



**UNIVERSITY OF KWAZULU-NATAL**

**Exploring the challenges of female leaders in core leadership roles in a mining  
company in KwaZulu-Natal**

**By**

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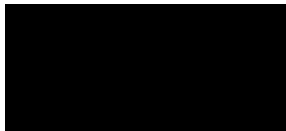
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I would like to thank my mother for the sacrifices she has made, including missing family events to support me during this time.

## **ABSTRACT**

The mining industry is male-dominated, and females experience challenges working and advancing to leadership positions, particularly in core leadership roles. These core roles include engineering, metallurgy, geology, artisanship, mechanics, and technicians. The objective of this qualitative study was to identify the challenges and explore how female leaders in core leadership roles manage these challenges, as well as the type of support they receive in a mining company in KwaZulu-Natal, South Africa. The target population in this phenomenological study was 21 women who were in middle to executive-level management positions in core roles. Purposive sampling was used to select 13 participants for the study. Data was collected using semi-structured virtual interviews and analysed using thematic analysis and NVivo software to identify themes. First, the results revealed four themes that depict the challenges faced by female leaders in core mining roles: lack of a support structure, mistreatment, abuse by authorities, and being negatively stereotyped as women in the mining company. Second, the study identified three ways in which female leaders in core roles deal with challenges: adopting a predominantly situational leadership style, balancing the demands of motherhood and marriage with their work, and advocating for a better and safer working environment. Third, female leaders in the mining company received three types of support: management development in the form of non-technical training to help them fit, survive and lead in the mining workplace, mentorship and coaching, and anonymous reporting platforms. The study concludes that women still face challenges in leadership roles. Female leaders in core roles use the situational leadership style to navigate the challenges, and the mining company provides various management training to female leaders, as well as education on sexual harassment. The study calls for the mining company to automate certain parts of its operations to make it easier for women to operate machinery and perform physical labour. Additionally, mining companies need to address the lack of support from other women who have risen through the ranks. The study highlights recommendations for creating an environment where women feel welcomed and supported by the mining company. Areas for future research are suggested.

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## **ACRONYMS AND ABBREVIATIONS**

|        |  |
|--------|--|
| DMRE:  | Department of Mineral Resources and Energy     |
| HR:    | Human Resources                                |
| ILO:   | International Labour Organisation              |
| IT:    | Information Technology                         |
| MPRDA: | Mineral and Petroleum Resource Development Act |
| MCSA:  | Minerals Council South Africa                  |
| WIM:   | Women in Mining (Committee)                    |

# CHAPTER 1: INTRODUCTION

## 1.1 Introduction

In the words of Dolly Masilela, the mining superintendent at Exxaro Resources, who spoke at the 2023 annual Women and Leadership in Mining Conference, the situation is that “we simply cannot ignore the imperative of having more women in leadership positions as the crucial caveat in transforming the industry” (Clamp, 2023:1). Clamp (2023:1) recognises that there is a need to “empower women to take their rightful place as leaders, innovators and drivers of change within the industry”. South Africa’s mining sector lags in empowering women for leadership roles and the pursuit of gender inclusivity (Clamp, 2023). Governments in many countries, including South Africa, have applied prohibitions that have prevented women from working in mines, especially in underground mining (Mangaroo-Pillay and Botha, 2020).

In addition to the prohibitions, there are traditions and long-established practices in the mining sector in South Africa that need to be challenged to drive progress, sustainability, and competitiveness (Clamp, 2023). For example, women underground miners in core roles are objectified sexually and are subject to verbal, non-verbal, and physical sexual harassment (Mangaroo-Pillay and Botha, 2020). Increased female representation in leadership positions is vital for a variety of reasons. It is key to combat gender inequality, promote inclusivity, and address under-representation in an industry where women have limited career advancement opportunities due to being subjected to biases and stereotypes (Clamp, 2023).

Breaking down barriers that are embedded in the status quo of gender bias, which will motivate women to pursue leadership roles, is crucial if the industry is to access a diverse pool of women leaders across different levels and roles in the mining sector. The potential for growth in the mining industry is curtailed by the systemic exclusion imposed by gender inequality (Mangaroo-Pillay and Botha, 2020). The current norm in the industry can be changed by supporting women, promoting them into leadership roles, and offering the necessary female role models and mentors to young women wanting to join the industry. Vinberg et al. (2023) state that there is a paucity of studies regarding leadership behaviour

in the mining industry, with more studies focusing on safety and preventing injuries to employees.

Leadership in any team-based activity is critical in the mining sector, which is a male-dominated industry globally. Women comprise 13% of the mining workforce globally (Kansake, Sakyi-Addo, and Dumakor-Dupey, 2021). In South Africa, there are more men than women working in the mining industry (Commission for Employee Equity, 2023). According to the Minerals Council South Africa (MCSA) (2019), women make up 18% of the mining industry while the Commission for Employment Equity (CEE) (2023) states that 20% of the workforce in the mining industry are women. The increase has primarily been associated with functional roles which support the business such as human resources (HR), finance, information technology (IT), social development, communications, and occupational health (Botha, 2016; Clamp, 2023).

Therefore, the roles that directly partake in the value chain activities are the ones with the greatest paucity of female employees. The value chain roles are those that result in the products produced in mining, that is, ore, metals, coal, and petroleum. These roles are also termed core roles or operational roles in the mining environment. They include plant operators, artisans, engineers, maintenance supervisors, operations supervisors, plant engineers, production superintendents, engineering managers and operations managers. A study by Kaggwa (2020) found that there are more women in cleaning, secretarial, and support positions than in managerial or professional positions. These roles are not core to mining operations. More men get hired in core operations jobs, for example, operators, artisans, engineers, and maintainers, because there is a perception that men have the physical strength to perform these jobs better and faster (Kaggwa, 2020).

The focus of this qualitative research was to explore the challenges that female leaders in core operational roles face, to ascertain how these leaders deal with the challenges, and to determine the type of support they receive in the core roles they exercise at a sand mining company in the KwaZulu-Natal Province, South Africa. The sand mining company produces titanium dioxide slag, rutile, zircon, and pig iron. It is located in Richards Bay and spans an area that is two kilometres wide and 17 kilometres long (Rio Tinto, 2023). The mine uses a dredging mining technique to extract minerals from the sand and has an

upstream beneficiation process that includes a smelter to further process the minerals. In 2021, the company announced a R6.5 billion expansion project which is aimed to extend the life of the mine (Rio Tinto, 2023). The mining company of interest is the highest tax-paying company in KwaZulu-Natal and the biggest mine in KwaZulu-Natal (KZN Top Business, 2023). It employs 2,093 permanent employees, and almost 3,000 contractor employees (Rio Tinto, 2023).

This introductory chapter will start with the background of the study by outlining the general trends and issues concerning female leadership in the mining sector, and women leadership development in South African mines. Thereafter, the chapter will focus on the research problem, the research objectives, the research questions, and the motivation and significance of the study. Lastly, the chapter will present the study delimitations and the structure of the dissertation before concluding with a summary.

## **1.2 Background of the study**

### **1.2.1 Trends and key issues of female leadership in the mining sector**

Women comprise 8% to 17% of the mining workforce globally and in the C-suite or chief executive level, women comprise 13% (Ellix, Farmer, Kowalik, Little, Moonsamy, Mussacaleca, Ruban, and Zapata, 2021). The number of women in mining in South Africa has increased from 2% in 2008 to 18% in 2018 (MCSA, 2019). More women are now choosing careers in mining, and the mining industry has embarked on initiatives to achieve this increase (Collins, 2024). According to Collins (2024), the mining industry has realised the value of having a diverse workforce, which accounts for the increase in women being recruited into the industry. Profit margins of mining companies with women as members of the board are higher (Collins, 2024). This is corroborated by the World Bank, which found that an organisation with a gender-diverse leadership achieves a performance increase of 25% compared to other organisations (Perks and Ford, 2024). Women are more empathetic, willing to collaborate, and have different lifestyles and life perspectives compared to men, all of which are beneficial to an organisation (Collins, 2024).

McKinsey and Company conducted a global survey with over 1,000 employees in the mining industry across 52 countries (Ellix et al., 2021). These employees were at the entry-level to C-suite levels. A finding of the survey was that women are attracted to the mining industry due to the high remuneration and the varied types of work that the industry offers (Ellix et al., 2021).

Data analysis conducted by SandP Global of over 2,000 publicly traded mining companies worldwide indicates that, while more females have joined the mining and metals industry, the industry remains male-dominated (Kuykendall and Duquiatan, 2023). In 2023, females comprised 12.1% of C-suite positions, reflecting a growth of 1.6% since 2021. Women also held 14% of executive roles, an increase of 1.7% since 2021, and made up 12.3% of board roles, an increase of 4.3% since 2021 (Kuykendall and Duquiatan, 2023). Regionally, women in Africa and the Middle East account for 30.9% of executive roles, which is more than double that of the global average. The smallest share is in Latin American and Caribbean companies, at 11.2% (Kuykendall and Duquiatan, 2023).

The survey conducted by McKinsey and Company found that the reason women leave the mining industry is the shortage of growth opportunities and career advancement compared to male colleagues (Ellix et al., 2021). The women stated that they were sidelined for technical roles. Women were also found to have less operational experience compared to men and this was attributed to mentorship programmes being geared toward men (Ellix et al., 2021). Due to a lack of mentorship, fewer women advance to leadership roles (Ellix et al., 2021; Perks and Ford, 2024). Therefore, advanced education is less valuable compared to operational experience. With the mining industry being male-dominated, the women who partook in the survey stated that it was difficult for them to make work connections, and they felt they were not part of the “boys’ club”. This negatively influenced their work motivation and made it difficult for them to gain the work experience needed to obtain leadership roles (Ellix et al., 2021).

Another finding was that women leave the mining industry because the investment that they have made in furthering their studies is overlooked, while operational experience is prioritised for promotion to leadership roles (Ellix et al., 2021). Forty-four percent of the

women who participated stated that they do not receive equal promotion opportunities compared to men, and 20% stated that they were not afforded growth opportunities. Additionally, 45% of the female respondents reported experiencing poor sponsorship (Ellix et al., 2021). Sponsorship in this survey was defined as a sponsor who advocates for an employee. The women felt that there were no individuals who spoke on their behalf.

Moonsamy, Mussacaleca, Ruban, and Zapata (2021) state that the mining industry needs to have strategies to attract, retain, and promote women to bridge the gender gap. To attract more females to the industry, it is suggested that mining companies be intentional in hiring women and aim for a workforce that is 50% female. This was also a finding from a study done by Mashaba and Botha (2023), which emphasised that companies should make increasing the female workforce a critical performance indicator. The industry must also attract young women as early as high school to pursue mining-related careers by hosting community or school events and providing educational trips. Once women start working in the industry, there must be strong support systems to ensure their career progression (Moonsamy et al., 2021).

To retain women, mining companies can introduce rotation programmes to keep employees intellectually challenged (Moonsamy et al., 2021). Achieving a diverse workforce also requires companies to be intentional about their hiring practices (Moonsamy et al., 2021). To promote more women, it is suggested that sponsorship programmes pair junior females with senior leaders to ensure that women are advocated for and provided with growth opportunities (Moonsamy et al., 2021).

### **1.2.2 Women's leadership development in the mining sector in South Africa**

The Department of Mineral Resources and Energy (DMRE) has a mandate to ensure that there are programmes and projects for the minerals and energy sector to advance gender equality and the empowerment of women in the mining industry (Marabwa, 2021). The South African government also has the Mineral and Petroleum Resource Development Act (MPRDA), which aims to redress historical socio-economic inequalities, enforce broad-based economic empowerment, and ensure the participation of historically disadvantaged persons in the mining and minerals industry (Marabwa, 2021).

Sibanye-Stillwater, a mining company in South Africa, is actively working to increase diversity, representation, and inclusion. The mining house employs a female project manager to oversee women in mining initiatives, and the company has since seen a 3% increase in its female workforce (Collins, 2024). At Sibanye-Stillwater, a structured recruitment system is used to hire more females. Additionally, more learnerships and bursaries are being awarded to women, individual development plans are compiled to guide female employees, and mentorship programmes are being implemented to ensure that young female employees receive guidance (Collins, 2024). Sibanye-Stillwater has a three-tiered strategy that focuses on diversity, inclusion, and bionic innovation. The company aims to harness emerging technologies and drive innovation to support its workers in their day-to-day tasks. This approach seeks to shatter the stigma of traditional mining work and attract more women to the industry (Collins, 2024).

### **1.3 Problem statement**

In South African mines, women struggle to rise to leadership positions, especially in core roles that involve the production of mining products. The MCSA, in an article published in 2018, argues that women in mining must be afforded the same opportunities as men to rise to leadership positions in the core roles of a mine. Women face the same challenges as their male counterparts, as well as unique challenges that are specific to women. The International Labour Organisation (ILO) had an act from 1935 that prohibited women from working in underground mines: Convention 54 of 1935 (MCSA, 2018). In 1995, the ILO created Convention 176 of Safety and Health in Mines, which addressed the rights of all workers, including women. Mahlasela, Madumo, and Randa (2023) state that opportunities for growth for women in the mining industry are limited and that the mining industry remains male-dominated. Chen and Moons (2015) studied why fewer women compared to men pursue careers in mathematics, technology, and engineering. They found that fewer women enrol in these fields, and those who do are often pushed out due to gender biases. Women experience a sense of not belonging in male-dominated industries and have fewer role models or female mentors (Chen and Moons, 2015). In 1996, South Africa denounced Convention 54 of 1935, allowing women to work in underground mines (MCSA, 2018). It must be noted that before 1996, women were

permitted to work in surface mining, but underground mining was the exception. Even then, there were few women in surface mining. In the gold mining industry, males still dominate the workforce 28 years after women were allowed to work underground (Benshaul-Tolonen, 2024). In South Africa, the first female mining engineering graduate, earned her degree in 1992 (MCSA, 2024). Women are relatively new to some of the aspects of mining work, as they were previously excluded from opportunities. Mine work is labour-intensive, requiring significant physical effort (Heleta, 2016). By nature, these types of jobs often exclude women due to physiological and anatomical differences between males and females (Botha, 2016). In South Africa, the number of females working in mining has increased. According to the MCSA (2019) in 2002 there were 11,400 women in mining in 2002, and this number grew 56,691 by 2019. In total, there were 454,861 workers in mining in 2019, of which 12% were women. A further breakdown of mining statistics for women in management and professional roles in 2019 indicated that 17% of women were in top management, 17% were in senior management, 24% were professionally qualified, and 18% held skilled technical professions (MCSA, 2019).

The South African mining Industry is still far from achieving a gender-balanced workforce and substantial representation of women in leadership positions, mainly within core roles. Given this gap, this qualitative study explored the leadership challenges faced by female leaders in core roles, the ways they deal with these challenges, and the support received in a sand mining company in KwaZulu-Natal, South Africa. The study is valuable as it not only focuses on the nature of challenges and how they are dealt with but also examines the support received by female leaders in a male-dominated environment.

Prevailing types of masculinity in the mining sector can result in women facing unfriendly work settings in companies that are unable or reluctant to support a more varied workforce. Mining companies are infused with masculine ideals and work environments that perpetuate the image of the miner as a man and maintains standards and principles that oppress those who differ from the norm (Heimann and Johansson, 2025). Male dominated industries such as forestry, construction and including mining, are male dominated and this has led to females working in hostile environments (Heimann and Johansson, 2025). Gender discrimination in the mining industry reinforces masculinity in

the industry. Mashaba and Botha (2023) state that jobs in the mining industry for men and women are assigned differently. This reinforces that there are jobs that are reserved for men. In underground mining, supervisors do not take women seriously and are given jobs that are not physically demanding (Kansake, Sakyi-Addo and Dumakor-Dupey, 2021).

Gender obstacles linked to career retention and advancement in the mining industry are also influenced by the perception of the ideal worker in mining as male, resulting in “sticky floors” and “glass ceilings,” meaning women tend to remain in the roles and levels they initially enter, making it less probable for them to rise to senior or management roles within the companies (Baruah and Biskupski-Mujanovic, 2021). Atakhanova and Howie (2022) indicated in their research on employment within Kazakhstan's coal industry, mining, oil extraction, and energy sectors, that there are observable patterns of both horizontal and vertical gender segregation present in these industries. The research shows ongoing vertical discrimination against women, who are primarily found in low-skill, non-core, administrative and jobs with low salaries.

Mkhatshwa and Genc (2022) examined the presence of women in top and executive management roles in a South African mining company. Women on mining boards in the South African mining industry continue to be underrepresented and predominantly include outsiders with little experience in the mining industry. Women in boardrooms typically bring advisory expertise or serve as support specialists, i.e. finance, legal affairs, or the arts, whereas men have specialised industry knowledge and hold the majority of the highest positions on the board. The research also shows that women are perceived to be inferior in terms of skills compared to men, primarily associated with supportive roles, while men are viewed as capable in the essential aspects of production.

#### **1.4 Focus of the study**

Roles that directly contribute to the value chain, that is, result in producing the final mining product, include employees that do manual labour, operate heavy machinery, do artisanal work and perform process control activities. Botha (2016) refers to these roles as core mining positions. Therefore, core mining roles exclude employees who exclusively do office work, which is considered a support function in the mining industry. These roles

include finance, HR, communications, community relations, and IT functions (Hodge, Ericsson, Löf, and Semkowich, 2022).

The focus of this study was on female leaders who manage employees in core mining positions. In the mining company of interest, the operations general managers, operations managers, engineering managers, plant engineers, and production superintendents participated in the study.

### **1.5 Research objectives**

To explore the challenges faced by women in core leadership roles in a sand mining company in KwaZulu-Natal, the specific research objectives were:

1. To identify the leadership challenges that female leaders in core leadership roles face in a mining company in KwaZulu-Natal.
2. To explore how female leaders in core leadership roles deal with the challenges faced in a mining company in KwaZulu-Natal.
3. To examine the support that female leaders in core leadership roles receive in a mining company in KwaZulu-Natal.

### **1.6 Research questions**

Given the above research objectives, the following aligned research questions were posed:

1. What are the leadership challenges that female leaders in core leadership roles face in a mining company in KwaZulu-Natal?
2. How do female leaders in core leadership roles deal with the challenges faced in a mining company in KwaZulu-Natal?
3. What support do female leaders in core leadership roles receive in a mining company in KwaZulu-Natal?

## **1.7 Motivation for the study**

There have been several initiatives to increase the number of women joining the mining industry. However, the number of women remains lower than desired. There are various reasons why there are fewer women in mining and further, there are even fewer women who progress within this industry to reach senior management and executive levels.

The lack of female managers to serve as mentors and role models is cited as one of the reasons why there are fewer female senior managers in the mining industry (Ngcobo, 2019). The lack of role models can also be the reason why women, in general, do not pursue studies that are mining-related (Ngcobo, 2019). The number of women who contribute to the value chain in many mining companies is small, and these roles are the core mining roles (Commission for Employee Equity, 2023). For women to partake in these core mining roles, they need to pursue studies in these fields. Heleta (2016) states that the difference in terms of qualifications between men and women is a contributing factor in curtailing women from ascending to leadership roles. These fields include engineering, artisanship, geology, and environmental sciences.

There are several barriers that women in mining face. Schuster (2018) states that the prescriptive and descriptive stereotypes about women are a frequent topic of discussion and are a philosophy that can explain the gender gap in the selection of leaders. Challenges in balancing family planning and motherly duties, working in a hypermasculine work environment, physically demanding manual labour, sexual harassment, and pay disparity are among some of these challenges. By interviewing women in senior management, knowledge of how to deal with such challenges can be enhanced, and suggestions can emerge on how to improve the industry.

With a lack of role models among female senior leaders in mining, the study aimed to understand leadership in the mining industry. A better understanding of leadership can broaden the knowledge of management in mining. To this end, the leadership styles preferred or emulated by senior female managers in core mining roles were explored. With the sharing of this knowledge, this information will be accessible to other women who aspire to reach management levels in the mining industry.

## **1.8 Significance of the study**

The study focused on female leaders in core mining roles. The participants shared the challenges that they face as leaders at a mining company in KwaZulu-Natal. The information collected from this study will be significant to women, leadership development managers, mine strategic leaders, and executives working in the mining industry.

Women in the mining industry who are currently in core leadership roles and those who want to pursue leadership roles can better understand the current challenges faced by other women in mining and how women deal with these challenges.

Leadership development managers will better understand the challenges that women in mining face and can tailor leadership development initiatives and programmes that are suited to women in the mining industry. Mining executives and mine strategic leaders will have a better understanding of the challenges and how to support women leaders to excel in their core roles.

The study provides recommendations on how to support women in core leadership roles. These recommendations can be applied to the mining company in KwaZulu-Natal and other mining companies.

## **1.9 Delimitations of the study**

This study was delimited in three key ways: First, as there are male and female leaders in core roles at the mining company, this study deliberately focused on women leaders only and excluded men in leadership. This is in line with the interest of the study to understand the challenges faced by women leaders in the mining sector. Second, the study did not focus on all women in leadership positions in the mining company. It exclusively focused on women leaders in core roles, leaving out those in non-core roles at the mine. Lastly, the study was geographically delimited to one mine in KwaZulu-Natal, thus excluding other mines in the province as well as the other eight provinces.

## 1.10 Chapter outline

The study is presented in six chapters. These chapters comprise the introduction, literature review, methodology, results, discussion of the results, and the recommendations and conclusions.

**Chapter 1** introduces the study and provides the background, problem statement, research objectives, research questions, motivation for the study, and its significance, focus, and delimitations. It also provides the structure of the study and a chapter summary.

**Chapter 2** comprises the literature review. It examines the meaning and the multi-dimensional nature of leadership, management, and their key functions. In doing so, the chapter unpacks the differences between leadership and management before clarifying what leadership style is and the different leadership styles. Leadership in the mining industry, female leadership and the workforce in the mining industry, and challenges encountered by women in the mining industry, are discussed in this chapter.

**Chapter 3** explains the methodology used in this qualitative study to pursue the research objectives. The sampling method, sample, data collection, data analysis and research ethics are discussed.

**Chapter 4** presents the themes that depict the findings of the study.

**Chapter 5** discusses the findings of the study presented in the preceding chapter. The chapter discusses the findings in light of the relevant literature and previous studies by others.

**Chapter 6**, the final chapter, concludes the study. It presents a summary of the main findings and the methodology used. Recommendations are made, and the chapter ends with some suggestions for future research.

## 1.11 Summary

Women in the mining industry are underrepresented; there are few role models and female mentors, and the challenges faced by women in mining have encumbered the

progression of women to leadership roles in the industry, especially in the core mining positions. The research objectives were to identify the leadership challenges that female leaders in core leadership roles face, explore how female leaders in core leadership roles deal with the challenges, and examine the support that female leaders in core leadership roles receive in a mining company in KwaZulu-Natal. This chapter was an introduction to the study; it highlighted the background, research problem statement, research objectives and questions, limitations, and the structure of the study.

The following chapter will review the literature pertaining to female leadership in mining.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter aims to review the literature related to the concepts of leadership, leadership style, and female leadership in the mining industry. It examines the challenges that women face in the mining industry, especially in core mining roles. The chapter begins by unpacking the concept of leadership and how it is different from management. Thereafter, the chapter focuses on leadership styles and the nature of female leadership. Lastly, the chapter discusses the challenges encountered by women in the mining industry.

### **2.2 The meaning and multi-dimensional nature of leadership**

A clear understanding of leadership and its multi-faceted nature is key in a study that focuses on female leadership challenges, how challenges are dealt with, and the support received by female leaders in core leadership roles in a mining company in KwaZulu-Natal.

