 2003 as an artisan until 2006 and these artisan its different levels. Like they call it level 2 artisan and level 4 artisan, so when you are at level 4 its like you are specializing now on something. Then I can say in 2010 was when I started specializing as an electrician and I started at level 2. So I can say from 2006 its almost 3 or 4 years difference. And to be a supervisor it didn't me more than a year because it was from 2010 and 2011 I was made supervisor. I think I can say that where I stayed long is here

as an engineering supervisor, because I started in 2011 until now. And now from where I am the next level is for me to be an Engineer and to be an engineer you need to study and that period I am still studying I can't be too comfortable, there is still more I want to do.

Me: so are you saying that they give recognition to your qualifications?

P: yes they do. What is happening is that, we all have developmental plans, everyone even the artisan. Then we need to know what you want to become next from being an artisan, then everyone must follow whatever they choose.

Me: does the company follow that?

P: yah, but you must just not relax and say the company will follow, you must also do the follow up. Like you say now I am finished with this, what is next or what will I do next and when?

Me: what helps management decide to take women underground?

P: I think, it's because of that Employment Equity, because now there is supposed to be a balance, which is the instruction they got from government. Because before there were no women underground, but when that thing started was when they started to employ women to try and balance that structure. Even now if you are a women underground, you have a lot of opportunities especially if you study, because they still trying to be in line and get balance. Because now if you check, the higher positions, it is all men and us the women we are still very few. You will find that women in a higher positions for example, there's 1 or 2 and on the other side men are like 10 or 20, so you can see that it is not balanced. I can say that if as I women you want to study, you have got a better chance because of the Employment Equity.

Me: so what determines an employee's capacity to go work underground? What are some of the things you look for, for that person to go underground?

P: Fitness on top of the list, you must be fit for you to work underground. So in order for you to work underground, there is a certain process that you need to follow, like they take you for medical examination, where they check the fitness and the health. Then they check if you will be able to work under the hot conditions underground, so they take for a Heat Tolerance Test (HTS). They put you in something like a steam room and there is a step where you have to climb up and down, up and down and they give you a specific time and they take your temperature before and after and if they can see that you are within the temperature that they

want then they can see that your body can withstand the temperature underground. And another thing because some jobs require you to pick up heavy loads, they want to see if you will be able to do that. If you can do most of those things then they can say that you are fit to work underground. But it doesn't mean that its only women that go through this, even the men go through the same process, because you will maybe you will be doing the same job.

Me: and how often do they check on the fitness levels?

P: It is once in a year, after a year you go back there for medical examination, like they do the same process over again. And even induction, they will induct you to tell you what you can expect underground, so when you get there you are not surprised.

Me: Do you form part of the recruitment team?

P: no, recruitment team is part of HR, they have got that process to follow. Me as the supervisor they can just call me for that interview to say that he or she can work in my section because of this and that.

Me: Do you also have to go through those tests?

P: yes everyone, even the manager as long as you go underground and automatically your access card expires after a year. When you try to clock in to go underground, it will say certificate expired.

Me: what do you like about your job?

P: I like challenges, I don't want to do the same thing over and over again. And in my job, there are a lot of challenges, there are a lot of new things happening, there are a lot of projects, all those things that involve risk assessment is what makes me like my job so much and to work with people as well, because as a supervisor, I still need to know how to work smoothly with people because I need to manage them and discipline them where necessary, without shouting so I can make them understand.

Me: What are some of the challenges you experience as a woman working underground?

P: I can say that most people say that for us as women, it's not easy for people to believe in you, because they will say that she is women, she is a lady she cannot do this. And then if you do something wrong, they will say that we expected that from you because she is women. They are always negative towards us even in my department now, for example if they give us

the same project and then they put me and a men to work on it. From me I need to put extra effort, so I can prove myself to make sure that whatever I am doing, I do it perfect because I don't do that, they will say it's because I am a women that's why but when a men fails, he still has that chance, they will just say he will do it again. But you, you need to prove yourself always. Even to hire a woman in section, they always have that in mind, they ask whether she will achieve what they want and whether she will be able to give them the outputs, even some of the men, even now they still say they don't want women in their section because they still have that mentality that women are not supposed to work in the mines, they are not supposed to work like men, they are supposed to be at home cooking and cleaning, they are supposed to be nurses, social workers (laughing) all those things.

Me: Laughing

P: (laughing) Yes I can say that its challenging because you always have to prove yourself, no one will believe in you immediately.

Me: And do you deal with that? How do you take that as a women?

P: The thing is that, (thinking) since well I know that I have been long in the field, even if they don't believe in me, as long as I believe in myself and you know that this is the way to do things and I am doing things the right way. You just need to believe in yourself and believe that whatever you are doing, you are doing it right, you must not even compete even though you sometimes fail, because things don't always work smoothly every day. And sometimes they don't even have to say it, when you do something wrong, you can just see by their body language that they are secretly laughing at you because you are a women.

Me: so how have you managed to deal with the challenges you have mentioned so far? Like you mentioned that the situation underground is very noisy, the heat, and you also mentioned something about the toilet facilities.