First, it is vital to acknowledge that scholars have defined leadership differently, and there is a lack of definitional consensus. From reviewing the literature, it can be said that there are varied definitions of leadership, and therefore it is not easy to define it precisely. It is thus sensible to broadly understand the key aspects found in the definitions of leadership. For example, By (2021) asserts that leadership is a collective responsibility in achieving goals. Notably, By's (2021) definition of leadership aligns with the definition by Bass (1990). Bass (1990) states that leadership is an interaction among members of a group where a member of the group restructures the situation within the group. In another example, Luedi (2022) indicate that in leadership, there is a followership. Thus, leadership involves the interaction and relationship between a leader and a follower. In a slightly different vein, Dugan (2024) defines leadership as influencing others to do something in a manner that surpasses their expectations to achieve specific goals.

In this regard, the aspect of the intentional and non-coercive influence of others is to achieve or exceed expectations. There are also instances when leadership is defined in terms of the use of power in a leader-follower relationship and context. According to

Guzmán et al. (2020) leadership comprises of four skills which are interpersonal skills, strategic skills, business skills and cognitive skills.

It is clear that leadership is a social process of influencing others to achieve a common goal. A person or individual who practises a process that applies leadership qualities, such as values, beliefs, character, knowledge, skills, ethics, experience, and culture, is a leader. Notably, leaders inspire people, move them to action and change the world. In this way, leaders can impact the thoughts, feelings, and actions of others through a social process that is highly complex. Leaders guide and direct people towards a shared vision or objective (Wajdi, 2017). Wajdi (2017) agrees that leadership as a process involves developing a vision for a group and aiming to achieve a common goal for a group through a social process of influence. Fatimah and Syahrani (2022) share the view that a leader manages a strategy to ensure that a vision is achieved.

Second, leadership inspires and motivates people (Rivaldo, 2021). Leaders have followers and create a passion within their followers to achieve a vision and reach desired goals (Bennis and Nanus, 1997). Thus, the second aspect emphasises that leadership is inspiration and motivation for people to do their best. In this way, leaders ignite passion and enthusiasm among their followers. Leaders create a sense of purpose and drive individuals to exceed expectations. Before the COVID-19 pandemic, leaders were selected and promoted largely based on their ability to lead, manage, and evaluate the performance of employees who could carry out a particular set of tasks (Kropp, Cambon, and Clark, 2021). However, the uncertainty and complexity created by the pandemic have emphasised the need for leaders who are poised to be great coaches and teachers in manager-employee relationships where either the manager or, at times, the employee works remotely. Leaders now have less face-to-face interaction with or visibility of what their subordinates are doing on a day-to-day basis and must focus on influencing outputs rather than the processes and inputs used to produce results (Kropp, Cambon, and Clark, 2021). Bennis and Nanus (1997) state that leaders serve others who follow them.

The third aspect underscores the view that leadership is about prioritising the needs of others over personal gain (Luedi, 2022). Leaders focus on serving their team members and the community. They build trust and create a positive impact. This service-oriented

view of leadership emphasises that leadership is about serving others. The fourth aspect of leadership focuses on relationship building. Leadership is about building strong connections with others. One of the key tasks of leaders is to build trust, rapport, and collaboration. Leadership creates a positive and supportive environment where people feel valued and empowered to pursue a common goal. The fifth element of leadership is the nature of the relationship with followers, characterised by empowerment. In this regard, leadership is about delegating power and authority to others. Empowering leadership concerns sharing power between the leader and the followers, which creates autonomy (Cheong, Yammarino, Dionne, Spain, and Tsai, 2019). It generates an increased level of self-reliance, the ability for followers to lead themselves, and psychologically empowers followers (Cheong et al., 2019).

The sixth component of leadership found in the literature is about adaptive change. Leadership is the ability to navigate and respond to change effectively. Leaders are agile and resilient in the face of uncertainty. They embrace challenges and find innovative solutions. Manyuchi, Mbohwa, and Muzenda (2020) argue that the leader's main job is to see that whatever is necessary to meet team needs is taken care of, and a good leader ensures they have contributed to team effectiveness and cohesion in a dynamic environment in the mining sector. Manyuchi et al. (2020) categorised the leader's behaviours into two broad categories, namely, consideration and initiating structure, based on followers' perceptions. First, the aspect of consideration includes fostering effective relationships, which means showing concern for a subordinate in a supportive manner towards others (Manyuchi et al., 2020). Second, the initiating structure involves the leader's actions focused specifically on task accomplishment. This includes setting performance standards, clarifying roles, and holding subordinates accountable. Manyuchi et al. (2020) argue that in a mining context, it is crucial to understand how leadership behaviours that guide an organisation occur and relate to tasks, teams, and individuals.

It is necessary to comprehend female leadership roles, where a person is required to assume leadership responsibilities both formally and informally without any assigned authority. Without being placed in a formal leadership role, leaders are requested to

assume leadership responsibilities by assisting in the direction of a team (Manyuchi et al. 2002). This kind of setup keeps the person's attention on how to affect the behaviour of their team rather than how to use their power (Manyuchi et al. 2020). Teams are becoming more and more important as the mining industry expands to increase quality, efficiency, and positive change (Northouse, 2004). Increased production and efficiency, improved product and service quality, and increased employee dedication and satisfaction are some possible benefits of teams. These advantages do not happen on their own, and effective execution requires several conditions, especially the quality of leadership (Kezar, 2004).

Building consensus around common goals, determining efficient performance strategies, planning team activities, improving member skills and role clarity, fostering cooperation and mutual trust, acquiring necessary resources, and facilitating external coordination are all crucial leadership processes in teams (Manyuchi et al., 2020). For the team to be successful, the task must be well-defined and understood, duties must be assigned, resources must be identified, accountability must be established, and progress must be assessed (Manyuchi et al., 2020). The preservation of the team requires all participants to work together in a coordinated manner, moving in the same direction, with equal opportunities and appreciation for all participants' efforts. To accomplish the intended goals, leadership positions the leader to both participate in the team's daily activities and provide subordinates with clear instructions on how to complete tasks (Manyuchi et al., 2020). If the mining industry is to meet its objectives during the Fourth Industrial Revolution, the leader must ensure that subordinates have a strong task orientation. A strong leader can exert influence over the team even if the relationship between the leader and followers is strained (Manyuchi et al., 2020).

Leadership is thus a multifaceted construct that spans various skills, behaviours, and influences. While there is no single definition, it is evident that effective leaders can inspire, motivate, and guide others towards shared goals. Table 2.1 below presents a variety of definitions of leadership, not only to show the lack of consensus on what leadership is but also to illuminate the areas emphasised by different scholars when it comes to leadership.

Table 2.1: Selected definitions of leadership by various authors from past to present

| <b>Author</b>                                    | <b>Definition of leadership</b>  | <b>Area of emphasis</b>                                   |
|--|--|---|
| Blackmar (1911)                                  | It is the centralisation of effort in one person   | Leader centric, and scope of effort                       |
| Bernard (1927)                                   | It focuses the attention of group members in the desired direction   | Aligning and ensuring commitment to the desired direction |
| Copeland (1947)                                  | It is the art of influencing   | Process of social influence                               |
| Knickerbocker (1948)                             | It consists of the relationship between an individual and a group  | Dyadic relationship                                       |
| Bass (1998)                                      | It is an interaction and leaders are agents of change whose acts affect other people more than people's acts affect them | Relationship of leader and followers                      |
| Woodard, Love and Komives (2020)                 | It is applying the collective efforts of employees to adaptive challenges faced by the organisation                      | Collective efforts and optimisation of resources          |
| Vroom and Jago (2007)                            | It is the potential or capacity to influence others  | Process of social influence of others                     |
| Jung (2013)                                      | It is the alignment of subordinates' activities and their motivational activation for goal attainment                    | Alignment of subordinates and goal achievement            |
| Alkan and Aydogdu (2019)                         | It is a process of challenging, inspiring, and motivating a group of people  | Process of challenging, inspiring and motivating          |
| Ressang-Wildschut, Oldenhof and Leistikow (2023) | It is a behaviour that assesses and aligns an organisation's internal aspects such as                                    | Aligning internal aspects with external realities         |

|             |   |                            |
|-------------|---|----------------------------|
|             | processes, structures and staff,<br>with external realities |                            |
| Haar (2024) | It is the rightful or authorised use of<br>resources        | Authority and resource use |

### 2.3 Understanding management and its key functions

Management is a process whereby the organisation's activities are managed to ensure the organisational goals are met within the desired standards (Nienaber, 2010). According to Frederick Winslow Taylor, the essence of management lies in identifying objectives and executing them in the most optimal and economical way possible (Lauer Schachter, 2010). In line with this, management is a distinct process consisting of four functions, namely, planning, organising, controlling, and problem-solving performed to determine and accomplish the stated objectives using human beings and other resources (Wajdi, 2017).

First, planning involves setting short-term goals and objectives for the team or department. Second, organising entails allocating resources, delegating tasks, and structuring teams. The leader's organising role involves establishing and structuring the organisation based on scientific principles and assigning responsibilities that match individual strengths, to ensure that its various parts work purposefully towards the attainment of organisational objectives (Abgor, 2008). A leader must be able to reconcile the interests of the individual members of the team with those of the organisation. Third, controlling refers to monitoring progress, assessing performance, and implementing corrective actions when necessary. Providing regular updates to higher management on key performance indicators (KPIs) is a key part of controlling (Wajdi, 2017). Fourth, problem-solving addresses issues that arise and ensures minimal disruption to operations. Managers focus on *how* things should be done to achieve efficiency and consistency within the team (Wajdi, 2017). At its core, management involves getting things done through others and with formally organised groups.

Post, Lokshin, and Boone (2022) define management as the effective handling and control of resources to ensure that the desired objectives are achieved. Kotter (2001) defines management as a job involving planning, budgeting, activity coordination, and monitoring for a group or an organisation.

According to Rozanna and Ahadiat (2023), management is the application of strategies for managing resources. Managers provide resources for their employees or ensure their availability and make sure that the resources are used to achieve the best results; managers must also earn the respect of their employees (Wajdi, 2017). Kotter (2001) states that a manager provides service to the organisation sustainably and efficiently, while Kotterman (2006) opines that managers are short-term goal-oriented.

From these definitions, management, for this research, is defined as a process of efficiently using and directing company resources to meet the company's goals that people in management positions coordinate (Wajdi, 2017). In adopting this definition, the study upholds that effective leadership is centred on a vision to guide change while managers set out to achieve organisational goals through implementing processes to achieve the defined change through activities and processes, such as budgeting, organisational structuring, and staffing. More importantly, management involves ensuring that an organisation runs smoothly on a daily basis to meet the objectives and goals specified by the organisation's stakeholders. Leaders, however, set the vision and parameters within which a manager must operate and adhere. A manager focuses on maintaining order, optimising processes, and working within established frameworks to achieve set goals (Wajdi, 2017). Leaders are more intent on thinking ahead and capitalising on opportunities

## **2.4 Unpacking leadership versus management**

Nienaber (2010) argues that management is working with other people to ensure an organisation's goals are articulated and executed effectively and efficiently. In other words, management is the process of working with others to ensure the effective execution of a chosen set of goals while leadership is about developing what the goals should be (Nienaber, 2010).

Wajdi (2017) states that most people assume managers are leaders, which is untrue. Some managers do not practise leadership, and some people are leaders without a management position (Wajdi, 2017). According to Ricketts (2009), it is not automatic that a good leader is a good manager and vice versa. Benmira and Agboola (2021) state that leaders are strategists and visionaries, while managers focus on the short term, controlling performance and monitoring if things are done accordingly. Rozanna and Ahadiat (2023) are explicit that managers aim to achieve order and a well-functioning work environment, while leaders challenge the status quo and encourage people to try new things or change to achieve the vision. In short, leaders look for change and innovation while managers do not like change but rather order and the status quo. Tukur, Snyman, Postma, Van der Berg-Cloete, and Evelyn (2021) agree that the manager focuses on systems and structures to administer and maintain the status quo, while the leader focuses on people to innovate and develop people and things.

Leaders are less focused on organising people to get work done and more on finding ways to align and influence them (Benmira and Agboola, 2021). The key function of a leadership position is to mobilise others to execute individual and collective tasks (Tukur et al., 2021). Organisations need good leaders and managers to attain desired goals effectively. Therefore, managers are more focused on the structure and work-related processes, while leaders direct people towards a vision and goals. Managers are intentional, authoritative, rational, analytical, and stabilising while leaders are flexible, creative, motivating, courageous, and inspiring (Wajdi, 2017). According to Wajdi's (2017) experience, leaders bring about changes and managers enforce the changes. The work of leaders and managers in an organisation is complementary. Drawing from the above discussion, Table 2.2 summarises the key elements that distinguish leadership from management.

Table 2.2: Summary of key focus areas distinguishing managers from leaders

| <b>Aspect</b>   | <b>Manager's focus</b>                  | <b>Leader's focus</b>                        |
|-----------------|---|--|
| Mechanism       | Formal, positional power                | Social, non-coercive influence               |
| Approach        | Execution, processes, and consistency   | Vision, innovation, and transformation       |
| Decision-making | Risk-averse, follows protocols          | Risk-taking, embraces change                 |
| Team dynamics   | Assigns tasks, enforces rules           | Inspires, mentors, and empowers              |
| Goals           | Short-term performance and efficiency   | Long-term growth and development             |
| Communication   | Provides instructions and feedback      | Engages in open dialogue, seeks input        |
| Focus           | Maintains the status quo, achieves KPIs | Challenges the status quo, drives innovation |

Source: Own

Table 2.2 is clear that it is not only the mechanism of power and position used by managers to get results through others, but leaders use social, non-coercive influence to achieve common goals. It is equally interesting to highlight that managers are typified as risk-averse and focus on following protocols, while leaders are tolerant of risk and encourage change to achieve their vision. Notably, the key difference between the two, namely, the managerial and leadership approaches to reaching goals, is insightful in

understanding the nature of leadership. Leaders convey their vision and inspire and motivate others to follow them. Managers use formal and positional power to reach their goals, with great emphasis on meeting KPIs and maintaining the status quo. Griffin (2023) asserts that leaders in the mining sector in South Africa have to think beyond the usual ways of doing things and find new solutions to tricky problems (for example, social and environmental degradation). In numerous mining companies, leaders demonstrate skill in handling operational changes, yet frequently struggle with self-management and their interactions with superiors, subordinates, and external stakeholders (Griffin, 2023). Certain leaders in South Africa's mining industry face difficulties in effectively managing essential business processes. The traditional demand-and-control leadership approach is becoming less effective, leading to increased anxiety among leaders aware of their restricted impact on business results. Leaders in mining organisations must collaborate with various groups, drive significant changes, and make informed decisions while taking calculated risks (Griffin, 2023). Leaders in the mining industry are facing challenges in uncertain situations, where excelling and outperforming competitors is more crucial than ever.

For this study, leadership is defined as the act of challenging current conditions and practices to ensure that the future vision of an organisation is realised by motivating and influencing others. With the mining industry being conscious of the importance of having a diverse workforce and aiming to increase the number of women working in the industry, it will take leaders who are willing to change current practices and capable of influencing others to embrace women joining the mining industry and innovate to make heavy work in the industry easier. Hence, this study's adopted definition of leadership was suitable.

Griffin (2023) categorises leadership competencies into three core areas: *lead self*, which involves managing emotions, responding effectively in challenging situations, demonstrating resilience amid change, building relationships, and making informed decisions based on sound information, all while navigating high-stress situations endemic to the mining industry; *lead others*, which includes cultivating interpersonal sensitivity, building collaborative relationships, mobilising and developing teams, communicating with impact, and fostering sustainable customer relationships in the mining sector; and

*lead business*, which focuses on achieving outcomes regardless of conditions, making informed choices, leading transformation efforts, and shaping a future characterised by growth and creativity within the competitive mining environment.

While it is clear that the development of appropriate leadership skills is essential to ensure that leaders can meet their current and future responsibilities in the South African mining context, there is also a need to explore the challenges faced by female leadership and the support mechanisms needed to enable their growth into core leadership roles across all levels, from team leaders to executives. Organisations must promote a culture of high performance and continuous improvement (Griffin, 2023). Capable leaders represent the actual competitive edge for mining companies and understanding the leadership styles required in a variety of contexts is vital for advancing female leadership.

## **2.5 What is leadership style?**

Leadership style is a consistent pattern of behaviour demonstrated by a leader (Daft, 2018). It refers to the way an individual or group of leaders interacts with their team, makes decisions, and influences others in an organisation. A leadership style describes a leader's method of directing, mentoring, and motivating those who follow them. It influences the way leaders engage with their followers, make choices, and develop connections. Grasping leadership style is essential for building trust, gaining loyalty, and optimising a leader's influence on their organisation or team. Different leadership styles are suitable for different contexts.

The style of leadership determines the productivity and performance of employees. A leader is a person who influences followers, guiding them to achieve a desired outcome (Nanjundeswaraswamy and Swamy, 2014). The four factors that affect leadership styles are the team being led, the leader, the situation, and communication. Effective leaders focus not only on results but also on developing a positive and supportive team dynamic.

First, the team being led refers to the team directly under a leader's guidance. Each team member plays a role in achieving shared goals, but their diversity means they may respond differently to the same leadership approach. To lead effectively, leaders must

understand their team members on an individual level, including their characteristics and personality traits, motivators and driving forces, strengths, weaknesses, and areas for growth. A leader needs to tailor a leadership approach to these nuances, to maximise each team member's potential and inspire them to perform their best. Second, the leader's personality and self-awareness play a significant role in shaping their leadership style. Leaders must have a clear understanding of their strengths and weaknesses, emotional triggers and tendencies, and communication habits. Great leaders embrace feedback as an opportunity to enhance their effectiveness and adapt to the needs of their teams. Third, the situation is crucial, as no single leadership style fits every situation. Leaders must adapt their approach to each scenario's unique demands. If a chosen leadership style does not yield the desired results, a skilled leader should reassess and adjust their strategy rather than stick rigidly to an ineffective approach. Lastly, effective communication is the cornerstone of successful leadership. It ensures that leaders and their teams exchange ideas, expectations, and feedback. Critical elements of effective communication include clarity of the message and constructive feedback. Open communication builds trust and transparency, empowering teams to excel. When delivered constructively, even critical feedback can boost morale and drive improvement. A leader's communication style should align with their leadership approach to create a harmonious and motivated team.

## **2.6 Different types of leadership styles**

As this study is about female leadership in a mining context, it is important to understand the leadership styles as reflected in existing literature. According to Vinberg et al. (2023), there are six leadership styles: charismatic, team-oriented, participative, human-oriented, autocratic, laissez-faire, transactional, transformational, and situational leadership style.

### **2.6.1 Charismatic leadership style**

According to Daft (2018), charismatic leaders show great passion for their jobs, and they have personalities that leave an emotional impact on people. This type of leadership style inspires employees to do more despite the challenges and personal sacrifices that they must make. Charismatic leaders are attractive to their followers due to their extraordinary personality. They have a vision that challenges current situations, use emotive language,

show risk acceptance, genuine care, and confidence, and are energetic (Muenjohn, McMurray, Fernando, Hunt, Fitzgerald, Mckenna, Intezari, and Bankins 2018). These are the elements that make them attractive. Charismatic leaders show their emotions, which can be an advantage and a disadvantage depending on the situation (Muenjohn et al., 2018). A disadvantage of this leadership style is that it can be viewed as a form of manipulation. It also makes followers less likely to use their logic and rationale when ideas are imposed on them, which can have a negative impact on an organisation (Shonk, 2024).

### **2.6.2 Team-oriented leadership style**

Team-oriented leadership is a style of leadership that applies motivational behaviours to motivate employees to work together to achieve results (Chang, Bai, and Li 2015). The employees are directly inspired to work together. Leaders who use this style inspire pride and loyalty among team members (Mensah and Qi, 2016). The advantage of this leadership style is that it fosters creativity by taking advantage of diverse views from team members. The disadvantage arises when there is conflict in a group, as work will be delayed and tasks take longer to complete (Ayuni, Kusumawati, and Wasitowati, 2023).

### **2.6.3 Participative style**

Participative leadership is also called democratic leadership (Akpoviroro, Kadiri, and Owotutu, 2018). This style is defined as a process of joint decision-making and shared influence in making decisions by the leader and their followers (Puni, Ofei, and Okoe, 2014). In this leadership style, all members are involved in decision-making. Members contribute to the development of strategies, procedures, and the identification of goals that must be achieved (Akpoviroro, Kadiri, and Owotutu, 2018). The qualities of a leader who uses this style include the ability to delegate duties, sound decision-making, and effective consultative behaviour. In participative leadership, the final decision is made by the leader (Akpoviroro, Kadiri, and Owotutu, 2018). The advantage of the style is that the leader cultivates employees who are committed to their jobs with less need for the leader to use formal authority, discipline, and pressure. This is because the employees are part of the decision-making process and implementation. As a result, the employees' morale and productivity are raised (Akpoviroro, Kadiri, and Owotutu, 2018). There is no need for

the use of detailed control systems for checking work progress. The disadvantages of the style are that it leads to slow decision-making, is ineffective in crises, lacks accountability, and can result in resentment among the team if an unfavourable decision towards some members is made (Akpoviroro, Kadiri, and Owotutu, 2018).

#### **2.6.4 Human-oriented style**

Leanard (2018) and Wu (2017) define human-oriented leadership as a supportive and participative network that leaders and followers form to perform daily job operations and ensure that the organisation's goals and strategy are achieved. Lythreatis, Sayed, and Wang (2017) state that the human-oriented leadership style is made up of two influential styles, namely, the supportive style and the participative style. The human-oriented style relies on the leader's behaviour, which is inspired by the people following him or her. It is not driven by the need for power or goal attainment (Leanard, 2018; Oh, Cho, and Lim, 2018). Salman (2024) states that human-oriented leadership is the same as people-oriented leadership. People-oriented leadership focuses on employees. This style fosters a positive work environment where employees feel appreciated. Leaders who use this style have good communication skills and can quickly form relationships (Salman, 2024). The advantages of this style are a positive work environment, trust, and loyalty among employees. Additionally, it stimulates creativity and innovation in employees (Salman, 2024). The disadvantages of this style include difficulty in making tough decisions, a perception that the leader is weak, and the potential for groupthink among the employees (Salman, 2024).

#### **2.6.5 Autocratic leadership**

The autocratic leadership style is characterised by a leader who makes all the decisions and instructs employees on what to do (Chukwusa, 2018). The decision-making process is conducted with little or no consultation with the employees. This leadership approach is imposed and is also called coercive leadership (Chukwusa, 2018). The autocratic leader makes decisions based on their own thoughts and judgements, giving authoritarian control over the staff. Due to this, the disadvantage of this style is that creativity and innovation are stifled as employees cannot share their viewpoints. This leads to staff who are not motivated, not committed, and resistant to achieving the goals that need to be

accomplished (Chukwusa, 2018). The advantage of the style is evident in situations of crisis or a challenging work environment (Chukwusa, 2018). In a crisis, decisions need to be made quickly as there is often insufficient time to consult and ruminate on ideas. When the work is challenging, it is beneficial for employees on the shop floor to focus on their tasks and not have to worry about making decisions. The decisions can be left to the leader, giving workers more time to fulfil their duties (Chukwusa, 2018).

### **2.6.6 Laissez-faire leadership**

A laissez-faire leadership style applies minimal supervision (Hundie and Habtewold, 2024). The leader who utilises this style has minimal reliance on leadership skills, minimal interaction with their team, and sets no goals for the team (Hundie and Habtewold, 2024). This style of leadership can be applied if the leader has followers who are independent and highly competent (Hundie and Habtewold, 2024). This style works if most of the decisions are under the control of the followers. According to James (2023), the advantage of this style is that creativity flourishes within a team and employees feel empowered. The disadvantage is that it can lead to confusion within a team if there are instances where direction from a leader is needed, and no direction is given by the leader.

### **2.6.7 Transactional leadership style**

The interactive relationship between leaders and followers marks the transactional leadership style (Khoshnaw and Karadaş, 2024). The relationship is based on set tasks and objectives, with a reward system when the tasks are completed; these are contingent rewards (Khoshnaw and Karadaş, 2024). Punishment is used in this relationship if the tasks are not completed or if there is misbehaviour in the workplace (Khoshnaw and Karadaş, 2024). Leaders who practise this style act with urgency, communicate expectations clearly with a direct communication style, and are usually opposed to change (Meredith, 2021). The advantage of this style is that it provides a clear work structure with objectives for a large organisation, achieves short-term goals quickly, and rewards and penalties are clearly defined for workers (Meredith, 2021). The disadvantages include personal initiatives not being rewarded, creativity being stifled, and rewards being usually practical, for example, money or gifts (Meredith, 2021).

### **2.6.8 Transformational leadership style**

Transformational leadership aims to change or challenge the subordinates' motives and values to achieve better performance through their development and growth (Daft, 2018). Nanjundeswaraswamy and Swamy (2014) argued that a transformational leadership style leads to greater job satisfaction for leaders. These leaders tend to foster a competitive and innovative work environment. This was concurred by Voon, Ngui, and Ayob (2011) who examined salaries, job security, job autonomy, and workplace flexibility of employees and found that transformational leadership yielded satisfied employees. According to Bass (1990), five factors are related to transformational leadership. These are charisma, individual attention, contingent reward, intellectual stimulation, and management by expectation. The charismatic element is the one that resonates with workers and inspires them, especially in times of volatility and uncertainty. In contrast to transactional leadership, which emphasises the clarification and execution of tasks, transformational leadership aims to inspire and motivate followers to achieve these tasks. This can lead to followers going beyond self-interest and aligning with the organisation's strategic goals.

### **2.6.9 Situational leadership style**

A leadership style that is also popular, especially in management training programmes, is situational leadership (Thompson and Vecchio, 2009). Benmira and Agboola (2021) state that situational leadership requires the leader to be able to assess the environment and the context, and from this assessment, they must use a leadership style that suits the situation. Situational leadership has been criticised for a lack of empirical support and is usually not extensively discussed in management textbooks; however, situational leadership theory remains relevant (Thompson and Vecchio, 2009). Situational leadership was proposed by Hersey and Blanchard (1972); they stated that based on the level of maturity of the subordinate, a certain style of supervision must be applied. The theory stipulates four combinations of leadership style and subordinate maturity level (Hersey and Blanchard, 1972). The first is the subordinate with a very low maturity level which requires a telling supervision style. The second is the subordinate with a moderately low maturity level requiring a selling supervision style. The third is the subordinate with a

moderately high maturity level requiring a participating style of supervision. The fourth is the subordinate with a very high maturity level requiring a delegating supervision style.

The advantages of situational leadership include flexibility, improved communication as each situation is unique and the leader and followers need to engage, efficient use of resources through prioritising, and better decision-making (Salama, 2024). The disadvantages are complexity, as different situations require a different understanding, it can be time-consuming, the style can be experienced as inconsistent by followers, and there are chances of misinterpretation (Salama, 2024).

## **2.7 Leadership in the mining industry**

According to the MCSA (2018), in the South African mining industry, women comprise 16% of top management, 17% of senior management, and 18% of skilled technical professionals. At the mining company of interest, of the employees in management positions, 26% are women (Rio Tinto, 2023). According to Kaggwa (2020), women occupy only 5% of all the management roles in the South African mining industry.

Core mining positions include mining, engineering, geology, and metallurgy (Harmony Gold Mining Company, 2008). Career progression can be defined as the advancement, either vertically or horizontally, of an individual inside or outside the organisation (Faugoo, 2011). The career progression of women in the mining industry has been encumbered by male dominance, sexual harassment, childbearing, and childrearing (Woolnough and Redshaw, 2016; Williams, Muller, and Kilanski, 2012). Many women in the workforce do their paying jobs and then start a “second shift” of childcare and housework when they get home. Hochschild (1989) states that the “second shift” has encumbered the career progression of many women. While there has been an increase in women entering the mining industry, fewer women advance to reach leadership roles (Moalusi and Jones, 2019).

According to Vinberg, Lööv, Jakobsson, Molnar, and Larsson (2023), most mines face challenges related to safety and working conditions for their employees. They emphasise that the health and leadership behaviour of mine managers are crucial in ensuring that subordinates are well-supported to work in tough working environments. Vinberg et al.

(2023) also note that there is a paucity of studies on leadership behaviour in the mining industry, with more research focused on safety and injury prevention. The underrepresentation of women in the mining industry contributes to the lack of documentation regarding female leadership in the sector.

Both Bezuidenhout and Schultz (2013), and Vinberg et al. (2023) state that organisational culture is highly linked to leadership within the organisation. It was found that organisational culture is mainly imparted by a transformational leadership style (Bezuidenhout and Schultz, 2013). Piwowar-Sule and Iqbal (2023) state that a transformational leadership style leads to the sustainable development of the workforce. Bezuidenhout and Schultz (2013) found that a transformational leadership style was most suitable for employee engagement in a leading gold mine in the North West Province. The mining industry in South Africa is plagued by industrial actions, and community unrest, and must still remain competitive in the global market. The events that led to 34 fatal incidents of mineworkers in the North West Province in August 2012 are examples of failed leadership in the mining industry, according to Ramphele (2012). A transformational leader possesses charisma and effectiveness, which are essential in leading and inspiring people in times of organisational change and uncertainty (Hughes 2010).

## **2.8 Female leadership and workforce in the mining industry**

Women's leadership is usually understood in relation to men. This comparison gives a message that women are always seen to be subordinate to men (Pullen and Vachhani, 2020). The social background of a leader influences their leadership style. Victor and Soutar (2005) studied how the leader's environment, family, clan, and tribe influence their leadership. They found that the leader's background correlates with their business ethics, which contribute to the organisational life and have a positive influence on the members of the organisation. Female leaders have a higher ethical standard compared to male leaders (Shonk, 2020). Therefore, women are less likely to allow unethical behaviour at work. Men have "soft" ethical standards and usually apply ethical standards only if they favour them (Ciulla, 2020).

Ngcobo (2019) states that women have generic qualities that are important for organisational leadership. These qualities include gentleness, empathy, tolerance, sensitivity, affection, and sweetness. Perhaps what is stated by Ngcobo can be seen as a stereotype. Schuster (2018) states that the prescriptive and descriptive stereotypes about women are a frequent topic of discussion and are a philosophy that can explain the gender gap in the selection of leaders.

Alimo-Metcalfe (2010) conducted research comparing the leadership of women and men and found that women use transformational and interactive leadership styles. Women are more focused on motivating others and have less self-interest compared to men. They encourage everyone to participate and they also care about the well-being of their employees, believing that people work best when they are feeling good (Alimo-Metcalfe, 2010). Eagly and Karau (2020) also suggest that women's leadership style encourages the participation of people and is more cooperative compared to men, which is more controlling and commanding.

For this study, female leadership is defined as leadership exercised by a woman who encourages followers to be interactive and prioritises their well-being. This definition is suitable as the mining industry is perceived as a masculine workplace. According to Benya (2009), there were very few women employed in core mining roles and even fewer in core leadership roles. This makes this study important in furthering the understanding of females in core mining leadership roles. The leadership styles exhibited by women in management positions can also influence their career progression.

Maseko (2011) sought to determine which leadership style was demonstrated by female project managers in South Africa's energy producer, Eskom. Maseko (2011) found that the project managers exhibited people-oriented, democratic, and transformational leadership styles. As alluded to above, leadership styles can be a contributing factor in the career progression of individuals.

Novotney (2023:1) asserts that "when more women are empowered to lead, everyone benefits" as female leaders boost productivity, promote teamwork, motivate organisational commitment, and enhance equity. Many women face bias not only because of their gender, but also due to their race, sexual orientation, disability, or other

facets of their identity. The inherent inclination of female leaders to motivate and cultivate connections serves as a basis for generating significant change and meaningful outcomes.

Novotney (2023) identifies a series of steps mining organisations and individuals can take to help close the leadership gender gap. First, it is important that organisations, line managers, and leadership development practitioners identify potential leaders early. This involves allowing prospective leadership candidates to gain extensive feedback early in their careers through assignments, mentoring, and coaching, which helps them build their networks and showcase their capacity to handle more extensive responsibilities. Second, organisations should create mentorship initiatives that additionally emphasise sponsorship. The advantages of effective mentoring programmes encompass increased career success for individuals as well as enhanced employee engagement, retention, and knowledge-sharing for organisations. Sponsors extend their influence beyond mentoring by actively promoting the career growth of a junior employee. Sponsorship is more successful in facilitating advancement into leadership roles compared to mentorship because sponsors advocate for individuals in their absence. Third, assist women in becoming part of women-led professional organisations. Women enhance their leadership skills by participating in women's professional organisations. Women-led organisations enable members to develop their leadership skills, connect with other women, collaborate with and learn from women leaders, and gain encouragement from peers to pursue leadership positions. Fourth, it is essential to prioritise allyship. Men also play a crucial role in increasing the number of women in leadership positions. Male leaders who receive training on being allies are significantly more inclined to address instances of gender inequality compared to those who lack such training. Allies leverage their advantages and membership within their group to assist and champion individuals from a different, historically marginalised identity group.

Measham and Zhang (2019) state that the reason women do not pursue careers in the mining industry is due to the environmental impact of the industry. They argue that women generally have more morals than men and are not comfortable with impacting the environment negatively. Also, there are still cultures around the world that deem women

to be child-bearers and homemakers and, therefore, they should not participate in economic activities. In some gold mining companies in Ghana, women are not allowed to enter the gold mining pits when they are in their menstrual cycle as it is believed that the gods will withdraw the gold when an “unclean” person enters the pit (Kansake et al., 2021). As a result, women tend not to be hired in gold mines in that country (Kansake et al., 2021). In large-scale mining around the world, women comprise 10% of the workforce (Rickard et al., 2017).

According to the Royal Academy of Engineering (2016), the USA had 20% female engineering graduates, Japan had 12.5%, and Switzerland had 14%. Around the world, there is still a gender gap in STEM (science, technology, engineering, and maths) fields, especially engineering. There are still stereotypes in society that STEM fields are masculine; in addition, there are fewer female role models in these fields. Maths anxiety is cited as a reason why some women do not pursue the STEM fields (Kansake, Sakyi-Addo, and Dumakor-Dupey, 2021). In most parts of the world, males dominate the mining industry. Kansake, Sakyi-Addo, and Dumakor-Dupey (2021) state that in the USA, 13% of the mining workforce is made up of women. College programmes related to mining careers enrol only 16% of women in the USA. In managerial positions globally, women account for 8% of board seats in the top 100 mining companies (Kansake et al., 2021).

The distribution of roles held by females in the South African mining industry, based on research by Kaggwa (2020), is 1% engineers, 3% learners, 5% managers, 7% technicians, 9% professionals, 9% administrators, 27% operators, and 39% general workers. In the past, women were not afforded the same educational opportunities. Holeta (2016) states that the difference in terms of qualifications between men and women is a contributing factor in curtailing women’s progression to leadership roles.

## **2.9 Challenges encountered by women in the mining industry**

According to Botha (2016) and Kansake et al. (2021), there is insufficient research to better understand the challenges that women encounter in the mining industry. Furthermore, there is not enough data to give accurate statistics on the state of gender diversity in the industry. The challenges discussed below are pertinent and frequently highlighted in the literature.

### **2.9.1 Balancing work and family duties**

Women revealed during coaching sessions (as part of a mentorship programme) that it is challenging to balance work on the one hand and motherhood and wifely duties on the other (Ngcobo, 2019). Being housemakers, the time for women to pursue further studies is not available. Men, meanwhile, can focus on their continuous training. In their research on South African open-cast mines, Moalusi and Jones (2019) found that the long, awkward, and unpredictable hours worked at the mines affected the home and family caretaking roles of women. Due to plant breakdowns, standby duties, and long meetings, the hours are counterproductive to childrearing and some women have postponed marriage and pregnancy to be able to be competitive within the industry (Moalusi and Jones, 2019).

Women are still seen as subservient to men. According to Wright (2014), in male-dominated industries, men can work longer hours and have flexible work patterns compared to women. Women prefer family-friendly workplaces and traditionally stay away from male-dominated industries. This is in line with the social construct and gender stereotypes that women are homemakers.

### **2.9.2 Discrimination**

Kansake, Sakyi-Addo, and Dumakor-Dupey (2021) conducted a survey of women in various countries, including the USA, Ghana, and Ireland, to understand why there is low participation of women in the mining industry. The study used a combination of open and closed-ended questions. The majority of the participants were from Africa and were under the age of 40 years. The challenges that were highlighted by the women included salary disparity between men and women, gender-based discrimination, sexism, and sexual harassment. The women also indicated that there was no clear path for development within their companies. Fifty-three percent of the women in the study indicated that they had experienced discrimination based on gender, 37% had been sexually harassed, and 17% had been subject to sexual requests from hiring managers. The women also indicated that they experienced victimisation when they reported the harassment incidents. Botha (2016) states that one of the challenges of female mine workers in operational roles is sexual harassment. Sexual harassment is in the form of name-calling,

whistling, derogatory language, physical contact, display of body parts and, in some instances, sexual assault and rape.

Kaggwa (2020) conducted a survey involving 2,365 women working in the South African mining industry. Ageism in the workplace was noted in the survey in that companies favoured training young women over older women (Kaggwa, 2020). Racism was also noted, with white women being preferred for training and having higher salaries. The women also stated that they were overlooked when it came to decision-making. Their voices were ignored while the opinions of male colleagues were acknowledged. Domestic responsibilities of women are also a challenge that women in mining face.

### **2.9.3 Physical labour**

The mining industry is generally labour-intensive and involves activities and manual operations that require physical strength. These activities are part of the value chain. According to Johnson, Whittington, Regnér, Angwin, Johnson, and Scholes (2020), the value chain is all the activities within an organisation that create a product or service. In the mining industry, these are the core activities that result in the extraction of minerals or the beneficiation of the minerals. Botha and Cronje (2015) state that women are primarily hired in administrative positions and not in operational activities. It has only been in recent years that there has been an increase in the number of women in core mining operations, such as blasting and drilling.

Kaggwa's (2020) survey revealed that there are more women in cleaning, secretarial, and support positions than in managerial or professional positions. These roles are not core to the mining operations. More men get hired in core operations jobs, for example, operators, artisans, engineers, and maintainers, because there is the perception that men have the physical strength to do these jobs better and faster (Kaggwa, 2020). The women in core operations who partook in the survey operated crushers and winch machines. They stated that when they got underground, their male colleagues took over these roles and they only assisted them. They stated that their direct supervisors were aware of this fact. The women said that due to the heaviness of the equipment used, they found it difficult to operate the equipment and the machines (Kaggwa, 2020).

#### **2.9.4 Career progression**

The main challenges expressed by the women in Kaggwa's (2020) survey were the lack of career progression, decision-making discrimination, and salary disparity. The women stated that this was due to their direct supervisors and the company policies.

The lack of career progression can be attributed to the lack of mentors for women in the mining industry as well as supervisors being unsupportive of women (Botha and Cronje, 2014). There is also the perception that women are incapable of performing the same tasks as men (Botha, 2016). The working hours of a woman working in the mining industry are not conducive to motherhood and marital duties. Women have had to sacrifice some aspects of their careers to ensure that they build healthy homes (Botha, 2016).

Moalusi and Jones (2019) investigated the experiences of women in core mining positions at a South African open-cast mine. The research focus was on the prospects of career progression of these women in the mining company. From the research, the authors recommend that mining companies must provide training to managers that is specifically tailored to make them aware of the barriers to the career advancement of women in mining. In addition, they need to find mechanisms to enhance the performance and achievements of women. They also recommended that the mining industry must have retention strategies to ensure an increase in the number of women in core mining positions.

#### **2.10 Summary**

Chapter 2 explored the literature pertaining to leadership, women leaders, and challenges in mining companies in terms of women leaders. The focus was on management, leadership, leadership styles, female leadership in the mining industry, the female workforce in the mining industry, and challenges faced by women in mining. The chapter has acknowledged that leadership has no definitional consensus as different scholars define it differently. However, there is clarity on the definition of leadership and female leadership used for this study in a mining context in South Africa.

The following chapter will discuss the methodology that was used to conduct this qualitative research.

## **CHAPTER 3: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter presents the methodology used in this qualitative study. It starts by reiterating the objectives of the study. The chapter then focuses on the research methodology, research design, and methods used, before discussing the target population of the study. Thereafter, it discusses the sample and sampling technique used to select participants, the data collection and data analysis, the research quality, and the ethical considerations. As with previous chapters and those that follow, the chapter ends with a summary.

### **3.2 Objectives of the study**

The objectives of this phenomenological study were to identify the leadership challenges that female leaders in core leadership roles face, explore how female leaders in core leadership roles deal with the challenges, and examine the support that female leaders in core leadership roles receive in a mining company in KwaZulu-Natal, South Africa. By identifying the challenges that these female leaders experience in mining, a better understanding of why few women pursue careers in core roles in the mining industry can be achieved.

### **3.3 Research methodology**

A research methodology is the main principle that directs a study. It establishes the overall strategy for investigating a subject and influences which research method will be employed (Chivanga and Monyai, 2021). A research methodology differs from a research method, as research methods are the instruments utilised by a researcher to collect data (Mitra et al., 2021). In short, research methodology is about how a researcher systematically designs a study to ensure valid and reliable results that address the research aims, objectives, and research questions (Creswell, 2009). More specifically, the methodology is the collection of practical decisions regarding what type of data to collect (for example, qualitative or quantitative data), who to collect it from (the sampling strategy), how to collect it (the data collection method/s), and how to analyse it (the data analysis method/s) (Creswell, 2009).

A qualitative research approach was adopted in this study. Vaismoradi, Turunen, and Bondas (2013) define qualitative research as a means of attaining an in-depth understanding of phenomena based on perceptions of participants through their subjective experience and description of the phenomena. Qualitative research seeks to provide rich and thick descriptions. Thick description enables researchers to comprehensively understand the context and reality of the study. Thick descriptions offer an in-depth and intricate description of a phenomenon, transcending superficial observations to uncover the deeper meanings, motivations, and social interactions involved. Ugwu and Eze Val (2023) define qualitative research as a study of the nature of phenomena through exploring and understanding the phenomena by asking questions of people experiencing the phenomena. Qualitative research involves gathering and analysing non-numerical data (Ugwu and Eze Val, 2023). It aims to comprehend how people perceive their surroundings (Ugwu and Eze Val, 2023).

This study adopted a phenomenological research approach that helps describe an individual's lived experiences (Braun and Clarke, 2013). Phenomenology studies human experiences, particularly how individuals perceive and communicate their lived experiences. At the centre of phenomenology is the analysis of subjective experiences to gain insights into the meanings and significance of phenomena. In this way, phenomenological research seeks to explain the nature of things through how people experience them. In a phenomenological study, only the subjective views of the people who have experienced the phenomena matter. In this case, the views of female leaders in core roles at a mining company in KwaZulu-Natal, South Africa, were key in understanding their lived experiences of challenges faced and support received in the company.

### **3.4 Research design**

Chivanga and Monyai (2021) define research design as a procedure for collecting and analysing data from sources that the researcher has deemed to meet the requirements of the purpose of the research. According to Creswell (2008), the research design should align with the intended results of the study and the type of human interaction required to

get the results. Kumar (2014) defines research design as a study that is carried out to attain answers to the research questions and meet the objectives of the study.

### 3.5 Target population

A target population refers to a group of individuals that meet inclusion criteria or have characteristics that allow them to participate in a study (McGilvray, 2021). The target population for this study was females in core mining leadership roles in the mining company of interest. There are 134 women in leadership roles in the company, varying from junior management to executive level. Of the 134 female leaders, there are only 21 in core mining roles, ranging from middle management level to executive level. Of the 21 females, 13 participated in the study. Table 3.1 below provides a description and profile of the target population.

Table 3.1: Description and profile of females in leadership positions in the mining company of interest

| <b>Position</b>      | <b>African</b> | <b>Coloured</b> | <b>Indian</b> | <b>White</b> |
|----------------------|----------------|-----------------|---------------|--------------|
| Executive management | 4              | 0               | 0             | 0            |
| Senior management    | 10             | 0               | 2             | 2            |
| Middle management    | 26             | 0               | 4             | 5            |
| Junior management    | 51             | 3               | 17            | 10           |
| Total                | 91             | 3               | 23            | 17           |

Source: Rio Tinto (2023: 12)

### 3.6 Sampling method

Alvi (2016) defines a sample as a small number of individuals selected from a target population for research purposes. The selected individuals are referred to as participants. A sample is a portion of a population selected to be representative of the entire population (Acharya, Prakash, Saxena, and Nigam, 2013).

### 3.6.1 Sampling

Sampling is a process whereby a sample is extracted from a population. A sampling method can be either probability sampling or non-probability sampling. Probability sampling is a sampling method whereby all members of a population have a known probability of being selected (Acharya et al., 2013; Alvi, 2016). Probability sampling enables the findings of a study to be generalised (Acharya et al., 2013). It is also called random sampling or representative sampling. Systematic errors in sampling and sampling biases are minimised in this technique (Alvi, 2016). The disadvantage of probability sampling is that it can be time-consuming to apply and can be expensive (Alvi, 2016). Probability sampling can be classified into six techniques; simple random sampling, systematic random sampling, stratified random sampling, cluster sampling, multiphase sampling, and multistage sampling.

In simple random sampling, every member of the population has an equal chance of being selected. Computer-generated random numbers or lottery methods can be used to randomly select participants (Acharya et al., 2013). In systematic sampling, the first participant is randomly selected and the subsequent participants are selected on a periodic process (Acharya et al., 2013). Both simple random and systematic random sampling methods are used for homogenous populations, that is, each member of the population is similar to each other (Alvi, 2016). In stratified random sampling, the population is divided into subgroups or strata, that share similar characteristics (Acharya et al., 2013; Alvi, 2016). This method is used for heterogeneous populations where elements of the population differ in certain aspects (Alvi, 2016). In cluster sampling, the population is divided into clusters and these clusters or groups are homogenous. This method is usually used when the population is grouped into geographical areas (Acharya et al., 2013; Alvi, 2016).

Non-probability sampling is a method where the probability of selecting a participant is not known (Acharya et al., 2013). The selection of subjects is based on the judgement of the researcher. This method is also known as judgement sampling or non-random sampling (Alvi, 2016). The advantage of this method is that it requires minimal effort and is not time-consuming. The disadvantage is that it is prone to systematic errors and

sampling biases, and the findings of the research cannot be generalised. There are seven techniques for non-probability sampling: volunteer sampling, convenience sampling, purposive sampling, quota sampling, snowball sampling, matched sampling, and genealogy-based sampling.

In convenience sampling the researcher selects participants that are easy to find. This method is also called opportunity sampling (Alvi, 2016). In purposive sampling participants are selected in the same manner as convenience sampling, but with a purpose for selecting them. Criteria are used to select the participants (Acharya et al., 2013; Alvi, 2016). In quota sampling, the desired characteristics of the population are represented in the sample. Quota sampling and stratified sampling share the same characteristics. The population is divided into strata and quotas (Alvi, 2016). In snowball sampling, the initial participants are asked to refer other participants to the researcher (Alvi, 2016). This method is also called chain sampling. Match sampling is used in experimental research, where there are two groups and an intervention is done on the one group and the two groups are then compared. Finally, genealogy-based sampling is used when sampling an area. Instead of selecting households, all family members are selected to provide a reasonable representation of the community.

### **3.6.2 Sample description**

According to Alvi (2016), non-probability sampling is suitable for exploratory research that aims to generate new ideas or knowledge. For this study, purposive sampling was used. Female leaders in core roles at the sand mining company of interest were purposefully selected and interviewed at the mining site. All the participants were currently in supervisory or management positions. The female leaders that participated in the study met the following specifications:

- Work in core mining positions or roles.
- Be at middle management, senior management, and executive management level.
- Have subordinates report to them and report to the next level of management.