P: You get used to that, for example let's talk about the toilet facilities, so what I do is that before I go underground I go to the toilet and when I get out of underground, I go to the toilet again. I can say that you can control your body.

Me: what about peeing? What happens when you are really pressed and you want to pee?

P: Normally if that is the case, If like your tummy is not well, you can speak to your supervisor and ask them to excuse you for the day, so you don't have to go underground. But

if you are pressed while you are underground, you sometimes don't have a choice, but I never use those toilets.

Me: what makes you avoid using these toilets so much?

P: It's the hygiene, they are dirty, everyone is using them, they are not flushing. You don't know who sat on the toilet before and there is no tissue there, if you want to use the toilet you have carry your own roll of tissue. And then even when you are walking past, you can smell that it smells bad, because they are not flushing. What happens is that, there is a bucket, and that bucket gets replaced after a week. Just imagine in that week, we have day shift, afternoon shift and night shift and everyone is using that toilet and then you need to there as well. But there is a project that we are doing now, it's a new project, they want these toilets to flush, because we have running water underground. But I don't know how that will work because its underground so we have no sewage underground, maybe there will be pipes. Maybe they will manage, maybe it will be for the best.

Me: (laughing) we hope it will be for the best.

P: (laughing) even not but it is not going to be the same, like what is happening currently.

Me: how has your company managed to deal with all these challenges that women are facing? You mentioned the issue of toilets being changed, what other things are they doing to address of the issues that affect women?

P: Not much really, not much because the only different thing is the toilet, because now they have separated the toilets to show that this is for men and this is for women. The other thing is, I can't say its only to accommodate the women, they are just improving the mine as a whole, they are looking at things like ventilation and other things, they are just improving the conditions underground and I can't say it's because of the women.

Me: are there any other challenges that you can think of that are specific or unique to women working underground based on your experiences?

P: what I can say about the challenge that is there now, I am not sure whether I can out it as a challenge or what because they want the men to do the same job, even us as women that is what we want. Now what they are doing, you will that there is a women and she is working night shift of which this is a challenge, even if they put us on the same level as the men but for women that is a challenge especially when you have kids to take care of and now you

have to be at work. And I can say that most of them now, they have put them on night shift and now it is the father who needs to take of the kids while you are working. You need to deal with that and you need to be familiar with that and that in my opinion is a big challenge.

Me: Are you experiencing it?

P: I never worker night shift but I can see there are people who are working night shift, but they are expecting us to do so because it is what we said we will do. Because we said whatever job they give us we will do. From my view, even though we are all working but doing night shift is a very big challenge for women. But they are doing it, they are surviving, it seems like they are enjoying even though I don't know deep down in their hearts how it affects them.

Me: So tell me what are some of the things that have been put in place to support women who are working underground?

P: If ever maybe you are having problems, the HR's door is always open, if ever maybe you are uncomfortable with whatever situation that is happening, they have got labour relations here, you can go to that department and tell them what is bothering you and they will support you. We have the unions as well, if ever you feel that you are not getting any help then you have the right to go the union, everyone has the right to be part of a union. We have got all the support you can think of, there are many doors open for you to get assistance.

Me: but how accessible are they to the employees?

P: in terms of solving the problems?

Me: yes, even in terms of them being visible enough for the employees to access?

P: they are always available and there's is more than one person so you can always get help. If you have a problem and you report, they start by doing their own follow up and there after they call you in until you are satisfied.

Me: In terms of their abilities to respond to the problems that are faced by women, what can you say about that? Responding to women specific issues.

P: They are doing that. I remember there was a lady that harassed by a men underground, I don't know what relation did they have but that men was claiming that it has been long since he has been having a relationship with this lady and he has been buying him stuff like

cellphones, and now this lady does not want to deliver. Then when they spoke to the lady, she said that nothing like that happened and he went underground with a knife because he wanted to stab the lady. What happened is that, there are people that saw that whole thing happen, so when she reported that to the union and they responded quickly and that man was fired.

Me: and the safety precautions? Can they not detect when someone has a dangerous weapon?

P: No, underground we have security, whatever they are doing is mostly to search us when you are coming from underground, to check whether you are not taking anything from underground. There are things that you are not supposed to carry when you are going underground and that is communicated during induction so I think what got that guy fired was because he had a knife underground.

Me: what forms of support do you think are required for women in the mine? What do you think they need?

P: I think what we have currently is what is necessary for us, but if there is anything new that they want to implement that is also ok. I think the mine has done their own exercise to say now we need to support the women and they have put things in place.

Me: is there anything that you would like to add to what we have covered so far?

P: Nope, I think you have asked as many questions that you can (laughing) and then with this interview what is going to happen? Are you going to write an article or what?

Me: I am going to be writing a research report and then it will be determined by the quality of the report if an article will be written. But rest assured that your name and the mine's name will not be mentioned anywhere.

P: Ok, but I think I didn't say anything wrong so, even if you mention my name (laughing)

Me: (laughing) No nothing at all, and oh is there anything that you would like to change about your job if you had to?

P: (thinking) No, I like it as it is even if they can add more technology, that thing will not change the underground situation.

Me: Ok, if there is nothing else to add then thank you for your time, enjoy the rest of your day ☺

P: Thank you.