### **3.6.3 Sample size**

A research sample is a small representation of a target population (Vaismoradi, Turunen and Bondas, 2013). Data saturation determines the sample size in qualitative research (Vaismoradi, Turunen, and Bondas, 2013). Data saturation in qualitative research is when collecting additional data does not yield new or relevant information/insights about the research topic. Data saturation is critical in qualitative research methods, as it indicates the completeness and comprehensiveness of the data collection. Data saturation is achieved when the same themes, ideas, opinions, or patterns are repeatedly observed or expressed by the participants or sources in a qualitative study (Sekaran, 2003). As stated by Creswell and Creswell (2018: 262), data saturation is “when gathering fresh data no longer sparks new insights or reveals new properties.” Creswell and Creswell (2018) state that data saturation is helpful in phenomenology to ensure adequate and varied perspectives of participants are collected so that there is a comprehensive understanding of a phenomenon. For this qualitative study, in the mining company of interest, there were 21 female leaders in core roles that met the criteria of the study. Of the 21 female leaders, 13 participated in the study. Saturation was reached after interviewing 13 female leaders at the mine with the participants giving similar answers to the interview questions. All of the 21 participants could not be interviewed as data saturation was already reached after interviews with 13 and further data collection would not produce any new relevant data. Table 3.2 below provides the details of the 13 female leaders in core roles who participated in the study.

Table 3.2: Females in core mining leadership roles who participated in the study

| <b>Code</b> | <b>Qualification</b>           | <b>Current position</b>                             | <b>Period in the current role</b> | <b>Years in mining</b> |
|-------------|--------------------------------|---|-----------------------------------|------------------------|
| P1          | BSc Chemical Engineering       | Superintendent: mining pond                         | 1 year 3 months                   | 4 years                |
| P2          | BEng Chemical Engineering      | Process safety engineer                             | 2 months                          | 5 years                |
| P3          | BTech Chemical Engineering     | Superintendent: iron injection                      | 1 year                            | 1 year                 |
| P4          | BEng Mechanical Engineering    | Lead: asset management                              | 2 years                           | 12 years               |
| P5          | BSc Chemical Engineering       | Lead: metallurgy mineral separation                 | 2 years                           | 17 years               |
| P6          | BTech Chemical Engineering     | General manager: smelting, processing and logistics | 2 years                           | 18 years               |
| P7          | BEng Metallurgical Engineering | General manager: mining                             | 9 months                          | 16 years               |
| P8          | BSc Chemical Engineering       | Metallurgy specialist                               | 2 years                           | 7 years                |
| P9          | BTech Chemical Engineering     | Superintendent: feed preparation                    | 2 years                           | 6 years                |
| P10         | BSc Extractive Metallurgy      | General manager: in operational services            | 3 years                           | 23 years               |
| P11         | BTech Mechanical Engineering   | Acting manager: RMM services                        | 6 months                          | 8 years                |
| P12         | BTech Geology                  | Superintendent: geological drilling                 | 6 years                           | 9 years                |
| P13         | BTech Electrical Engineering   | Power operations engineer                           | 1 year                            | 13 years               |

### 3.7 Data collection

Data is separated into primary and secondary sources (Sekaran and Bougie, 2010). Primary sources are respondents to a research instrument such as questionnaires and interviews. Secondary sources refer to data that is collected from sources that are already available, including journals, websites, books, and other publications. This study used primary data collected from female leaders at the mine.

### 3.7.1 Interviews

There are three types of interviews: structured, unstructured, and semi-structured. Structured interviews are standardised and consist of closed-ended questions that aid the researcher in easily arranging and analysing the collected information (McGrath, Palmgren, and Liljedahl, 2019; Elhami and Khoshnevisan, 2022). Unstructured interviews are informal, unstructured, and unplanned. The questions are open-ended and not predetermined. The onus is on the researcher to guide the discussion and ensure that the research objectives are met by the questions asked during the interview (Elhami and Khoshnevisan, 2022). Semi-structured interviews are a combination of structured and unstructured interview approaches. Both closed-ended and open-ended predetermined questions are used. However, this form of interview allows for flexibility as the researcher can clarify responses from the participants and ask follow-up questions if needed (Elhami and Khoshnevisan, 2022).

A semi-structured interview was adopted in this study. Gray (2009) states that semi-structured interviews are used to explore issues and to facilitate in-depth interactions that allow the researcher to attain clarifications and meet the research objectives. Appendix 2 depicts the interview guide that was used. The first part comprised demographic questions. This was followed by questions that sought to answer the first research question, namely, What are the leadership challenges that female leaders in core leadership roles face in a mining company in KwaZulu-Natal? The questions here focused on career progression, challenges experienced in the mining industry, gender-based discrimination, and how marriage and children affected their careers. Questions comprising the third part of the guide sought to address the second research question: How do female leaders in core leadership roles deal with the challenges faced in a mining company in KwaZulu-Natal? The questions in this part focused on participants' leadership styles and how they dealt with work challenges. Questions in the final part of the guide sought to answer the third research question: What support do female leaders in core leadership roles receive in a mining company in KwaZulu-Natal? Questions focused on what advice participants would give to women in mining who want to pursue leadership roles, what recommendations they have for the industry to employ more

women, and what initiatives to support women in the mining company of interest they are aware of.

The interviews were conducted online using Microsoft Teams. They took place from 26 August through to 16 September 2024. The average duration of each interview was 40 minutes. The interviews were video recorded and analysed by the interviewer. The participants were approached via the Microsoft Teams chat function as well as telephonically. The informed consent form (Appendix 1) was sent via email to each participant before the interview date. Before the interview took place, the consent form was explained to the participants, which included verbally informing them that anonymity and confidentiality were guaranteed and that they could withdraw from the interview at any point. Each participant signed the informed consent form. Before starting to ask the specified questions, the context of the study and the research objectives were shared with the participants. The interview guide that was used (Appendix 2) was developed to ensure that the research objectives of the study were met and to allow for open engagement with the participants. Further detail concerning the interview as a data collection strategy is provided below.

### **3.7.2 Data collection strategy**

To determine the lived experience of female leaders in core mining roles, a qualitative study was conducted. Qualitative research is inductive, meaning that it is explorative in nature and interviews are used to gather data. An interview is a two-way conversation whereby the interviewer asks an interviewee questions that are relevant to a study (Blumberg, Cooper, and Schindler 2005). An interview guide is used, which is a list of questions that a researcher has compiled to meet the objectives of the study. According to Bouma and Ling (2005), interviews offer the advantage of allowing the interviewer to ask clarifying questions or modify the questions during the interview process. Interviews can be structured or semi-structured. Structured interviews ask the same questions to each participant in the same order (Petrescu, Lazar, Cioban, and Doroftei, 2017). The responses from a structured interview are fixed as participants are usually given a list of choices of answers to choose from (Petrescu et al., 2017). In semi-structured interviews, the participants also usually get the same questions, but the questions are open-ended,

and the interviewer has the opportunity to modify or clarify questions during the interview (Petrescu et al., 2017). For this study, a semi-structured interview was used. This allowed the investigator to clarify some of the questions, skip questions that participants had already answered in their responses to previously asked questions, and allow participants to be candid and elaborative in their responses.

For this study, participants who met the criteria of being female leaders who work in core mining roles were interviewed. An online interview via Microsoft Teams was conducted. An in-depth interview was used, which allowed the researcher to ask clarifying questions. According to Chivanga and Monyai (2021), in-depth interviews allow for a significant amount of information to be gathered for qualitative research and also allow for the observation of non-verbal behaviours.

### **3.7.3 Construction of the instrument**

A research instrument is a tool that a researcher develops and uses for data collection to answer the research questions (Babbie, 2013). The interview guide developed for this qualitative study was based on the literature review conducted. The work of authors such as Botha and Cronje (2016) and Kaggwa (2020) was instrumental in developing the interview guide and its questions. An interview guide is a structured document that helps interviewers conduct effective interviews. It outlines the interview process, including guidelines for questions and topics to discuss with candidates. In the current study, the interview questions aimed to explore the challenges that female leaders in core mining roles experienced, how these leaders dealt with the challenges they faced, and what support was available to female leaders in the mining company of interest. By understanding these challenges, there is hope that the mining industry can address them and, in the future, more women will occupy core leadership roles. As highlighted earlier, the interview guide had a section focusing on demographic information from the participants, while the other parts had questions to address aspects of the three research questions. In short, the research foci were to identify the leadership challenges that female leaders in core leadership roles face, explore how female leaders in core leadership roles deal with the challenges, and examine the support that female leaders in core leadership roles receive in a mining company in KwaZulu-Natal.

### **3.7.4 Pre-testing of the interview guide**

A pilot test of the interview guide was conducted with participants similar to the female leaders who formed the sample of the study. The pilot test took place on 26 August 2024. From the pilot test, some of the questions were reworded while retaining the essence of the questions. For example, question 5 was changed to read: “How long have you worked in this company?” The question was changed to avoid using the name of the mining company. Question 12 was changed to read: “Can you describe how your past supervisors have supported or hampered your career progression as a female leader in mining?” The word “hampered” was used to replace “curtail”. The word “curtail” was changed to avoid the interviewer having to explain what the word means. Question 16, which originally read: “When faced with a challenge, what steps do you follow to address the situation?”, was not changed, but “leadership challenge” was added in parentheses. This was added to remind the interviewer to ensure that participants discussed leadership challenges and not only general challenges. After the modification of questions 5, 12, and 16 of the interview guide, there were no further changes.

### **3.8 Limitations of the research approach**

The first limitation of the research approach that has been adopted in this study is the small sample size. Due to the small size, the research findings cannot be generalised, but only transferable to similar contexts. The second limitation was the use of interview data. The data collected was rich and in-depth from different female leaders that participated in this study. However, to ensure quality, the transcript generated from Microsoft Teams video recording of the interview was cross checked and corrected by the researcher to ensure that the true words of the participants was capture and there were no errors. The participants were also given a chance to check the accuracy of the transcribed data to ensure that it captured their views and choice of words in expressing their lived experiences at the mine. For future research, mixed methods can be used incorporating quantitative data to enhance understanding and provide relatively more generalisable findings.

### **3.9 Analysis of data**

Qualitative data analysis is a process of interpreting non-numeric information through the identification of patterns and themes from feedback provided by participants (Mezmir, 2020). The researcher went over the video recordings and transcripts generated from the Microsoft Teams interviews to determine patterns and themes. In doing so, thematic analysis was applied. Braun and Clarke (2022) state that during qualitative data analysis, the researcher's personal experience and beliefs influence the process. This is termed "reflexivity". To minimise the influence of reflexivity, the researcher made a conscious effort to engage with the data collected from the participants with minimal interference from her beliefs and experience.

The steps of coding to determine themes in the collected data and the thematic analysis followed are detailed below, as discussed by Dawadi (2021):

#### *Step 1: Data familiarisation*

This is a process whereby a researcher becomes familiar with the collected data and engages with the data to identify themes and patterns. The researcher of this study went over the video recordings and the transcripts generated by Microsoft Teams to familiarise herself with the data.

#### *Step 2: Generating codes*

In this step, the data is sorted into common concepts or ideas that stand out. The NVivo software was used by the researcher for coding. The data collected from the participants was imported into the Nvivo qualitative data analysis software. The first result of coding emerged with concepts within the data, and they were labelled. The data was processed again to determine themes and subthemes. A thematic framework was created and used to analyse the entire data set.

#### *Step 3: Developing and refining themes*

At this stage, the researcher critically reviewed the identified themes. The irrelevant themes were eliminated, and the selected themes were refined to ensure that they aligned with the research objectives.

#### *Step 4: Defining and naming themes*

The final step in thematic analysis is the identification and naming of themes. The researcher ensured that each theme named was relevant to the study and that data from the participants supported the named themes.

### **3.10 Data quality**

Four criteria are used to assess the quality of data in qualitative studies: credibility, dependability, transferability, and confirmability (Guba and Lincoln, 1985). These are discussed below, along with how they were achieved by the researcher in this study. Achieving data quality in qualitative studies ensures the reliability and validity of the research.

#### **3.10.1 Credibility**

Credibility refers to truthfulness and accuracy of the information that is gathered by the researcher. Credibility asks: “How congruent are the findings with reality?” Credibility ensures that research findings are plausible and trustworthy. Member check was used to allow participants to check the transcribed data for its accuracy in capturing their views. The study has also used direct quotes to accurately report the views of participants. An audit trail with a detailed description of the research process is provided to ensure the credibility of the study (Shufutinsky, 2020).

#### **3.10.2 Transferability**

Transferability refers to the extent to which the research findings are similar to those of other studies and how applicable the findings are to settings and situations comparable to the population of the study (Nassaji, 2020). Transferability pertains to the degree to which the research findings can be extrapolated to alternative contexts or situations. Transferability is achieved when the reader seeks to transfer the interpretation of the findings from one context to another similar context. Such applications depend on the researcher’s detailed descriptions, which include contextual information regarding the fieldwork location, the sampling techniques employed, and the criteria for participant selection. These details help readers assess whether the results could be relevant or

applicable to comparable populations or environments beyond the scope of the study. To achieve this, the researcher must provide the reader with enough information regarding the participants and the study environment, enabling them to assess the relevance of the results (Cope, 2014). To ensure the transferability of findings in this study, the researcher has provided comprehensive details about the context, the description, and the selection of the participants from the mining company, the type and level of research participants, the methodology, the timeframes of data collection, and rich results to allow readers to gauge whether and how the findings can be transferred to another relevant context within the mining industry.

### **3.10.3 Dependability**

Dependability refers to the extent to which the research findings and data collected can be used by other researchers to reach similar conclusions (Nassaji, 2020). To achieve this, the researcher ensured that detailed information was provided on how the data was collected, how it was analysed, and how the data was aligned with the objectives of the research. To ensure reliability, researchers meticulously record their methods, strategies for collecting data, and processes for analysis. Establishing and maintaining an audit trail, which includes a detailed record of the decisions taken during the research process, enables other researchers to replicate the study, thus ensuring the reliability of the findings. This study has provided a sufficiently detailed audit trail for another researcher to repeat it.

### **3.10.4 Confirmability**

According to Nassaji (2020), confirmability in qualitative research refers to communicating the research data and findings well enough for others to be able to ascertain the accuracy of the results. Confirmability demonstrates that the research results are not influenced by the researcher's biases. To achieve this, the researcher provided the steps of thematic analysis used. The steps followed to analyse the data and to align the data to research objectives were outlined. The researcher's predispositions and reflexivity were consciously minimised by her to ensure that the truthful perspectives of the participants were presented. The researcher included actual quotes from participants under the themes identified and maintained an audit log to ensure that the research findings could

be independently verified. A member check was also used, in that participants were allowed to check the transcript and verify that it was a true reflection of their views collected during the interviews.

### **3.11 Ethical considerations**

Ethical protocols were implemented during the collection of data from the participants. The ethical clearance protocol stipulated by the University of KwaZulu-Natal (UKZN) was followed. The gatekeeper's letter from the mine of interest was obtained (Appendix 3), and the ethical approval to conduct research and collect data was obtained from the UKZN's Humanities and Social Sciences Research Ethics Committee (Appendix 4). An informed consent letter (Appendix 1) was drafted and shared with the selected participants before the start of the interviews. All the participants signed the consent form before the start of the interview.

#### **3.11.1 Informed consent**

The participants were initially approached telephonically and via email and asked if they would participate in the study. An informed consent form was sent to the participants before the interview started. The form was explained to the participants. The researcher emphasised that participation in the study was voluntary, they (the participants) would be kept anonymous, they had had the right to withdraw from the interview at any point, there was no reward, and that confidentiality was assured in that no names would be used in the study, and the interview recordings would only be accessible to the researcher and her supervisors. They were also informed that upon completion of the study, the recordings would be destroyed.

#### **3.11.2 Voluntary participation**

It was made clear to all participants that their participation in the study was voluntary, as per the informed consent form. The researcher stated that the study was part of the academic requirements to fulfil the MBA qualification. Also, as noted, the participants all signed the informed consent form before the start of the interviews.

### **3.11.3 Right to withdraw**

It was explained to each participant that they could withdraw from the interview at any time or choose not to participate. This explanation formed part of the informed consent form.

### **3.11.4 Safety and protection of participants**

As per the consent form details, anonymity and confidentiality were guaranteed to the participants. The recordings of the sessions were safely stored and password-protected in Outlook OneDrive. Only the researcher and her supervisors had access to the drive. The data would be deleted upon completion of the study.

### **3.11.5 Confidentiality and anonymity**

Confidentiality was assured to the participants before the start of the interview. The researcher maintained this by not discussing the participants' responses with anyone except through this dissertation report. Participants' anonymity was also assured before the start of the interview. The 13 participants were given anonymous identifiers to ensure anonymity, that is, P1 to P13.

## **3.12 Summary**

In this chapter, the research methodology adopted to conduct this research was detailed. A non-probability qualitative study approach was used with purposive sampling of the participants. The steps used to collect data were discussed together with how thematic analysis was aided by the use of the NVivo analysis software. The research methodology steps were critical to ensure that the research objectives were met and that the true perspectives and experiences of female leaders in core leadership roles in mining were captured and interpreted accurately.

The next chapter presents the results of the phenomenological study exploring the challenges of female leaders in core leadership roles in a mining company in KwaZulu-Natal.

## CHAPTER 4: RESULTS

### 4.1 Introduction

This chapter presents the results of the qualitative research which used a phenomenological approach to identify the challenges faced by female leaders in core leadership roles, how they deal with the challenges faced, and the type of support they receive in a mining company in KwaZulu-Natal, South Africa. In presenting the results, the chapter will initially summarise the results aligning each research objective with relevant themes and codes identified during the data analysis, to provide an overall picture. Thereafter, the chapter will present in detail the results relating to each of the research questions posed in Chapter 1.

*Note: The responses from the 13 participants are presented verbatim. As they are all English second or third-language speakers, the quotes may contain grammatical inaccuracies, reflecting the participants' natural way of expressing themselves. These have intentionally been left unaltered to preserve the authenticity and integrity of their voices.*

To begin with a summary of the results in terms of the identified themes and codes and in relation to the research objectives is provided in Table 4.1 below.

Table 4.1: Summary of themes and codes

| <b>CHALLENGES FACED BY FEMALE LEADERS IN CORE ROLES AT A MINE IN KWAZULU-NATAL</b>                             |               |   |              |  |   |
|--|---------------|---|--------------|--|---|
| <b>Research Objectives</b>   | <b>Themes</b> |   | <b>Codes</b> |  | <b>Number of participants who commented</b> |
| 1. To identify the leadership challenges that female leaders in core leadership roles face in a mining company | Theme 1       | Lack of support structure   | Code 1       | No job guidance  | 5   |
|  |               |   | Code 2       | Women not supporting each other  | 3   |
|  |               |   | Code 3       | Career progression   | 10  |
|  | Theme 2       | Mistreatment  | Code 1       | Bullying   | 5   |
|  |               |   | Code 2       | Experience of racism   | 4   |
|  |               |   | Code 3       | Sexual harassment  | 2   |
|  |               |   | Code 4       | Salaries differences   | 10  |
|  | Theme 3       | Abuse by authority  | Code 1       | Being intimidated  | 2   |
|  |               |   | Code 2       | Have to repeat themselves  | 5   |
|  |               |   | Code 3       | Being undermined or seen as a statistic                                      | 8   |
|  |               |   | Code 4       | Women have to prove their capability more than men                           | 6   |
|  | Theme 4       | Being stereotyped   | Code 1       | Female stereotypes in a masculine industry                                   | 9   |
|  |               |   | Code 2       | Women are emotional  | 4   |
| <b>HOW FEMALE LEADERS DEAL WITH CHALLENGES</b>   |               |   |              |  |   |
| 2. To explore how female leaders in core leadership roles deal with the challenges faced in a mining company   | Theme 1       | Dominant use of situational leadership style                                  | Code 1       | Leadership flexibility befitting situation                                   | 9   |
|  |               |   | Code 2       | Grapple to find own style to lead effectively                                | 2   |
|  | Theme 2       | Figuring out the co-existence of motherhood and marriage or prioritising work | Code 1       | Simultaneous managing of work and motherhood                                 | 3   |
|  |               |   | Code 2       | Surviving the struggle of managing married life and work                     | 5   |
|  |               |   | Code 3       | Enduring role change triggered by pregnancy and safety concerns              | 4   |
|  | Theme 3       | Prioritising personal safety and calling for a                                | Code 1       | Protectionism in the absence of adjusting the workplace to be safe for women | 1   |

|  |         |  |        |   |   |
|--|---------|--|--------|---|---|
|  |         | conducive environment for women  | Code 2 | Agitating for automation and quick adoption of technology | 3 |
| <b>SUPPORT RECEIVED BY FEMALE LEADERS</b>  |         |  |        |   |   |
| 3. To examine the support that female leaders in core leadership roles receive in a mining company | Theme 1 | Non-technical training to fit, survive, and lead in the mining workplace | Code 1 | Anti-harassment training                                  | 4 |
|  |         |  | Code 2 | Leadership training                                       | 4 |
|  |         |  | Code 3 | Mbokodo training  | 2 |
|  |         |  | Code 4 | Women in Mining (WIM)Committee                            | 4 |
|  | Theme 2 | Mentorship and coaching  | Code 1 | High school girls   | 3 |
|  |         |  | Code 2 | Mentorship and coaching                                   | 6 |
|  | Theme 3 | Reporting platforms  | Code 1 | Anonymous reporting                                       | 5 |

## **4.2 Challenges faced by female leaders in core roles at a mine in KwaZulu-Natal**

In this qualitative study, the first research question was: What are the leadership challenges that female leaders in core leadership roles face in a mining company in KwaZulu-Natal? Participants in this study identified four themes that reflect the nature of challenges faced by female leaders at the mine. These are lack of support structure, mistreatment, abuse by authority, and being stereotyped. They are presented in detail below.

### **4.2.1 Theme 1 – Lack of a support structure**

The mining industry is a male-dominated sector. If it is to increase the number of female workers and, significantly, female leaders, there should be means by which the industry can support women to thrive in the environment. The women who participated in the study indicated that there is poor career guidance and that women within the industry do not support each other. The lack of a support structure is manifest in three instances: not having job guidance, women not supporting each other, and limited career progression, as highlighted below.

#### **4.2.1.1 No job guidance**

The experience shared by the participants indicated that at the start of their careers, before progressing to leadership positions, they were not given guidance or the proper training to excel in the roles they occupied. With the industry having few women, it can be difficult to reach a healthy number of women in the industry if these women do not get the support to progress in their careers. Furthermore, proper feedback on how they are performing in their current roles is also not detailed or precise. They are left not knowing if they are performing well or not. P10 illustrated how female leaders in the mining organisation experience a lack of institutional support and rely on self-motivation and determination to realise their ambitions by seeking sources of support on their own, as elaborated in the quote below:

*I think for me in when I started out, there was no support at all. What drove me to actually continue in the journey was, I knew that I didn't wanna go back to the*

*person I was. To actually not having what I aspired to have. That was driven by just my personal convictions that I'm not gonna stay where I am. But I'm gonna fight. I'm gonna go out there. If my supervisor at the time is not willing to show me the ropes, I'm gonna go out in the plant. I'm gonna find people who are going to show me what needs to be done, and I'm gonna get the knowledge somehow, whether I'm supported here or not. But things are going to be done. That's how I actually pushed myself to actually get to learn everything I needed to learn. Otherwise, I would have stayed where I was. Because I remember as a graduate, there was a corner office. I was just put there. It was like, I don't know. No one came to check. Nothing was happening. (P10)*

P3 referred to the disabling environment, as the focus was on criticism rather than appreciation of how well the female leaders are doing to encourage and inspire them as reported below:

*I really, I really can't really tell which side is going. You are just in a state of you don't know whether you are going forward, you are going backwards. Here one thing I've seen is that the leadership is always comfortable in criticising anything and everything that's negative. [We] tend to focus so much on the negatives when it's not going right and then we forget the human part, yes, things are not going right, but what is really going right? So you end up being in this phase where you do not know where you stand. (P3)*

Not being supported and feeling left on one's own without direction in the day-to-day work life was emphasised by P9:

*... there was literally, I'll say there was no support. It was just every day coming in. You just doing your work and you go home. (P9)*

P6, who was a graduate, lamented the lack of supervisory-level support:

*In the past, it was difficult for me to work with the supervisor because they were not supporting me as a graduate. They were not supporting me as a metallurgist, you know, Anele, me and you are coming from the same experience. (P6)*

The lack of an open feedback culture and failure to grow and improve based on developmental feedback was revealed by P10:

*I didn't get feedback in terms of how my performance was, so there was this one time when there was one supervisor who was honest with me. To tell me exactly what is being discussed about me, but no one has ever told me. I still remember until today, like it happened yesterday, the way the conversation went, because hearing those things for the first time, it was very emotional for me in that room in that office, because no one had said those things before. It was the first time hearing it. But for me, I think that was the turning point in my career because from that point onwards I got to understand what people see when they look at me and how I perform. (P10)*

One participant indicated that she had a very good female supervisor. This inspired her to excel in her job and she also learned a lot from her. This speaks to the importance of having more female mentors in the industry. Below is what P8 had to say about role modelling by a supportive and excelling female leader, which is a rare occurrence:

*So it was very hands-on, very involved and I think also having a female supervisor just on its own it, it shows you that you can actually do it. I don't know, something psychologically when you see someone who's above you actually doing their work and doing it well. Also, you can see from that that is actually possible for you to be good at what you do. So I think that has helped me. (P8)*

#### **4.2.1.2 Women not supporting each other**

Most women within the mining industry have had some sort of negative experience. This includes, for example, challenges related to career progression, harassment, and being undermined. The mistreatment experienced by these women has impacted how female leaders treat other females within the industry. P12 stated that women experience so much trauma within the industry that they feel the next woman must endure the same experience.

In light of the above, some participants complained that females were less supportive and that female leaders actually thrived when led by male leaders. P12 pointed to the friction, victimisation, and micromanaging experienced under a female leader:

*What I can say is that, in my career, I think I've thrived the most under males. Funny enough ... and then I've heard the worst experiences, like very, very bad experiences with women leaders. I can summarise and say under women there was really a lot of just friction, micromanaging, bullying, victimisation, and just overall unpleasantness and stagnation actually ... And again, I say that with reference of me having had bad experiences under women leaders and male leaders. (P12)*

The issues of unnecessary and petty fights among female leaders, as well as the difficulty in working together smoothly and productively, were reported by P10:

*There's lots of fights amongst us as females, which is unnecessary and it actually petty and I don't know why it keeps happening but we need to see how can we really fix it. Because even now I'm dealing with this similar issue in my space where female leaders are not working well together, and I know that if there was a male and a female that wouldn't have happened. Someone would have accepted that, yeah this person is like this, but let's continue working. But things go to a level where work is impacted and now we must focus on that. Because if we can learn to work well as females we can achieve a lot. Because now there will be more of us. (P10)*

The prevailing view that women struggle to obtain leadership positions was highlighted as an assumption reinforcing the behaviours of female leaders who believed that no female should get a “nice ride” into leadership when everyone else has struggled. P12 summarised this assumption by female leaders as follows, illuminating the logic behind why women leaders do not support each other or other women at the mine:

*But in general, one can generalise and say women struggle so hard to get to those leadership roles that when they get there right, by the time they get there, they are so you know, there's a lot of trauma. There's just a lot that it turns their feelings.*

*Like other women behind them need to go through the same traumatic experiences. They have to go through the same trenches and bushes actually. It's like why would you get a nice ride when I had to, you know, go through the trenches, you know what I mean? That's what you had to go through to get it, so don't make it a standard. (P12)*

#### **4.2.1.3 Career progression**

It became evident during the interviews that career progression for females in the mining industry began 10 years ago; before that, career progression was stifled. At that time there was much discrimination against women; furthermore, there were very few women in the industry. With the intentional drive and campaign that the mining company of interest is undertaking, as well as the BBBEE requirements, the status quo has changed. Women who were hired within the past five years have experienced rapid career progression to the extent that surveys conducted by the company have indicated that male colleagues are complaining that they are no longer being considered for leadership roles. P10 described the improvement in the career progression of females at the mine highlighting the increased growth opportunities for females relative to white men in particular:

*It has Improved. But personally, when I look at the time when I started in this company, definitely there was no room, no chance for any female to progress at the same pace, or even faster than a male counterpart ... especially when I talk about those 20 years ago. But now, because a lot has changed, it's now where I feel like, and everyone says it, even in the surveys, everyone says it now that if you're a male, especially if you are white, your chances are not that great right now, but it was the exact opposite at that time. (P10)*

In a different vein, P4 focused on the aspect of protecting women in a “rough” environment as key to the slow career progress of female graduates at the mine:

*I mean, I came from varsity the same time as a graduate with other male engineers and I found that the progression was not fast. Maybe because of the fear of dumping me into the deep end and I mean they might be right, the mining industry*

*is rough and the ground mining is rough. So they would want to protect you. Maybe it is that protective thing that sometimes will prevent you from propelling as fast as your male counterparts. (P4)*

The slow career progress of female leaders compared to the fast progress of men with similar academic qualifications was summarised by P6:

*I think it did slow down my career. Just imagine I've been in this industry for the past 18 years and something that I was reflecting on the other day ... I was a metallurgist for five years. So for me, I feel like I really consumed a lot of my time there. And the five years when I was in metallurgy, the male counterparts, they were promoted to Superintendent, they were promoted to specialist, but I was still a metallurgist ... I would have reached this level probably five years back. (P6)*

P9 added that trust in the decision-making capabilities of men was one of the reasons for differences in career progression between male and female leaders:

*I would say progression is a bit different when it comes to male and female and why I say this? Male counterparts are more trusted to make big decisions. As a female, you might be right, but you get challenged just because you said it, you know. (P9)*

The doubts about women's decision-making capability entailed that women had to prove themselves to be considered for progression, as noted by P11:

*I think yeah, in a way, it did slow down, but then I had to work for me to prove myself. (P11)*

Women-related issues, such as time to have a child and expand the family, were viewed as slowing the career progression of women leaders. According to P12:

*I think women's progression is a bit slower than men's progression in the mining industry. So, if I'm to compare myself with men and their progression, particularly maybe just looking at men that I started with. I would say, definitely there's a difference, the progression is definitely different for men and women. The big*

*reason that I can think of ... like women get to a certain point where they expand their families, which means you're, at that point, pregnant. (P12)*

Persistence, desire to grow, and disregarding negativity displayed by others, were reported as critical if a female leader is to progress at a mine. In this regard, P13 stated:

*You'll find barriers, but it's all about you being persistent, wanting to develop. If you're going to go according to the feelings of people, you're not gonna go anywhere. (P13)*

#### **4.2.2 Theme 2 – Mistreatment**

It has been stated several times that the mining industry is male-dominated. There are stereotypes that society has towards women and certain types of jobs. Men are seen as heads of the household and as breadwinners. In general, females are highly sexualised in society. Women leaders in the mining industry often have to lead a large number of males who still believe in these stereotypes and who struggle to accept female leaders. South Africa is now 30 years into democracy, but the mining industry is still white-dominated, especially in leadership roles. Black women, in particular, have experienced racism from white co-workers and they state that, due to BBBEE requirements and the gender balancing initiatives that the mining companies are implementing, they sometimes feel like they are a statistic.

##### **4.2.2.1 Bullying**

The bullying experienced by the participants is related to the stereotypes that society holds about women. Women are expected to be domesticated and homemakers, while the men are supposed to be breadwinners. Participants referred to the poor support they received from HR, believing that HR allows bad behaviour to happen especially if it favours top management. P11 recounted her painful experience of bullying at her previous mining company:

*This is a huge one. I hope I don't cry. Racism, bullying, being belittled, someone taking your ideas. You are coming up with innovation and probably are sharing out of a goodwill, you know, and you are sharing the details and you're hoping maybe*

*this one will pave a way for me. And then the next thing you'll hear, your ideas are presented, and someone is getting like, they recommend that person for doing well. So for me, it's that. And when I say bullying, like, you deserve to be in the kitchen, why did you choose the engineering field, you know, and sometimes swearing. You know, a lot of things. I don't want to go more in-depth, but I've experienced those, bullying, racism. And you know, yeah. (P11)*

The fear of victimisation, especially by senior leaders, is one of the reasons why bullying is not reported as stated by P2. The participant also discussed a situation where she was denied a job opportunity by her senior leader and pointed to there being little HR support to address bullying.

*Also prevalent is bullying as well. I think bullying also ties back with my first point of intimidation. Bullying particularly from senior management ... when you start tapping into management roles then it becomes more difficult because you also fear victimisation. So we also still have that fear that should I report this and nothing happens – I'll be put in a worse off position than I was before I reported it. So you remain silent and these things continue, you know? And I've also had a supervisor, manager, leader, who would actively try to block me from getting those opportunities. And he was successful at it. It's rather disappointing that leaders have the power to decide that you're deserving of this opportunity or you're not deserving of an opportunity because we are all here because we want to be successful and we need money. So you can't be the one to decide that I'm not deserving of an opportunity, you know, and the fact that HR allows that to happen is concerning. (P2)*

P6 stated that she has witnessed and heard stories of gender-based discrimination within the company:

*Unfortunately, we still seeing a lot of gender-based discrimination happening in the business and for me, it's a journey. As a business we need to continue and work on it, making sure that we encourage people to speak up about those things. (P6)*

P4 shared her own experience of being abused at work and not receiving support from HR and her direct supervisor. Instead of the issue being addressed, she was moved and placed in another role. P4 reflected:

*I remember using the whole process of HR and trying to resolve the matter and I had evidence. I could get this person fired and unfortunately, my leader resorted to rather having a conversation together with the person over lunch with the both of us. My manager went to HR and asked that this be removed and he will deal with it. Although he was trying to be human. But the problem was not resolved. It ended up being let's remove the female from the picture. Then you don't even have ground to go back and say, but I was following up with this. Because when you are removed from the position then you know, you can't again lodge a complaint or whatnot. So it's for us as women to go above HR and use anonymous platforms to report such things. (P4)*

P10 recalled a time when she was asked why she was working in the mining industry and told that she was not welcome to work there:

*And it was clear. I mean, even the attitude, the way people will engage with you, it was clear that you are not supported. Why are you here? The question was like, why are you here? Really? You know, you have no business being here. But yeah, some people I know are still suffering in silence because they don't trust the systems that we have. How do we get to that level where people can really speak freely about that? (P10)*

#### **4.2.2.2 Racism**

As previously mentioned, the mining industry is still white-dominated at the management level. Black people experience racism and the use of the Afrikaans language is one of the ways racism is experienced by black people. Participants indicated that Afrikaans is used as a weapon in the mining industry, being deliberately used by their white counterparts who are fully aware that many black South Africans do not speak the language. According to P13:

*One thing that I struggled with and it was not only me, it was a racial issue, especially underground, where you find people you ask for explanation, you ask for assistance. And especially on the white counterparts, they would start explaining in Afrikaans and you are in a group, you've got African speaking people and you are Zulu or Tswana and you expect that they would explain in English. And that was never the case. Then you find your own way. (P13)*

P11 shared the same experience:

*And sometimes we're in the boardroom and there's white people only in that boardroom. And then they speak Afrikaans. I don't understand Afrikaans. Or, let me say at the time I didn't understand the words. You sit there and then they said, do you understand your task that you have to do for the day, and you don't understand. With that, it sets you up probably for failure, for you to fail, something like that. (P11)*

P6 stated that in the past, black employees were not supported; however, with the company on a campaign for a culture change, things have improved:

*But you know, there are people that were never really even, supporting black people, you know? The business going through this culture change, it opened up the doors for us, but really I did experience that before where I felt like I'm not being supported as a female, as a black person, as a young graduate joining the business. (P6)*

P9 recalls that in one of her previous roles, she was treated differently because of her race:

*So my previous supervisor who was a male, not in my current role but in my previous role. I would say there was a lot of unfairness on how he treated me or everyone else, which also speaks to the differences in colour, which is something that is still there. In the company, the difference in colour. (P9)*

#### **4.2.2.3 Sexual harassment**

Sexualisation is common in many societies. The participants stated that the Zulu culture emphasises this. The men in the company do not see anything wrong with the comments they make due to doing so being a prevalent part of their culture. One participant detailed an experience where inappropriate behaviour took place during a social company event. The issue of sexual harassment and harassment in general has been raised in many surveys that the company has conducted and it has taken action by rolling out formal anti-harassment training for all employees. P2 stated that there have been cases of sexual harassment and disciplinary cases that she has witnessed. She believes that people do not know how to behave at work and do not see their behaviour as offensive:

*Actually, there are cases of sexual harassment that we are seeing. People are going through disciplinary hearings to address those. Personally, I think with regards to sexual harassment, that's quite prevalent in the mining industry. I don't know if they have become like, not sensitised to how people need to behave at work, how people need to speak at work. You find really offensive comments being said to you and more often than not, I did nothing about it because I just figured and even the other ladies will say ah, it's common. Even if you do report it like they're not gonna stop. You are not the first person, so you just sweep it under the rag. (P2)*

P9 expressed her personal experience of being sexually harassed. This happened at a work social event. She stated that alcohol played a role in the way the men were behaving during the event. As a result, she has now vowed to never attend a work social event where there are men and alcohol. P9 explained:

*Males still look at the female and sort of, if it's a right way to say, sexualise females. They still think it's OK to comment on how your physique looks like, to an extent, even as their leader they would have audacity to comment on that. So for me, it's one of the things that bothers me a lot, but the business is currently trying with their harassment training in making people understand what is wrong and what is right. I wouldn't comfortably say I am safe with my male colleagues. To an extent, I am referring to something that also once happening. So you know when we have those*

*outside braais, the quarterly braais, you try to engage with the team and try to breach that gap between management and the shop floor employees. So you attend their quarterly safety braai with the hope to build that. But you know when people are under the influence, they tend to misbehave, whether it's not work or work function, so I wouldn't say, as women we would be safe in that space. I don't feel safe in such a space. It was once proposed that we attend those things and I said to my leader I do not feel safe to do that. I will no longer attend such braais because of alcohol. (P9)*

#### **4.2.2.4 Salaries differences**

The general perception of the participants is that men earn more than they do. Some of the women have proven that their male counterparts earn more. One participant justified women earning less due to their being given lower salary increases during their periods of pregnancy or maternity leave. Another justified being paid less by stating that women's careers progress slower than men's, hence they earn less. One participant pointed out that her male subordinates are vocal about wanting salary increases compared to females who are not. There was also an incident where one of the participants in an executive position stated that she had had a very concerning grievance from one of the female employees. This particular employee was denied permission to work overtime by her supervisor due to her being female. However, it was noted that the mining company has taken measures to benchmark the salaries of employees and ensure that people are fairly paid. This is termed pay health. P10 was of the view that women are not paid the same as men:

*My perception is like, I think women are not paid the same as male counterparts, even though I can't prove it, but that's my perception, you know? Yeah. (P10)*

P4 has proven that men earn more than women in the mining industry:

*I have proved that it's not the same, there's no consistency. In my previous roles, in different companies, in my previous company and even in this company. (P4)*

P11 stated that she was put on pay health for one year, during which her salary was drastically increased, proving that she was underpaid. But she also believed that she had to work hard to demonstrate that she deserved the salary bump. P11 elaborated:

*There is also this thing called pay health. Because when I got here I think I was the least paid as well. So basically they matched your salary with your other colleagues. I also think I had to work hard to prove myself to my employer to say I deserve it. So yeah. (P11)*

P8 had a similar experience:

*I wouldn't say now, but I remember three years ago I received a salary bump like a significant one. And at the time, I was a process engineer, so I'm not sure what the company was doing at the time. I think they were looking at benchmarking salaries per pay bend and just based on the salary increase that I received for me it pointed to the fact that I had been underpaid for quite some time, so I don't know if that's true or not, but just based on the increase that I've got, it was a bit shocking that after the company's benchmarking, I should have actually been earning this amount. (P8)*

P3 recalled the time they were employed by the company, and how HR explained that they were ensuring that all females were paid market-related salaries:

*We are trying to close the gap in terms of this, what men have been earning and we want to make sure that you or any other females that are going into the leadership roles are earning the same salary as the men... (P3)*

P12 believed that women are paid less. She opined that the downtime women take when pregnant and raising their families contributes to their lower salary increases, and hence, why over time, women get paid less. P12 stated:

*The business doesn't allow us to talk money within each other. It's a confidential issue, but obviously, there are certain sometimes comparisons and talks in the corridors amongst each other. So I do believe that men definitely get far more than women ... maybe back to an example of the pregnancy and growing our families,*

*most women in terms of performance rating around their pregnancy and having the child and integrating back. I think most women have said they were sort of under-scored or given an average, right? So personally, I was underscored. (P12)*

P13 believed that things have changed and there is equal pay:

*Maybe in the past it was like that, but I don't believe it's the case in nowadays because you've got companies that are trying to bridge the gap in terms of salaries. (P13)*

P5 stated that men are more vocal compared to women if they believe that they are not being paid well:

*Actually thought it was OK and I actually thought the biggest challenge was that women develop slower because of the challenge that we just touched on. However, I do feel that being a leader, even looking with my team, my male team members are more vocal if they're not satisfied with their pay and they ask more to say, but yeah, why is it this much? And they actually are brave enough to ask and be like I don't feel I'm paid well. Like, can I get a raise? Like what do I need to do to get a promotion? (P5)*

P6 referred to a female colleague who was denied the opportunity to work overtime by her male supervisor. The supervisor believed that men should be breadwinners, and, therefore, she, as a woman, should not get extra money by working overtime. According to P6:

*There's a huge, huge discrepancy. And most of the time, if I remember well, especially when I was a metallurgist, the males were always getting more than what I got and even in the current role, I believe that men are getting more than what I get. So I think we still have that gap between the females and males in the industry. And for me, I don't know why, but I think probably is that we were previous disadvantaged and people don't believe that females deserve money as compared to the men. Actually, I was in one of the sessions and the lady was sharing her history with me. She said that she was very unhappy. She said that her supervisor said he's not going to call her for overtime. Why does she need money? Females*

*don't need money. And he said that her husband must contribute. Her husband must take care of the female. So why do you need to come for overtime? So she was very upset because of that statement from the supervisor. (P6)*

P9 believed that there is no pay gap. She pointed to there being mostly males in superintendent positions who have been working in these positions for years. The participant considered experience an important factor in salary determination and those (whether male or female) with less experience would earn less. P9 stated:

*I wouldn't know, but some of the male superintendents were confident to share such information. There wasn't much of a gap and also based on that they already were in a superintendent role that's why they were higher than me. (P9)*

#### **4.2.3 Theme 3 – Abuse by authority**

Authority is linked to the power to enforce instructions and if someone has authority, they are respected. This is why leaders are viewed as authoritative people. Women in mining, especially leaders, have to earn authority, rather than the authority being awarded by virtue of their occupying leadership roles. The female leaders stated that they have been intimidated, have had to repeat themselves multiple times to get their points heard, have been undermined, have had to prove their capability, and have had to dispel many female stereotypes.

##### **4.2.3.1 Being intimidated**

The intimidation that has been experienced by women in mining can be viewed from two perspectives – either them intimidating people or people intimidating them.

According to P2, being black, young and educated intimidates people in the workplace:

*One, being female, black and young. I think when you come into the mining industry, it's male-dominated. And then even the age gap, you still have, people who are close to retirement. People have been working for years. They have years of experience, but not necessarily the qualifications required. There's a lot of intimidation that takes place. (P2)*

P11 alluded to working in a male-dominated work environment being intimidating for a female:

*I think also the company is coming from far and I'm saying this because I'm looking at the Venda gold mine. There I think I was the only female in a management role. So you can imagine you are telling maybe 200 men what to do. (P11)*

#### **4.2.3.2 Have to repeat themselves**

Feeding into the stereotypes regarding women, some of the female leader participants believed that men are more assertive and have natural authority. They pointed to having experienced many engagements where they have had to repeat themselves to get their points across. This speaks to their authority as people in leadership positions being undermined.

P9 stated that as a female she has to repeat herself to be heard, as saying something once is insufficient:

*As a female, you might be right, but you get challenged just because you said it, you know, and sometimes you have to say one and the same thing multiple times before someone actually hears you. (P9)*

P12 was of the view that female leaders need to work on their assertiveness:

*So assertiveness is across the board in terms of human beings, but as a woman, you have to work a tad bit harder at your assertiveness and because the men hold a general authoritative aura and rule about them, which women don't in society, and somehow society follows us into the workplace. So to have authority and respect, your level of effort to be assertive you just have to work twice as hard with it. (P12)*

P6 stated that she is not heard in meetings and finds herself having to repeat things. Sometimes she says something and no one responds. However, if a male colleague says the same thing, the room responds.

*Sometimes I feel like I'm not being listened to like the men. Like, for example, if you comment on something, people will just keep quiet, not responding... So, I still*

*feel that there's that gap where people are not taking you seriously and sometimes people don't support you and sometimes you find that you say something, and then a few minutes later your counterpart male says it. People will then start talking and agreeing or discussing it, but when you're saying it yourself as a female, they'll keep quiet, they won't contribute. (P6)*

P8 shared the same sentiments as P6, P9 and P12:

*You have to keep saying the same thing over and over again. So for you to actually bring an issue to the table and for that issue to get actioned, it takes a lot of you bringing it up over and over again. Whereas I see sometimes with my male counterparts, it's when they speak about something it's taken into account and the discussion now is about how do we action or how do we resolve this issue.... Assertiveness can also be a big challenge for women where I think it comes about naturally to men because it's something that boys are told to have, to be assertive and say this is what they want. (P8)*

#### **4.2.3.3 Being undermined or seen as a statistic**

The company of interest has made a conscious effort to increase the number of women in the business. Indeed, this is now being done by most mining companies in South Africa as a response to meeting the BBBEE requirements. All participants who commented on this subtheme were black female leaders. They felt that they were perceived by other employees as just being in leadership roles to meet the BBBEE targets. Some stated that they feel like they are just a face, a doll or a Miss South Africa, hired only to meet statistics. However, these women have worked hard to get to where they are and find it very disrespectful when they are undermined.

P6 detailed the statistics of women in the mining company of interest:

*As much as we are trying to achieve our strategy, to have 40% females by 2029 in five years' time... I think, as a business, we currently sitting at 24%. Obviously, we need to be at 40% by 2029 and then, obviously, continue after that. (P6)*

P12 was aware that the company of interest is on a journey to increase the number of women employees:

*Ah, I know that there's a set, shall I call it a score or target in terms of like women in a particular position? The numbers, the demographics? So I think that alone it does try, I think support or push the change, forced change, right? (P12)*

P9 referred to a female engineer colleague who viewed females being in the mining industry as just a numbers game:

*I know the business aims to have 40% women in the company in five years. A 3% year-on-year increase... I'll take for instance another engineer, what she said when she left the company, she just said that we are just here for statistics sort of you know; you get to that feeling where you feel like you're just a number. (P9)*

Women are assumed to be promoted based on their gender. P10 stated:

*That's the most irritating for women as well because the assumption is obvious – if you are female in the role, the assumption is you are promoted now because you are female, and that's the sad part because it's not true. It can't be true. I mean, people need to have the credentials. (P10)*

P11 spoke of being undermined by her supervisor:

*Sometimes your leader also makes it difficult. Like he doesn't tell you what is the plan. Probably jumps you and goes straight to the guys and gives them instructions. And by the time you get to the guys, they know everything that your leader said they must do and you are just there like a face, you know. And yeah, so you are like a face and they are communicating somewhere or they play golf together somewhere. When you come to work you are just there as a face because there's a number they're pushing. Number to have a black female, something like that. (P11)*

P2 also referred to women being seen as a statistic. Additionally, they are not given the freedom to exercise their leadership:

*They just think you are here because you're a woman and you're trying to get the numbers up. The business is trying to get the numbers up, you're not really deserving of the position that you're in and that mostly comes from men ... and also giving them autonomy because sometimes I feel like you're given the seat, but muted at the same time. So you get told what to do, but then you are a leader. You're told that you're a leader, but you can't make decisions as a leader. (P2)*

P8 expressed that she is not afforded respect as a leader because she is a female. She also believed that women are being employed in the industry to meet BBBEE requirements:

*I don't know if it has to do with me being a female or maybe just my personality. I am a bit introverted compared to my counterparts; so I think it's a bit of both. But some of the challenges that I have experienced is someone seeing that you are in a leadership role but not really respecting that you're in a leadership role. So as an example, instead of if someone wants a resource from your team, they tell you instead of asking, and if you refuse, they go above your head ... it helps as a female leader when people have confidence in your competence, there's already that question. Are you competent? Are you here because of BBBEE? Let me just put it straight, but if you make sure that you are competent like you know your job like the back of your hand, I think it really helps establish that respect straight off the bat. (P8)*

P4 was of the view that women are hired as a front or a token:

*I've also found that leaders have also stifled the whole progression and the process, mainly because there's this thing of jumping the ladder when your leader goes and jumps you and goes to your subordinate, another man so that they can have a man-to-man talk. I've seen it here and I've seen it at Lonmin, so that's a general thing that I've realised. So that kind of behaviour short-circuits the learning, the relationship does not support the relationship that you have with your subordinates because the minute they know that they can skip you and go to your manager, you're just Miss South Africa and you have to smile and wave and just be on the seat. It's frustrating. I don't like being a doll. That's why I chose*

*engineering. I believe in the practical, you know, a strong stance and don't put me as a dol I... People are trying to change their tones and for us to like, ohh, shame. Sorry, we are workers, we are not women. We are workers. (P4)*

P6 shared that she had changed her leadership style to be heard:

*... because sometimes you feel like people are not listening to you as a female and then now trying to change your leadership style and become more aggressive. (P6)*

P3 stated that men are seen to be the reason women become successful. The perception is that women are unable to do their jobs well on their own:

*You will always have a male, somewhere, being an anchor. Yes on the org structure, there are women, but in terms of impact, it's not there. It seems to me that men are more celebrated and get the spotlight. Is it really that glamorous to be in the position where you are there as a number? Is there the same support and faith in women? It's more evident for men. There is always that male anchor or male support or a mentor. And in the background, there is that, that person is supported by so and so. (P3)*

#### **4.2.3.4 Women have to prove their capability more than men**

Significant feedback was received from the participants concerning females in the mining industry having to prove their capability, and to do this, they have to work much harder than their male counterparts. They do so to dispel stereotypes, balance family life, earn more, and gain the respect of their subordinates and superiors. P11 stated that she has had to work 10 times harder than her male counterparts. She did this because the men around her do not believe that she is capable and she has had to prove her capability:

*I had to work ten times more than a male to prove myself that I'm capable of doing the job, so that also causes strain you know. Someone else has to scrutinise your job just to check if there's no mistake, and then if there's a mistake they celebrate, you know? I think when I got appointed, I was the least-paid engineer. But then I*

*had to work ten times harder. Before they can say, okay, we believe that you are capable. So with that and obviously they had to increase my salary. (P11)*

P12 had experience of being questioned about her capability. Her knowledge and skills were questioned and she had to work hard to prove that she was, indeed, capable:

*And I think when it comes to like knowledge and experience and skills, women also have to continue to prove themselves... more often than not whether it is your team or your stakeholders or whoever, someone is questioning your knowledge and skills to even know what you're saying. You just get questioned a lot, so yeah, you will work twice as hard to prove and get anything done. And I know males that have moved around different commodities in the mining industry and they just walk in their form [men see no need to change themselves]. They are automatically trusted that they know what they're saying or doing and, therefore, their instruction is trusted. (P12)*

P2 shared the same sentiment as P11, that women have to work much harder than men to be recognised. She has had to deal with people to whom she has to prove her capabilities:

*So you almost always have to work ten times as hard to prove that you are capable. You know, even though your work speaks for itself, but you'll constantly encounter people who want you to prove yourself, and they won't take what the work or the work you put in ... you'll constantly have to prove yourself ... and even sometimes, they never buy into what you do. (P2)*

In a similar vein to the responses above, P6 has had to put more effort into her work:

*So for me, the challenges I faced as a female, I need to put more effort compared to the men.... (P6)*

P7 believed that the culture or tradition in Zululand does not expect a woman to be a leader, especially to lead men. As a result, she has had to work hard to prove her capability on the shop floor:

*I was better received by my peers and seniors than subordinates. I think there, I had to do a lot of work to show capabilities. And to earn the team's trust, that as a woman I can actually lead through. And for them to realise that I could lead them. I think those have been the biggest challenges, you know, around just the cultural component of being in Zululand. (P7)*

P1 told her female shop floor employees to work hard and gain experience because they will need it to get higher positions. Women must not allow men to do the hard jobs for them:

*So in the mining industry, earning someone's respect is still a very big thing and it's not impossible for women, but it's a lot harder. We have to work a lot harder to gain that respect. So I usually tell a lot of my females that are on the shop floor level to say that, unfortunately, the reality of the situation you gonna have to work harder to prove that you can do it. Otherwise, you're gonna come to a certain level and beyond that level you now need the next skill and you're not gonna have that skill if you don't develop it. (P1)*

#### **4.2.4 Theme 4 – Being stereotyped**

The stereotypes that the participants raised are aligned with the fact that the mining industry is male-dominated. The assumption is that women should be softer and more nurturing at work because they are mothers, and women are not given challenging leadership roles because of the belief that they will not be able to cope since they must take care of their families; therefore, they do not have the capacity to do tough roles. The stereotype is that men should take care of women and thus women do not deserve money. The Zulu culture that men uphold does not allow women to do heavy lifting or tough manual jobs. This is more common in artisan types of work. Women are also seen as emotional and unable to make rational decisions. The participants revealed that at times they have to try to act like men at work to ensure that they are respected and that work gets done.

#### **4.2.4.1 Female stereotypes in a masculine industry**

Participants highlighted that being women, there are roles that they are not given due to perceptions that they will not have enough time to do the extra work due to family responsibilities. Artisans, who do some of the most manual and mechanical types of work in the mining industry, are still very male-dominated. One of the reasons for this is that male colleagues assist female artisans in doing heavy manual jobs. Due to this, women do not acquire the necessary skills or even perfect the skills. The Zulu culture, in which men are breadwinners, has disadvantaged women by limiting their ability to do extra work and earn more money. As one participant commented, women cannot work overtime, solely because they are female and for no other reason. P4 believed that her capability to work in the mining industry is hampered by the stereotypes that people hold regarding women and the mining industry:

*And I think it's a perception from individuals, the stereotypes that we have. That your work as a leader and leading men, is stifled by those stereotypes. In the industry, a leader in their mind is thought of as a man ... So one, you're not a woman, you are an employee, and the minute you take yourself out of your woman role when you get to work the better, because we are emotional beings as women, as females, and the minute you get that position, I'm not a woman, I'm an employee. You will take more responsibility and not always be defending your position in the workplace. (P4)*

P5 stated that assumptions are made about women who have children, that they cannot handle more workload because they have motherly duties at home:

*Assumptions are made on your behalf to say, oh, maybe she can't really. We can't give her something hectic now because you know she's a new mom and you can't travel because, I mean, who's gonna look after your kid? (P5)*

P6 shared a story about one of her colleagues who was denied permission to work overtime by her male supervisor because he believed that women do not need to make money:

*I was in one of the sessions and the lady was sharing her history with me. She said that she was very unhappy. She said that her supervisor said he's not going to call here for overtime. Why does she need money? Females don't need money. And he said that her husband must contribute. Her husband must take care of the female ... They still believe that the men need to provide for females. (P6)*

P11 spoke about her experience of being told that women should be doing domestic work. She also related how her supervisors were undermining her and going behind her back. Due to this, she believes that women need to act hard and forgo their "softness" in the mining industry:

*And when I say bullying, like, you deserve to be in the kitchen, why did you choose the engineering field? There's men that still find it hard to have a female leader in front of them, so sometimes you speak to them, you give them interaction and the only person that they will listen to is probably your manager when they come ... and then again, you just find those ones that doesn't wanna do it. You feel when you speak to them, you get that hate from the voice or whatever. They just don't. They avoiding you? They don't wanna talk to you. You know those ones that you can feel that they don't want to report to you, but they don't want to say it? For me, women have to take out that woman, ohh, I need to be soft. You know, when we are growing up, they give us dolls and we need to be that. You must just take it out. I'm not saying be rude, but stay firm in what you believe in. (P11)*

P4 and P7 also referred to people still seeing women in stereotypical roles:

*And also the cultural challenges that we face in the KZN area that females in general, there's that element of people not distinguish between boardrooms and their bedrooms. You know their wives are supposed to support, and I agree with that. But when you get into a boardroom, I'm assertive. We question each other, we call, hold each other accountable. So the fact that you're male is not supposed to threaten me. (P4)*

*It's not company specific, but it's the culture around Zululand, right, that in this area most of the men, their wives are at home, they're housewives and then coming*

*then into this environment. I think female leaders need to be comfortable with their personalities. It might not be different because there's also the stereotypes and the bias, right? So if I'm being assertive the same as a male colleague, chances are more than not people ask me, oh, I'm I having a bad day and I'm like, no I am not, you are like this as well. So why is mine different? That people would call you out more than they would call out, maybe a male under the same circumstances. If I'm under pressure. If I've got a colleague who's under a pressure and is male, nobody goes, oh, shame, you are under pressure these days. (P7)*

P9 stated that while men and elderly workers expect to be respected they, in turn, do not respect females, especially if they are young and black:

*Males still find it hard to take instructions from a female. Being young as well, a young female. Men still tend to find it hard, so it's just standing your ground in such instances. And also having elderly people that still think you must respect them, as how you respect your own parents. Whereas in the workspace, respect is earned. (P9)*

P12 mentioned how women change the way they conduct themselves to be similar to men, because of the history of male dominance:

*The roles have been occupied by males for so long that the role when you assume it, you have to change to sort of reflect what males are, right? (P12)*

P2 stated that there is an expectation that women must behave in a nurturing manner at work:

*An expectation is that because women are naturally nurturers, that's expected of them at work. We are not people's mothers at work. We are here to work. (P2)*

P1 was of the view that the cultural aspect related to manual labour affects women's progression in the mining industry:

*I think what hinders women's progression, especially when it comes to manual labour is the cultural aspect of it. So what I see even in my teams and the artisan field, the men would say don't carry that I'll carry it for you, and that actually hinders*

*the progress because you're now not allowing them to do a task, which is then affecting their progression and women only come up to a certain level, because to do the next, or let's say the next step is to be a specialist or supervisor. They need to be able to do those extra skills that are typically seen as men's skills. They need to be able to drive a machine, do rigging all on their own, to fault find all on their own on heavy equipment. And so, unfortunately, it is the cultural aspect, or let's say, men respecting women, they calling it that, men respecting woman. It's actually hindering their progression ... So, even if we just think of the Zulu culture and how they treat their woman, so it's a lot more, women are seen as soft and those types of things. So to take it over into the workplace, it's very difficult for them to see a woman carry something heavy or even in some cases, to the point of a woman being a leader becomes a problem. (P1)*

#### **4.2.4.2 Women are emotional**

Some of the participants stated that women are more emotional. One participant was of the view that women's emotions can sometimes cloud their decision-making and it is important to take a step back in some situations and reflect first before acting. Another participant stated that being emotional is a positive characteristic. However, most of the participants viewed being cast as emotional in a negative light – they believe that it is not true that women are emotional at work. P1 though, opined that women are emotional beings but that this could be a good thing:

*We need to be able to manage our emotions much more so. Okay, I know it's the typical thing, oh, women are so emotional. But it's true that we are more emotional. In everything that we do. It helps, though, it's a positive characteristic to have. (P1)*

P7 stated that women being thought of as being emotional does not mean that they have to adjust or change their leadership styles to be something they are not:

*It's not that women need a different style. I think they need to be comfortable with their style without changing it because of the environment and how people have that bias. There are too many stereotypes against women. Oh, she's too aggressive. She's too emotional. (P7)*

P9 stated that men do not have to act differently to be respected – they are simply respected. Women are judged as being emotional when they are being firm. P9 regarded this as a form of manipulation:

*You know a male leader can come in here and just automatically people just fall in this space and just get in line, you know. With a female leader, sometimes people will take chances with you. Without coming out as a person, that is too harsh or the word they normally throw about females, emotional, whereas they just manipulating you to be what they want you to be or else which is you basically standing your ground. I've been accused of many of those where people will even throw comments and say she has relationship problems that is why she's like this. She's just taking her frustration on us. (P9)*

P13 shared that one needs to be in control of their emotions because emotional decisions result in bad outcomes at work:

*When you go with emotions, women are very emotional and when you go with emotions, you'll end up losing your job, right? Because the things that you would say out of emotions are out of anger. What you can do is just type test, take a step back, and reflect on what is happening, and be as factual as possible. (P13)*

### **4.3 How female leaders in core leadership roles deal with the challenges faced in a mining company**

The second research question in this study was “How do female leaders in core leadership roles deal with the challenges faced in a mining company in KwaZulu-Natal? The participants in the study revealed three ways that female leaders were dealing with the challenges: (1) adopting a predominantly situational leadership style, (2) figuring out the co-existence of motherhood and marriage or prioritising work, and (3) prioritising personal safety and calling for a conducive work environment for women.

#### **4.3.1 Theme 1 – Dominant use of situational leadership style**

The dominant leadership style practiced by the female leaders in the mine of interest is situational leadership. The participants had a good understanding that one leadership

style cannot cover all the circumstances they face in the mining industry as leaders. There was a mixed response regarding whether women need a different leadership style compared to men in the mining industry. There was also overlap among the participants on the understanding of leadership and management.

#### **4.3.1.1 Leadership flexibility befitting the situation**

In general, the leadership style demonstrated by the female leaders is situational leadership. It ranged from being accommodative, open, and a good listener to being firm, and putting their foot down and autocratic when needed. One participant termed situational leadership as “freestyling” regarding herself as a democratic leader. A second participant stated that, due to recently joining the mining industry, which she deemed a tough one, she has changed her leadership style to be a confrontational leader. P10 expressed how her leadership style changes, using different approaches:

*Accommodating, good listener, supportive. Have engagements with people. Can be firm in certain situations. Having a consistent personality, I try by all means to have that. (P10)*

P11 bases her leadership style on the performance of her subordinates. Each subordinate is led in a style that suits how they perform. P11 explained:

*So this is my leadership style: if I know definitely that you are one of these employees that deliver, I don't have to check on you. I just know that would be sorted out. And then differently we also have those employees that we have to check ten times to make sure that they're doing it. (P11)*

P5 expressed that different teams require different leadership approaches, based on her own experience of leading different teams:

*I have led different teams. I've led the operations team and then went back to the technical team and I realised that you need to approach the two differently. I'm usually very clear on the expectations. (P5)*

An interesting expression was provided by P6. She described her leadership style as “freestyling” – leading in a manner that is suited to the situation:

*So for me, I always say I'm freestyling. It means my leadership style depends on the situation at the time. So for me, there's no one-size fits all ... I always say to myself, there's no bible for life and there's no bible for leadership as well. As a leader, you do make mistakes. The important part as leaders who make mistakes is to learn from our mistakes. (P6)*

P7 puts people first, adopting a people-oriented leadership style:

*So I'm people-centric most times. Yeah, most times I'm people-centric. I also pull people on the journey together and it's less push. Pushing is during moments of stress or high pressure where I feel like now we need to move faster. (P7)*

P12 switches between leadership styles as and when needed, for example, from authoritative to transformational:

*I think I'm someone who can also transition between the leadership styles because I think a good leader knows when to be what at the particular time. So whether you are a very authoritative or whether you're now the transformational leader who's you know, depending on what your team needs at the time, I think I'm able to switch between the leadership styles as and when needed. (P12)*

P13 is collaborative, firm at times, and accepting of different views:

*I'm a very approachable person. I am collaborative and when there is a need, I would put my foot down, but I'm a person that likes to collaborate with people and get ideas from people. I am not a person to dictate. (P13)*

P2 considered herself a democratic leader recognising both its strengths and weaknesses:

*The leadership qualities that I possess, I think I'm more of a democratic leader. That is a strength and a weakness at the same time. The reason why I say it's a strength and weakness at the same time is because I believe in hearing everyone's opinion. As a leader, you don't need to make all the decisions because also you are stifling creativity. However, it takes time making decisions. When you always lead like that, giving everyone the platform to bring up their ideas. (P2)*

P3 described herself as a confrontational leader as she has found that since joining the mining industry from the fast-moving goods industry, the former requires a firmer leadership style:

*I was more of coming from the empathetic point of view, let's do this as a team. Let's do it together, but we don't have the luxury of time because you are always pointed in a million directions. I just need you to do your job and that's it. So I have ended up being more of a confrontational leader, I just need things to be done and we will have the uncomfortable conversation because I feel like people are not used to be told you are not doing it right or you are not performing. (P3)*

#### **4.3.1.2 Grapple to find own style to lead effectively**

The participants, in general, believed that they do not require a leadership style different from their male counterparts. These female leaders were cognisant of the fact that there was a temptation to act more like the males or be more aggressive at work to try and get their voices heard. However, they viewed this as being an act or facade that would not be true to their authentic selves and personalities. P6 found that she and some of the women in the mining industry had changed, becoming more aggressive because it is a male-dominated industry and they want to be seen and heard. However, P6 believed that women do not need a different leadership style to men:

*Something that I was actually reflecting on, sometimes as females we think we need to be aggressive sometimes. You think we need to be aggressive. For me, I really believe that you don't need to be as a female. You don't need to be aggressive because sometimes you feel like people are not listening to you as a female and then now trying to change your leadership style and become more aggressive. So for me, I believe as a female, we don't need a different style from the male you know. (P6)*

P7 also believed that women do not have to use a different leadership style, but instead use what works for them. They do not have to be aggressive just because they work in a harsh environment:

*It's not that women need a different style. I think they need to be comfortable with their style without changing it because of the environment and how people have that bias. There are too many stereotypes against women. Oh, she's too aggressive. She's too emotional.... I don't think women need a different style. I think they should be comfortable with their own style of leadership and not change it because of perceptions. (P7)*

P5 endorsed what P6 and P7 shared:

*I don't think they need a different leadership style. I think we must just not try to mimic our male counterparts because maybe our, you know, softness helps bring the softness or bring the balance, but I really don't believe it should be any different. (P5)*

#### **4.3.2 Theme 2 – Figuring the co-existence of motherhood and marriage or prioritising work**

In motherhood and marriage, the challenges that the women leaders have faced are pregnancy and taking care of their families both of which compete with work. Of all the challenges, pregnancy emerged as having the most negative impact on their work. The participants revealed that they are usually moved away from their regular duties when pregnant, unkind words are said by their leaders, and their salary increases are negatively impacted. Pregnancy appears to be a major curtailment to career progression.

##### ***4.3.2.1 Simultaneous managing of work and motherhood***

In general, the female leaders seem to manage being mothers quite well. Comments pointed to the importance of a support system. Having extended family members or a helper makes managing their families easier. However, three participants stated that raising children was a major challenge. One participant explained that having a child motivated her to work harder and another stated that they sometimes have to sacrifice family time to ensure that they deliver on their job, and pointed out that women also have to work harder in the mining industry to prove themselves. P7 found balancing work and motherhood challenging:

*Balancing working, being a mom, that's for me is one of the big challenges. (P7)*

P10 used being a mother as motivation for her to thrive in the mining industry:

*It actually affected me a lot ... when I look at it now, it's probably one of the things which drove me even more to make sure that I achieve what I needed to achieve as an individual. Because like now, if I'm thinking about it, if I gave up, then when all those things were happening, well, what would I say now? Would I be blaming the fact that I had a child for me not succeeding? (P10)*

Due to women having to work harder than men to prove themselves in the mining industry, P6 has sacrificed time away from her family for work:

*So, it's very hard because you're thinking how many school holidays in the year there are, four, huh? But you could see that your male counterparts take leave four times a year for school holidays, and you realise why I can't do it. It goes back to that point I was saying as a female you need to work twice as hard as the male. So, sometimes you have to sacrifice family so that you can push your work and also for females, it takes time to prove yourself. (P6)*

#### **4.3.2.2 Surviving the struggle of managing married life and work**

Being married has significantly affected the lives and careers of the participants. Family and household duties were cited by the women as time-consuming and unfair as men usually do not attend to most of these duties – a reason why male co-workers' careers progress faster. One participant stated that their partner did not have a clear understanding of the demands of the engineering field and, therefore, they never saw eye-to-eye, which led to a divorce. P10 shared that being married and working is difficult and that the husband has lighter responsibilities and can progress in their career:

*Obviously, getting married, it happened as well along the way. So it's not easy because like, yes, as a wife, there are duties that you need to take care of and when you go home, it's not like a colleague who is a male. They go there and they sit and do whatever else they want to do. They continue. For me when I get home, I must be a wife, there is school. I must make sure everything is there. (P10)*

Some people do not fully understand the workload and pressures of being an engineer and in the case of P13, her husband's lack of understanding led to their divorce:

*As much as you're working as an engineer, it doesn't mean that your counterpart understands the career requirements and the pressures that you get. Sometimes you come back tired and you don't wanna do anything, but there's an expectation that even if you come back at 11, you must come back and cook. Some of the responsibilities, I neglected. We grew apart with my partner. I ended up divorcing. (P13)*

P5 stated that in a marriage the responsibility to take care of children mostly resides with the mother and this is why women do not progress as fast in their careers:

*And being married also, although we laugh about it, it does slow you down because, although you become a unit, if you both chasing your careers, one of you has to sort of slow down because when kids have issues, when there is school things, and so many. That normally becomes the mother of the kids responsibility. Because the father might be like, when they are sick, I don't know what to do. (P5)*

Two participants revealed that not being married is probably the reason why they have been able to progress in their careers. One participant refused a marriage proposal to be able to progress in her career:

*After I got my GCC, I was obviously approached for marriage, but I was like, marriage? Because you can see a relationship if it will work. You know, if it's gonna work out or it's just a fleeing for now and then, unfortunately, I chose my career. Because I was starting my career. (P11)*

The second participant viewed not being married as fortunate:

*So, fortunately, I'm not married. Maybe that's why I'm where I am. I don't know if I was married. What that would look like, because I think with kids, I'm the leader at home so I don't know if someone else giving me rules and restrictions and also chasing his own ambitions and then me chasing my own ambitions. So, I think*

*because I'm single, I have not had the same type of discussions when it comes to career growth. (P7)*

#### **4.3.2.3 Enduring role changes triggered by pregnancy and safety concerns**

It was clear from the participants that being pregnant is frowned upon in the mining industry. The participants stated that when they were pregnant, they were moved from their core roles to roles that were not meaningful or career-developing. One participant was asked to notify their leader early if they were planning to fall pregnant, as in giving notice of intent to fall pregnant. One participant was even used as a “scarecrow” and discriminated against by senior leaders. P12 shared that their mining areas are not safe for pregnant women and due to this, women are moved offsite and placed in office-bound roles. Usually, these roles add no skill or career development benefits. It is concerning for P12 that for months, women are made to do roles that add no value while pregnant and this curtails their career progression. P12 explained:

*Women get to a certain point where they expand their families, which means you're, at that point, pregnant and so depending on your role and contribution to the value chain, some women have to be moved for their own safety, physical safety, and obviously the child's safety. And that alone is sometimes seen as a negative. It has some form of negative connotation. For production right, because now, hey, you're the engineer, etcetera. They're not moved into function roles that are important or of significance. Or career developing roles. So something that really within the seven months, could be something that they've developed themselves or they've developed a new skill or contributed positively to the business. It's kind of like they're just thrown, from what I've seen, just thrown at the training centre. No one really knows what they do. I've yet to see a lady who's come back from maternity leave and you know, progressed within a two to three-year window post having a baby. You basically come back and have to start over. (P12)*

P5 experienced her career slowing down when she was pregnant. Her supervisor at the time made her do work that added no value to her career path. Her supervisor, who was

male, also showed no understanding of the struggles that women in the working space face:

*My very first leader when I was a graduate ... I remember when I did my first development plan with him, this is now the second year. So he's asking me: So you must tell me if you planning to fall pregnant so that I can plan accordingly because you'll be out of action for like a year. I was very offended by that comment. I'm like, but it's got nothing to do with my development and I think also for him. It was like, yeah, I mean, you're the only female in my team. I need to know how to work around you. Okay, so now what if I don't fall pregnant? Is it gonna count against me to say hey, that's the KPI I did not meet? So, I think that was like, umm, then I had my first child, I think the third year I was working, and yeah, my leader at the time was like, the moment I told him, it's like off the plant, stay in the office. So, because he took an extreme, I felt that he actually held me back because for like five to six months I was working with like training records, pulling data, doing all those things. When you know my peers were doing meaningful work. (P5)*

P13 alluded that being away on maternity leave creates a gap in one's career. She also had to work until the final days of her pregnancy due to work pressures. This is a contrast to what the other female participants had experienced, where they were made to do light, less meaningful work. P13 explained:

*You get to take some time off work, maternity leave, you are restricted in duties. And you come back it's as if you've been away for four years and in some instances, depending on the role that you're doing, I remember with my last born, I was working until a few days before delivering because there was production pressures and there was work that I needed to deliver and even during maternity leave you get calls that you know, there are some documents that need to be submitted and all of that. It's not easy. But when is the right time to have a baby? (P13)*

P4 shared her experience of how people gossiped about her being pregnant and how she had ruined her career. Even female leaders were not supportive of her being pregnant:

*So when I fell pregnant and I was a graduate and I was engaged at that time, getting ready for marriage. But the discrimination that I got was beyond, beyond measure and you know, you hear people saying things. This coming from the leadership. Yeah, I should have waited until I got my GCC and some things. You have to be taken away from even your current engineering position. Because of those things you see, while my other 2 male colleagues progressed. But anyway, I was even used as a scarecrow. There was a lady who said, ohh, are you Lebo, pleased to meet you. You know what I've heard about you? You heard about me, right? Yeah, Blakey. Blakey was a leader. And then she said, Blakey always talks to them and said don't be pregnant. Don't be like Lebo. You know you're gonna ruin your future and career. So pregnancy and being a mother it's always been painted black as a scarecrow for other women. Don't get pregnant. Don't get married. Don't be too much of a mother. You cannot be feminine. (P4)*

#### **4.3.3 Theme 3 – Prioritising personal safety and calling for a conducive environment for women**

With the mining company striving to increase the number of female employees, the participants raised concerns about safety and the difference between men's and women's physical strengths. The use of technology can help women do physically demanding jobs in the plant.

##### **4.3.3.1 Protection in the absence of adjusting the workplace to be safe for women**

Mining and processing plants cover a big area. At night, one can feel unsafe, especially if there is poor lighting. With the high rate of gender-based violence in the country, it is understandable that women employees would feel vulnerable in such spaces. Therefore, if the mining company wants more women, their plants need to be safe for women. P6 shared an experience of one of her shop floor female employees. The employee felt unsafe when performing some of her duties and this limited her at work. Insufficient bathrooms were also pointed to. P6 elaborated:

*I was actually talking to the ladies from logistics. They are shunters, as shunters you need to walk on the ground when you switching the points. But when you're*

*going to the exchange yard, it's a very open area. You know, anything can happen to you. It's not safe, so now it's ending up limiting your potential to deliver on your work because now you're thinking I cannot go there at night. It's not safe for me. The other one that I'm always advocating for is the working environment, which is not conducive for the females. But how do you make the environment conducive for the females? Because in this industry you can see it's a male-dominated industry. Even if you go into the bathroom, you find that there's one female bathroom, there are ten male bathrooms. (P6)*

#### **4.3.3.2 Agitating for automation and quick adoption of technology**

The participants emphasised the importance of demonstrating capability in the mining industry, to prove that women can do what men can do. However, it is a fact that men are physically stronger than women. The mechanical engineering space, especially artisanship, is very physically demanding and this is the area in mining with a paucity of women. The participants were of the view that automating the plants and using technology could make the physically demanding tasks much easier. P4 stated that the mining industry is slow to innovate and felt that she has had to hold back her innovative spirit:

*Slow to innovation. I think first of all coming from varsity and you come with the energy of a continuous improvement of understanding problems and we've been trained to solve problems. The mining industry doesn't work like that. Your breaks have to be applied a bit because people are not having the same hunger to continuously improve things. (P4)*

P7 suggested that the equipment be made user-friendly and unisex to make it easier for females to do mining jobs:

*Where we can improve is also technologies. I'll give you an example, if it was a dozer driver, right, so women are capable of driving a dozer, but height-wise, you know maybe they can't reach the pedals, but you can always adjust. Make it. Make the equipment unisex-friendly. Either male or female. (P7)*

P9 believed that automation could level the playing field and allow women to take on jobs traditionally reserved for men due to the heavy manual labour involved. She stated:

*As we introduce more or empower more women in mining, let's make the environment conducive for females. By that I mean, some plants or some areas are still basically manual. So they're more physical labour than automation. So if we can drive automation in the plants it could help with the comments that are normally said by our male colleagues that you know, when it comes to taking spanners, the 50/50 ways is the 50/50. Sometimes the big palms or the big bolts or big spanners, females tend to have challenges with that. So if we can make the plants be automated, improve on the process to drive automation. It will also help to minimise such comments where our credibility is taken away because of now just the physical power. (P9).*

#### **4.4 Support that female leaders in core leadership roles receive in a mining company**

The last research question read as follows: "What support do female leaders in core leadership roles receive in a mining company in KwaZulu-Natal?" The participants in this qualitative study revealed that female leaders in the mining company received three types of notable support: (1) non-technical training to fit, survive, and lead in the mining workplace; (2) mentorship and coaching; and (3) reporting platforms. Each of the three themes is presented below.

##### **4.4.1 Theme 1 – Training**

Initiatives that the business is currently implementing were mentioned by the participants. These initiatives include a variety of topics and address some of the challenges that have been highlighted. Anti-harassment training focuses on sexual harassment, leadership training is for all employees in supervisory roles, Mbokodo training is for young females who have studied mining relevant qualifications to gain work experience, and the Women in Mining (WIM) Committee which drives initiatives or campaigns to support women in the industry.

##### **4.4.1.1 Anti-harassment training**

The company administers two "people surveys" annually. These surveys capture feedback regarding the company from the employees. Female employees, especially

young females, have highlighted how they have had sexual advances from men. In response, the company implemented a formal training initiative to educate all employees on bad behaviour. The training is termed anti-harassment training, covering bullying and discrimination and having a very strong focus on sexual harassment. The study participants detailed their experience regarding this training. Responses from P5, P7, P8, and P1 are provided below:

*I think the cascading of the sexual harassment or was it harmful behaviours training? Let me put it like that, which focuses on sexual harassment. I think it's a good thing that the company is doing because it actually has informed a lot of people that there is support. (P5)*

*So a lot has been done around training on harassment, bullying, I think. I think at lower levels the message is not really owned, but a lot has been done just around that. Also just the work around the everyday respect to enter the facilities to assist, just the integration of ladies within the operating areas. (P7)*

*I'm aware of their sexual harassment training that was done earlier this year, so I believe from the people survey feedback that the company did identify that there is still an issue in terms of that. (P8)*

*So even after the training, they also make fun like, ohh no, I'm not allowed to open the door for you. They almost taking it to the extreme, you know. (P1)*

#### **4.4.1.2 Leadership training**

Participants believed that the company has done well in offering management training to middle management employees. The training referred to is the Duke Management Development Programme (MDP) (also referred to as uKhahlamba, the Duke Development Programme or the Superintendent Development Programme within the company). However, the participants felt that a leadership programme tailored specifically for women is needed, as the challenges that career women face differ from those faced by men. The MDP indicates that the mining company of interest is willing to pay to train and develop its employees. P8, P9, P6, and P10 referred to the MDP and their responses were as follows:

*I think there is a sup training. Yes, it is for everyone, but it's also empowering female leaders in getting those management skills that will help us navigate our careers. (P8)*

*Yes, you are a chemical engineer by qualification but to get to the management role, what are the good qualifications to get you there? To make you actually understand you as a person as well, just like the training we had, the Duke Management Development Programme, the Superintendent Cohort Training. (P9)*

*... but at the end, I still believe you can do a leadership programme for females you know. Remember, we can do leadership programmes like you guys are doing the uKhahlamba, but remember it's looking at overall ops, finances, and leadership. But for me, I think leading as a woman is different from leading as a male. (P6)*

*And I think with the training that's being done leadership obviously, uKhahlamba, it's for everyone, but specifically we need to probably investigate the impact on female leaders if we are focusing on that. (P10)*

#### **4.4.1.3 Mbokodo training**

The participants referred to the Mbokodo training that the company offers. This programme is specifically for women. It aims to hire women within the host community and offer them work experience in the mining industry. The women selected have qualifications related to math and science from Technical Vocational Education and Training (TVET) and Further Education and Training (FET) colleges. Most of the women who join this programme end up being hired as permanent employees within the company and some are offered opportunities to study further. P6 and P8 indicated that they are aware of the Mbokodo training programme offered by the company:

*Like I was actually looking at the Mbokodo Programme. Brought in six females last year [2023] and now those females started going in the positions. We are recruiting them and also we're working on the strategy to bring in iMbokodo females that have engineering trades so that we can have those MCs [maintenance controllers] coming into the leadership roles. (P6)*

*There's also the Mbokodo training specifically geared towards women, getting women into the mining industry and giving them some kind of experience. (P8)*

#### **4.4.1.4 Women in Mining (WIM) Committee**

The participants mentioned the WIM Committee that the company established some years back. The committee aims to improve the work experience of women within the mining industry. It plans events and has initiatives such as the modification of personal protection equipment (PPE) to be suitable for female bodies. The committee's impact is highly visible during August, which is women's month in South Africa. P6, P8, and P10 elaborated on what the committee has achieved including the holding of a Women's Day conference and what was learned from the conference:

*This year we had a session, the Woman's Day conference, where we had motivators, people from the industry, females that have succeeded in the industry. Went as far as understanding the financials and something that most of the women are struggling with to manage. (P6)*

*I am aware of the Women in Mining Committee, so I'm aware that there is a space as a woman or a community that you can join to effect change in the organisation. (P8)*

*Women in Mining conference. They were talking about things we should be doing as women because naturally as women we are not supporting each other. It's just how it is. We want to destroy each other instead of supporting each other. If one female is succeeding, we want to make sure that we pull them down, but we shouldn't be doing those things and that was the theme at that conference. (P10)*

P4 pointed out how the company has been considerate by modifying PPE to suit a woman's body. This initiative came from the WIM Committee of the mining company of interest.

*I've seen with the PPE for pregnant women, which makes them comfortable and I remember when I was pregnant and I was still at Lonmil when I couldn't zip my pants and I would wear bigger. So for a company to know that a woman needs a*

*more comfortable pants that can stretch; it's not their responsibility, but they're taking it upon themselves and they've made female pants that has drawstrings. I really appreciate that. (P4)*

#### **4.4.2 Theme 2 – Mentorship**

The participants emphasised the importance of having mentorship and guidance in the mining industry. They mentioned having other females within the industry being role models. It was also suggested that to increase the number of women joining the mining industry, there is a need to have more high school girls pursuing engineering studies at the tertiary level.

##### **4.4.2.1 High school girls**

One participant stated that the WIM Committee has started an initiative to mentor high school girls. Another participant stated that the company needs to examine how it can support the schools in its host community by, for example, improving the quality of education offered. A third participant stated that more female artisans are needed in the industry and the recruitment process starts from high school to ensure that females actually embark on further studies in the mechanical engineering field. P6 shared how the company of interest has been empowering the youth through the WIM Committee:

*... also in the Women in Mining structure, we are empowering [female] youth from high school and youth from other areas in mentorship programmes ... So I think we have started improving in our Women in Mining programme. (P6)*

P1 pointed to the need for young high school girls to start pursuing engineering-related qualifications. She explained that the reason why males still dominate the mining industry is because males study engineering courses:

*Unfortunately, compared to the males and the females, it's very little, very small percentage of females. But it does come back down to more men studying these trained skills, of course. So even starts before then, so it probably starts in high school when you actually have to get it in females' minds. Actually, you could be an artisan and this is what artisans do. I think it's being perceived as a heavy or*

*manually like intensive work, manual work, a lot of manual work and it is. But we've also seen women who can do it. Like we have a rigger at our plant and she's able to do that. (P1)*

P13 highlighted the importance of investing in the education of young people, especially young girls. She pleaded that the mining company of interest do more to improve the quality of education offered to the children in the host community:

*So it starts even outside RBM, we are in a community where we have young, young women, young men, cause we must also not leave out the man child or the boy child. If I'm only talking about the girl child, so the programme provided. I understand that RBM is giving back to the community. But what about mentorship? What about education? What can RBM do within the community so that a person from the community doesn't need to send their kids to Grantly, to Felixton, to Richards Bay, for them to get the good education? (P13)*

#### **4.4.2.2 Mentorship and coaching**

The participants have had both positive and negative experiences with mentorship. Most of the negative experiences concerned not being matched with the right mentor or the mentorship not resulting in the intended outcome. There was one participant in the mechanical engineering field who stated that she could not find anyone to mentor her in her field. It must be noted that the mechanical engineering field is still male-dominated. The men did not want to impart knowledge to her. The participant resorted to having a mentor in the HR department. One participant felt that having a female mentor is preferable given that they already understand the challenges that females face and there is no need to first explain things. P11 shared her experience in the engineering field where she struggled to find a mentor:

*You ask the person to be your mentor and they ask you, what you want to achieve? So for me, especially being in the engineering field. I felt like asking people to be my mentor is more like intimidating them. Why do you wanna achieve something in our field? They hold back, they don't want to give or share information so that you can also be a good leader or succeed in the same area. So what did I end up*

*doing? I went and got a mentor in other departments like HR. Someone who can groom me in like people management, cause engineering-wise wise I know without a doubt that I'm good in that field. In my space, I've never worked with a female and there's never been a female in engineering in my engineering space. So it's been males and yeah, so since I started my career I've never worked with the female in the engineering field. So here at RBM, it's the first time seeing a woman in the leadership role. (P11)*

P10 viewed the mentorship programme she was part of as ineffective, as the match between mentor and mentee was not compatible. The company, at the time, was just bringing people together without set criteria. P10 stated:

*They were just allocating people. This is your mentor. So that's how it happened. The relationship at the time with my first mentor, actually it didn't work that well because as opposed to, I think maybe the matching was not done that well because even if it's people who decided on the mentor. (P10)*

P13, however, had good mentors and one of the reasons for the good relationship was that the mentors were in the same field as her:

*I've had mentors and the relationship was good because they were in the same line as myself. It was a requirement that you must have a mentor. They were all males by the way. (P13)*

P2 had an opportunity to pick her mentor and explained why she chose that individual. The relationship, unfortunately, was not fruitful. P2 said:

*I've had a mentor initially. It was a woman in a senior role within the organisation. I think more than anything, she was more of a sounding board. And really I picked her because I looked at her career path and I made the decision that the career path that she followed is the same one I would like to follow someday. (P2)*

P5 has had the same mentor for a long time. The mentor is male and it is interesting to learn that the relationship has been beneficial to her development. P5 stated:

*I've had two mentors. Okay, but formally I've had one mentor and he's been mentoring me for a very long time, although he's not part of this company, he became my mentor when I was at Anglo and we just kept in touch. He is that person that you know if I just want advice or career development or even things that I want to do next and I call. (P5)*

P4 provided a positive perspective on female-to-female mentorship. She stated that women have similar challenges and when a female is mentored by another female, she does not have to explain some things. The conversations can be easier and they can relate with each other better. According to P4:

*I think one thing we've touched on is mentorships. That really can help and you know, with a lot of women climbing up the ladder, it gives us a huge pool of women, female leaders, that can be approached for coaching, for mentorship. Because I'll tell you, it's easier to be mentored by a woman. Not that it's easy to be mentored by a woman, but like I said, I have Bongji as one of my mentors, you know, I don't have to explain certain things to her. She already gets what are the challenges that a woman faces as a leader in the mining industry. (P4)*

#### **4.4.3 Theme 3 – Reporting platforms**

The participants mentioned reporting platforms, such as Speak Out and MyVoice, which the company has for reporting any form of mistreatment. Participants prefer these platforms because they believe they are safer and there will be no discrimination since they are anonymous.

##### **4.4.3.1 Anonymous reporting**

P9, P10, P4, and P11 mentioned the various platforms and channels that the mining company of interest has in place to address issues. These range from anonymous reporting platforms to workshops. The participants' responses were:

*There is my voice as well to speak out. You can speak out. You can also be anonymous on speak out to say this is what is happening in my section. P(9)*

*The company is doing a lot currently to make sure that people are heard. Like there's my voice. There's a carehab if really things are sensitive. So there's a lot of platforms where people are like able to voice their concerns if they are really being affected in that way. (P10)*

*Uh, the workshops that's been held with females, where they can voice their concerns either individually or in groups as well. And then the platforms that we have available to report these types of things. (P4)*

*They have opened a platform I believe for where you can go report all those things that are not right that are happening. The portal, the anonymous one...the voicing out platform – it's good because you can always voice out if you are not treated fairly. (P11)*

#### **4.5 Summary**

The themes that emerged in this chapter were a true representation of the lived experiences of female leaders in the mining company. To address the first research objective, "To identify the leadership challenges that female leaders in core leadership roles face in a mining company in KwaZulu-Natal", the themes that emerged regarding the challenges experienced were the lack of a support structure, mistreatment, abuse by authority, and being stereotyped. The second objective, "To explore how female leaders in core leadership roles deal with the challenges faced in a mining company in KwaZulu-Natal", revealed themes of the dominant use of the situational leadership style, figuring out the co-existence of motherhood and marriage or prioritising work, and prioritising personal safety and the call for a safer and more conducive environment for women. For the last objective, "To examine the support that female leaders in core leadership roles receive in a mining company in KwaZulu-Natal", the themes that emerged were training, mentorship, and reporting platforms. The challenges that the women have experienced, their leadership style, and the support currently available to them in the mining company were explored.

The next chapter discusses the results of the study in light of the literature reviewed in Chapter 2.

## **CHAPTER 5: DISCUSSION**

### **5.1 Introduction**

Following the presentation of the findings of this qualitative study, this chapter aims to align the objectives of the study with the main findings, and critically discuss and highlight the findings of the study in relation to existing literature. In this regard, the objectives were:

- To identify the leadership challenges that female leaders in core leadership roles face in a mining company in KwaZulu-Natal
- To explore how female leaders in core leadership roles deal with the challenges faced in a mining company in KwaZulu-Natal
- To examine the support that female leaders in core leadership roles receive in a mining company in KwaZulu-Natal

The findings of the study are reiterated in the next subsections with reference to the research objectives and literature.

### **5.2 Challenges faced by women in core leadership roles in the mining industry**

Participants in the study identified four themes that reflect the nature of challenges faced by female leaders at the mine. These are: (1) lack of support structure, (2) mistreatment, (3) abuse by authority, and (4) being stereotyped.

#### **5.2.1 Lack of a support structure**

Women not supporting each other is one of the subthemes that emerged. Andrews (2021) states that there are several reasons why women do not support each other. The first is the subconscious process termed “power dead-even rule”. Heim, Hughe, and Golant (2015) state in their book that for women to get along, they must see each other as equals within the group, that is, equal or even in self-esteem and power. This means that the key elements within the relationship must be “dead-even”. When there is a woman within a group of a higher status, the other members ostracise her and speak behind her back

(Heim, Hughe, and Golant, 2015). P10 in the study mentioned that women do not support each other and there is always petty fighting. The second reason is that women who have progressed to higher levels of leadership have higher emotional intelligence and typically will exude male-specific emotional intelligence (Andrews, 2021). These women are more assertive and confident. They have weaker female-specific emotional intelligence, which focuses more on interpersonal relationships and empathy (Andrews, 2021). Therefore, female leaders spend less time building relationships with other women and display more male-specific emotional intelligence. This is why they do not get along well with junior female colleagues within their organisations. This is sometimes termed “Queen Bee Syndrome” (Andrews, 2021). The third reason can be competition for positions. There are typically few leadership positions, and the pursuit of these positions can result in some women competing for the same roles and not supporting each other (Andrews, 2021). The fourth reason is the hardship that women have endured and the use of the common phrase, “I figured it out; you should too” (Andrews, 2021). This was specifically mentioned by P12 in the study, where she stated that other women expect all females to go through the thorns and trenches that they went through; they believe they do not deserve an “easy ride”.

Career progression is another subtheme that emerged, and several of the women leaders who participated in the study stated that their careers did not progress as fast as their male counterparts. The survey of 2,365 South African women in mining conducted by Kaggwa (2020) found the main challenges expressed by the participants were the lack of career progression, decision-making discrimination, and salary disparity. The women stated that this was attributable to their direct supervisors and the company policies. The lack of career progression can be due to the lack of mentors for women in the mining industry, as well as supervisors who are unsupportive of women in the industry (Botha and Cronje, 2014). However, 50% of the women who participated in Kwagga’s study stated that their careers progressed relatively normally or even fast. These were younger participants who were probably reaping the benefits of their companies intentionally hiring more women in leadership roles to meet statistical targets.

### **5.2.2 Mistreatment**

Mistreatment was a theme that emerged with the subthemes of bullying, racism, sexual harassment, and salary discrepancies. Mistreatment is strongly related to another theme that emerged, namely, stereotypes. These are stereotypes that women encounter in a masculine industry such as the mining industry. The racism experienced by the black African participants concerned the use of the Afrikaans language as a career-limiting weapon as they could not understand what was said during meetings or when given instructions. In terms of sexism, one participant was told that she “belongs in the kitchen”. Sexual harassment was also pointed to by the participants. One participant stated that she avoided work social functions due to an incident where inappropriate comments were made to her. The findings of sexual harassment and sexism align with a survey conducted by Kansake, Sakyi-Addo, and Dumakor-Dupey (2021) of women in the USA, Ghana, Ireland and other countries, to understand why there is a low participation of women in the mining industry. The majority of the participants in the study were women under the age of 40 years from Africa. In terms of challenges faced, 53% of the women had experienced gender-based discrimination and 37% had been sexually harassed (Kansake, Sakyi-Addo, and Dumakor-Dupey, 2021). Botha (2016) states that one of the challenges of female mine workers in operational roles in South Africa is sexual harassment. Sexual harassment is in the form of name-calling, whistling, derogatory language, physical contact, display of body parts, and, in some instances, sexual assault and rape. This is in line with the survey done by Kaggwa (2020) involving 2,365 women working in the South African mining industry, where ageism in the workplace was noted. Companies favoured training young women over older women (Kaggwa, 2020). Racism was also noted, with white women being favoured for training and having higher salaries.

### **5.2.3 Abuse by authority**

Authorities in this context are defined as male colleagues in the mining industry holding core leadership roles. Women in core leadership roles who participated in the study experienced abuse by authorities. They were not seen as equals. The women noted that they had to repeat themselves to be heard. Some male colleagues would not listen to their opinions and there were instances where they were told directly by authorities that

they did not belong in the mining industry and were only hired to meet the business target of having a certain number of black women. The women also stated that they were overlooked when it came to decision-making. Their voices were ignored and the opinions of male colleagues were acknowledged. Authorities in the mining industry need to embrace women joining the industry, otherwise, women will still face not only work-related hardships but also personal hardships. Perhaps authorities need a training programme to understand their impact on women in the workplace.

Given the above challenges, women in the mining industry have to work harder to prove their capability. Proving of capability was one of the subthemes that emerged under the theme of abuse by authority. Phoshoko (2022) states that women in the mining industry are not judged on their merit but rather on their gender, and for women to be seen in this industry, they have to sacrifice their femininity. Valadares, De Carvalho Neto, Mota-Santos, and Diniz (2022) concur that women in mining have to work harder than their male colleagues to show that they are competent at their jobs.

#### **5.2.4 Being stereotyped**

First, stereotyping is the outcome of a categorisation process where individuals from a specific social group (in-group) highlight the differences between people from other groups (out-group) while stressing the similarities among those within the same group. Stereotypes are perceived as generalisations regarding a group of individuals, where similar traits are attributed to nearly all members of that group, regardless of the actual differences among them. Stereotypes can exist in both conscious and subconscious forms; hence, individuals might stereotype others without realising it (Lieberman, Woodward and Kinzler, 2017).

In language psychology, a stereotype is considered a generalised belief about a particular category of people. Often, a stereotype refers to an expectation, whether positive or negative, that people might have about every person in a particular group. For example, the expectation may relate to the group's personality, preferences, appearance or ability. In essence, stereotypes are often generalisations that are overstated and not accurate and serve as a solid source of resistance to new information or change. Second, stereotypes relate to social identification which can be defined as the identity of the group

that the individual has classified themselves as belonging to. In this context, a person will associate with their group and experience an emotional bond with it (Liberman, Woodward, and Kinzler, 2017). Lastly, stereotyping relates to social comparison where individuals often compare their group to other groups (for example, women, black individuals, white individuals, those with social status, people of varying sexual orientations, persons with disabilities, or anyone deemed to belong to the so-called “out” group) (Liberman, Woodward and Kinzler, 2017).

In the current study, the overall and explicit stereotype from the participants was that the mining industry is still male-dominated and male colleagues still see taking instructions from women as going against the tradition that men are dominant. Throughout the study, it was evident that stereotypes are present in the mining sector, and that people hold stereotypes about others working in this field (out-groups), as well as about themselves (in-groups). Participants mentioned the area where the mining company of interest is located, which is the Zululand district in KwaZulu-Natal. Here, Zulu men are still not welcoming to female leadership. They adhere to the stereotype that women are supposed to serve men and are expected to be polite to male colleagues. This aligns with what the ILO (2021) noted, that the mining industry workplace culture is plagued by gender stereotypes that favour traditional male roles and lifestyles. In the present study, most stereotypes about females and female leaders turned out to be negative.

The findings of this study also indicated that female leaders experience stereotypes on three levels: emotional, cognitive, and behavioural. The potential adverse impacts of stereotypes can involve legitimising baseless biases or ignorance, reluctance to reconsider one’s beliefs and actions, and hindering certain individuals from stereotyped groups from fully participating in or succeeding in specific activities or domains. Lipton, O’Connor, Terry, and Bellamy (1991:129) describe occupational stereotyping as “a preconceived attitude about a particular occupation, about people who are employed in that occupation, and about one’s own suitability for that occupation”.

A subtheme that emerged was that women are perceived as emotional. P4 stated that this is used by men to brainwash and silence women when they express their thoughts at work. Research by the Intergovernmental Forum (2023) on Mining, Minerals, Metals

and Sustainable Development indicates that sexist biases in the mining industry prevent women from entering the industry. The forum found that in Latin American countries sexist biases are prevalent. Managers might encounter difficulties such as staff departures and reduced productivity due to stereotypes present within mining companies. When stereotypes exist in organisations, these mindsets can be hard to manage and challenging to override, and when they are negatively oriented, they can result in poor and unwise decisions. This ultimately establishes significant obstacles to the progress of minority groups, including women. Moreover, false stereotypes can contribute to discrimination, sexism, persecution, and racism. If these stereotypes are not eliminated from organisational practices, employees may struggle to progress and succeed within the organisation (Lieberman, Woodward, and Kinzler, 2017).

### **5.3 How women in core leadership roles in the mining industry handle challenges**

The participants in this study revealed three ways that female leadership deals with challenges: (1) by adopting a predominantly situational leadership style, (2) figuring out the co-existence of motherhood and marriage or prioritising work, and (3) prioritising personal safety and calling for a conducive environment for women.

#### **5.3.1 Dominant use of the situational leadership style**

When dealing with challenges at work, the type of leadership style has a big impact on the outcomes achieved and the results. However, when the participants were asked to describe their leadership style, they were confused between management style and leadership style. Nienaber (2010) attempted to determine the differences between the two terms and concluded that they are similar. Wajdi (2017) states that most people assume that managers are leaders. According to Yukl (1989), these two terms differ in the sense that managers aim to achieve a well-functioning work environment, while leaders challenge the status quo and encourage people to try new things.

Based on the description of their leadership style that the participants shared, the female leaders exhibited situational leadership, transformational leadership, democratic leadership and people-oriented leadership styles, with situational leadership being the

most dominant. These findings are similar to Maseko's findings on female project managers at Eskom, who exhibited a people-oriented, democratic and transformational leadership style (Maseko, 2011).

The Situational Leadership Model by Hersey and Blanchard (1972) is a contingency theory approach to leadership, which upholds switching between leadership styles depending on the situation. The model indicates that a leader ought to adopt one of four leadership styles based on the group's readiness, skills, experience, and dedication (Hersey and Blanchard, 1972). The Situational Leadership Model is based on utilising various levels and combinations of two types of leadership behaviours, which are relationship behaviour and task behaviour. First, a leader demonstrates relationship behaviour, or relationship-focused leadership while interacting with others through dialogue, conversation, and active listening. Relationship behaviour refers to a leader's ability to foster personal connections, rapport, comprehension, encouragement, and enthusiasm within the team (Hersey and Blanchard, 1972). Second, a leader shows task behaviour, or task-oriented leadership, by addressing more specific and frequently transactional aspects, meaning the managerial facets of leadership (Hersey and Blanchard, 1972). Task behaviours encompass establishing policies, regulations, guidelines, incentive systems, and various frameworks. Task behaviour provides clarity and enables team members to comprehend what actions they should take and when. The most effective leaders are "situational," able to adapt to any situation and discern if they must involve themselves at a strategic level or get into the details.

The four leadership styles are telling, selling, participating, and delegating (Hersey and Blanchard, 1972). First, the telling leadership or directing style is the most task-focused leadership approach where the leader instructs team members on tasks and timelines. Second, the selling or coaching leadership style is suitable for teams that possess low skills and experience yet demonstrate confidence and a desire to succeed. In various situational leadership models, the selling leadership style is known as coaching leadership. Selling leadership occurs when a leader determines what, when, and how tasks should be done while motivating and inspiring the team by clarifying the fundamental purpose. Third, participative leadership emphasises individuals and

alignment over providing specific directives. It is occasionally referred to as facilitative or collaborative leadership. Finally, the delegating leadership approach is particularly beneficial for skilled and capable team members who are self-assured and eager to contribute and excel. The leader takes a step back and intervenes when team members require assistance, but not for monitoring initiated by the leader. Therefore, a situational leader invests effort in comprehending each team member to apply the most suitable leadership approach for everyone (Hersey and Blanchard, 1972).

In this study, the female leaders at the mining company explained that they assess the circumstances and react based on what is needed at the time. Some participants stated that when giving instructions or delegating work to subordinates, there are those who do not have to be chased, while others require frequent check-ins. This speaks to the situational leadership theory explained by Hersey and Blanchard (1972) where the leadership style applied is determined by the maturity level of the subordinate. They also mentioned that they like to consult others when dealing with challenging or unfamiliar situations. This influences their leadership style, as it is shaped by different views, which is why the leadership style tends to be situational. The disadvantage of many leaders is their lack of the situational awareness required to know which leadership style to use. In a different vein, many leaders have a dominant leadership style that they rarely stray from. This is especially true for autocratic, task-oriented managers.

The application of the transformational leadership style by the participants is in line with Bezuidenhout and Schultz's (2013) findings from research at a gold mine in the North West Province, where most leaders were found to be using the transformational leadership style. Some of the participants stated that they like to inspire, challenge, and motivate their subordinates, which is one of the characteristics of transformational leaders, as stated by Hughes (2010) and Daft (2018). The female leaders appeared to be more human-oriented when they discussed their leadership style. Human orientation is one of the six leadership profiles that Vinberg et al. (2023) mention. The participants exercise an open-door policy with their subordinates and are generally concerned about their mental health. Alimo-Metcalfe (2010) describes that women are more focused on motivating others and have less self-interest compared to men. They encourage everyone

to participate, care about the well-being of their employees, and believe that people work best when they feel good (Alimo-Metcalfe, 2010). More research is required to understand the leadership style of females, especially in core mining leadership roles. The data available and the results of this qualitative study are not conclusive enough to generalise the findings. With further research, it would be important to truly ascertain the leadership style of women, as women in the mining industry face different challenges than men. Therefore, successful or thriving female leaders who are in leadership roles exhibit a leadership style that is capable of navigating all the barriers imposed upon them.

### **5.3.2 Figuring out the co-existence of motherhood and marriage or prioritising work**

Motherhood and marriage was a theme that emerged from interviewing the participants. Pregnancy was stated by the participants to curtail career progression. The time taken off while pregnant is so long that male counterparts progress even further ahead with their careers compared to women. One participant explicitly stated that she turned down a marriage proposal so that she could build her career, and another participant was used as an example by her leaders to other employees of how having children can limit one's career. This supports Moalusi and Jones' (2019) research findings on female South African open-cast mine workers. They found that women postpone marriage and pregnancy to focus on their careers because they think the time spent being pregnant and raising a family will slow their career progression. Regarding marriage, one participant stated that she had to let her husband's career prosper while she focused more on the children, and another participant ended up divorcing because she believed that she had neglected some of her marital duties. Mashaba and Botha (2023) state that one of the reasons why there are fewer women in the mining industry is the poor work-life balance that the industry offers. Mining operations run 24 hours, seven days a week, with shift work, breakdowns that need to be attended to, and various job commitments. This poses a challenge for women who have to balance work with domestic and marital duties. For the participants who already had children and were not married, they stated that having children had not slowed their careers and attributed this to the strong support they received from their families. In their research on 149,000 women who worked in

mining across 142 countries, the ILO (2021) found that work-life balance and unaffordable childcare services were significant challenges for women.

The mining Industry needs to give women meaningful work to do while they are pregnant. This will make women feel like the time spent away from the plant is not wasted. They can learn new technical skills during this time, which will aid them in their careers. Additionally, the mining industry needs to take advantage of remote work or online systems. Women can work off-site and remain productive.

### **5.3.3 Prioritising personal safety and calling for a conducive environment for women**

The female leaders who participated in the study shared that mine work can be physically demanding, especially artisanal work. Artisans do jobs related to welding or boiler-making, rigging, and fitting. These jobs are labour-intensive, and few women do these jobs. One participant shared that she motivates female artisans to do difficult jobs so that they can be fully competent and gain knowledge that will help them if they move on to supervisory roles one day. Another participant stated that driving a dozer is challenging for females due to height limitations. Using technology to make levers and pedals adjustable can make it easier for everyone. Kilu, Andersson, Sanda, and Uden (2017) state that since the industry is male-dominated, there is a perception that women lack the capability and strength to perform mining jobs, reinforcing the perception that men make better mining employees. Kaggwa (2020) states that more men are hired in core operations jobs, such as operators, artisans, engineers, and maintainers because there is a perception that men have the physical strength to do these jobs better and faster.

According to Mining Safety (2021), women differ anatomically, biochemically, and physiologically from men. Women have a smaller stature, different hormonal composition, and fat distribution (Mining Safety, 2021). Nkomo and Balfour (2022) state that women working in the mining industry are disadvantaged by the fact that they are often unable to perform physically demanding and strenuous work. One of the barriers preventing more women from pursuing mining jobs is the perception that mining work is labour-intensive (Mashaba and Botha, 2023). To this end, the participants in this study were agitating for

automation in the mining industry. They stated that new technologies are available, and equipment in mining plants can be made user-friendly for women.

#### **5.4 Support received by female leaders in the mining company of interest**

The participants in this qualitative study revealed that female leaders in the mining company received three types of support: (1) non-technical training to fit, survive, and lead in the mining workplace, (2) mentorship and coaching, and (3) reporting platforms.

##### **5.4.1 Non-technical training to fit, survive, and lead in the mining workplace**

The participants mentioned the training that the company of interest offers for women. This is the Mbokodo training, which is aimed at advancing women from the local community surrounding the mining company. The focus of the programme has been to get women into operational roles. One of the participants stated that the future aim of the Mbokodo Programme is to hire more women in artisanal engineering trades. This is due to the company not having any female maintenance controllers. The Mbokodo Programme is similar to a programme that the DMRE is running. This programme, called the Women Diggers Programme (Marabwa, 2021), was initiated in 2019 at the Vuselela TVET College, and aims to increase the number of women with mining-related skills (Marabwa, 2021). The participants also mentioned a management development programme offered to all middle managers in the company of interest. The executives who participated in this study referred to the programme as UKhahlamba, while all the other participants called it the Duke Management Development Programme. The programme aims to impart important leadership skills to employees at the superintendent level. Companies such as Sasol offer the Sasol Women in Mining Incubator, a year-long leadership and business development programme aimed at accelerating women's growth in the mining sector.

The participants also shared that the company has rolled out anti-harassment training. The focus of this training is on inappropriate behaviour at work, with an emphasis on sexual harassment. The participants stated that the programme was initiated after several young female employees responded to a company-wide survey, called the People Survey, indicating that they were being sexually harassed. The leaders in the company responded

by launching the anti-harassment training. As mentioned in Chapter 2, the literature review, sexual harassment against women is common in the mining industry, especially in underground mining.

The female leaders also shared that the company has the WIM Committee. This committee serves as a safe space for women to share their struggles and develops initiatives to address them. A mining company called Sibanye-Stillwater has a women's committee called Women of Sibanye-Stillwater (Sibanye-Stillwater, 2024), which shares the same objectives as the WIM Committee at the company of interest. Mashaba and Botha (2023) state that mining companies in South Africa are initiating gender equality forums or women in mining forums to address issues such as pay parity between men and women, the low number of women in leadership roles, and recruitment strategies to increase female representation. Mashaba and Botha (2023) also state that these committees are often ineffective due to the shift work cycle typical of the mining industry. As a result, there are instances where women miss committee meetings because of their shift schedules.

#### **5.4.2 Mentorship and coaching**

The theme of mentorship emerged from the participants, with a subtheme of high school girls. The participants shared that the mining company needs to support the local community high schools to ensure that the children from the community get a quality education to enable them to be proficient in maths and science which, are subjects required in core mining roles. There should be more focus on high school girls to show them that they can pursue career paths in mining. Chen and Moons (2015) stated that few women pursue careers that require mathematics, science, and technology. When women are in these fields, they feel that they do not belong due to masculine dominance (Chen and Moons, 2015). Mashaba and Botha (2023) did a mixed methods study on factors affecting the attraction of women to mining technical roles in South Africa. The participants in the study stated that more representation and visibility of women in mining technical fields will motivate them to pursue these careers, which speaks to a lack of female mentors whom other women can look up to.

Due to the smaller number of females in the mining industry, there are fewer female mentors for other females within the industry. One participant stated that having a female mentor means there is no need to explain the challenges that women face in the mining industry. A female mentor will already understand what it is like to be a female in a male-dominated industry. Botha and Cronje (2014) state that the lack of mentors for women in the mining industry contributes to fewer females in the industry and that supervisors are unsupportive of women in mining. A study by Lopez (2020) explored the mentoring strategies experienced by female mining managers in Latin America and indicated that a systematic mentorship programme for female managers in the mining industry in that region does not exist and the industry suffers from male chauvinism. Lopez's (2020) study recommended that there should be more effective use of artificial intelligence and teleworking as part of mentoring strategies for female managers.

Due to the paucity of females in leadership roles, this study suggests that the mining industry be intentional in pairing aspiring female leaders pursuing core mining roles with male colleagues as mentors. The industry must ensure that male counterparts are fully aware of the current workforce statistics in the mining industry and are committed to assisting women to thrive in the industry.

Under this theme, a subtheme that emerged was high school girls. The participants stated that the mining industry and the company of interest are not doing enough to show girls that they can work in the mining industry. They stated that girls need to see role models and be made aware that they can pursue artisanal and engineering qualifications. This is supported by the research findings from Mashaba and Botha (2023) on factors affecting women pursuing technical roles in the South African mining industry. The participants stated that career awareness initiatives must be implemented in high schools to create awareness and attract young girls to the mining sector (Mashaba and Botha, 2023).

People who supervise artisans in the company of interest are called maintenance controllers. In the company, there is not one female maintenance controller – all of them are male. One participant stated that there is a need to go to high schools and educate girls that they too can study engineering courses. There is also a need to support women who are in this field. She stated that she motivates females to do difficult tasks so that

they can gain experience and understand the challenges of different roles. The participant believes that this will aid them when they one day become supervisors.

### **5.4.3 Reporting platforms**

For discrimination and sexual abuse, the company of interest has a speak-out channel. On this channel, employees can anonymously report transgressions they have witnessed or experienced. The channel allows for the safety of employees. A participant stated that they were unfairly treated when they logged a case with HR regarding how a male employee treated them. In fact, the employee's supervisor, who was a male, supported the male counterpart who offended the employee. This shows that discrimination against women in the mining industry still takes place. The participant was later moved to a different department.

## **5.5 Summary**

The discussion aimed to align the research findings with the research objectives. The challenges faced by female leaders in core mining roles, how they deal with the challenges, and the currently available support were discussed in relation to the themes that emerged from the interviews with the participants. The literature presented in Chapter 2 was used to collaborate on the themes that emerged.

The next chapter, Chapter 6, concludes the research.

## **CHAPTER 6: CONCLUSION AND RECOMMENDATIONS**

### **6.1 Introduction**

This chapter provides an overall conclusion of this study that explores the challenges of female leaders in core leadership roles in the mining industry. The first section in this chapter provides the summary of the study, which reflects the research objectives, research process, as well as key results and conclusions. This is essential as it demonstrates how the research objectives were met. The second section focuses on recommendations drawn from the study. Lastly, a conclusion to the entire study is presented. This is the final chapter of the study and it concludes the study by providing recommendations on how the challenges in the mining industry related to women in core mining roles can be addressed and suggesting areas for future studies.

### **6.2 Addressing the research objectives**

Before focusing on the research objectives, it is key to reiterate the methodological aspects of the study. Qualitative research was conducted at a sand mining company in KwaZulu-Natal with a sample of 13 female leaders in core roles at the mine who were selected using purposive sampling. Data was collected using semi-structured virtual interviews and an interview guide. The data was analysed using thematic analysis to develop themes depicting leadership challenges, how female leaders in core leadership roles dealt with the challenges, and the type of support that female leaders in core leadership roles received in a mining company in KwaZulu-Natal.

In this subsection, the research themes that emerged from the data analysis will be aligned with the research objectives.

#### **6.2.1 To identify the leadership challenges that female leaders in core leadership roles face in a mining company in KwaZulu-Natal**

In this qualitative study, the first research question was: “What are the leadership challenges that female leaders in core leadership roles face in a mining company in KwaZulu-Natal? Participants in this study identified four themes that reflect the nature of challenges faced by female leaders at the mine. These are: (1) lack of a support structure,

(2) mistreatment, (3) abuse by authority, and (4) being stereotyped. The objective of ascertaining the challenges of female leaders in core roles in mining was met in this study. The themes that emerged highlighted the issues and challenges discussed in Chapter 2. The findings were further supported by other research findings as discussed in Chapter 5.

The theme of lack of a support structure emerged with a subtheme of no career guidance, meaning that there is no clear support given to women in leadership roles in the mining company of interest regarding how they can advance their careers.

Mistreatment was a theme where participants shared experiences of bullying, sexual harassment, and racism. Most of the mistreatment stemmed from the stereotypes about females and the cultural component that the women felt was prevalent in the Zululand region. The use of the Afrikaans language as a form of abuse and a means of limiting communication by white people in the mining industry was personally experienced by two of the participants.

Abuse by authority emerged as a theme most pertinent to leadership. Managers or leaders are in positions of authority, but women in core leadership roles in mining often find themselves undermined. The women felt like they were statistics in the mining industry, mainly there to increase the number of women in the mining workforce. The authority figures that abuse the women are the male leaders in the company. This abuse is often subtle, resulting in the women feeling ostracised due to male chauvinism. The women in core leadership roles have to frequently repeat themselves to get things done or to have their views and suggestions taken seriously. They are often undermined in the workplace. When they give instructions to subordinates, they encounter resistance. With core mining roles being physically demanding, women also find themselves having to prove that they are capable, often more so than their male counterparts.

Female leaders in core mining roles have had to deal with stereotypes being imposed on them, especially in the male-dominated work environment. The women have been told by their male counterparts that they should be doing domestic-related jobs or administrative work and should not be in core mining roles. There have been instances where women were deemed incapable of certain duties in core mining, and they had to prove their

competence by working much harder than their male counterparts to be taken seriously. The women in core leadership roles stated that they could perform all the jobs that the men could do. They believed that societal norms and male dominance have been the primary barriers to their success and advancement in the mining industry.

### **6.2.2 To explore how female leaders in core leadership roles deal with the challenges faced in a mining company in KwaZulu-Natal**

The participants in this study revealed three ways that female leadership deals with challenges: (1) by adopting a predominantly situational leadership style, (2) by figuring out the co-existence of motherhood and marriage or prioritising work, and (3) by prioritising personal safety and calling for a conducive environment for women. Based on the themes that emerged, motherhood and marriage challenges have slowed the career progression of some of the women. The leaders stated that having a good support system is important, especially when it comes to taking care of children. This help can come from extended family members or hiring a helper. The women highlighted that they work long hours and sometimes their partners do not understand the challenges of working in the engineering field.

To navigate some of the challenges in core leadership roles, female leaders practice transformational leadership and situational leadership. These were the dominant leadership styles that the women in the mining company of interest practiced. The female leaders use a style of leadership that suits a particular situation and the level of maturity of their subordinates. They are also very supportive of their subordinates. They want to ensure that they are mentally fit at work, encourage creativity, and want their subordinates to challenge the process.

### **6.2.3 To examine the support that female leaders in core leadership roles receive in a mining company in KwaZulu-Natal**

The participants in this qualitative study revealed that female leaders in the mining company received three types of support: (1) non-technical training to fit, survive, and lead in the mining workplace, (2) mentorship and coaching, and (3) reporting platforms. The mining company of interest offers several support mechanisms and training for all

employees and some of this training is geared to fast-track women into core mining roles and to address issues of harassment against women in the workplace. The female leaders who participated in the research shared that the company has rolled out anti-harassment training with a focus on sexual harassment. The reason why the sexual harassment training was initiated by the company was because there was feedback from the People Survey done twice annually by the company. Young female graduates reported that they were being sexually harassed. The training offered aims to educate all employees on what sexual harassment is. The leaders also revealed that the company has anonymous reporting platforms, where discriminatory transgressions can be shared. These are safe spaces, where anyone can share their opinions and they are guaranteed anonymity. One is MyVoice (for diversity) and the other is SpeakOut (for discrimination and abuse).

With the paucity of females in the mining industry, the participants revealed that the mining company of interest has a Mbokodo Programme. The programme is aimed at equipping females with engineering qualifications with mining experience. This training has the potential to foster more women doing artisanal work.

A management development programme by Duke University was shared by the participants and they were cognisant that the training would sharpen their management skills. The programme is aimed at both male and female workers. The participants were of the view that the programme would enable women to be better prepared for management roles.

What was also shared by the female leaders is that there is a WIM Committee. It was revealed by the women that the committee annually plans events to foster camaraderie between women and offer a platform for women to share their experiences and develop themselves. The committee also implements initiatives to address concerns raised by the women.

### **6.3 Limitations of the study**

The major limitation of the study was the number of participants in the study. Thirteen female leaders in core leadership roles participated. The sample is small for

generalisation of the results and recommendations. The study also took place in one mining company located in KwaZulu-Natal. Further studies are required in different mining areas to better understand the influence of different cultures and societies interactions with female leaders in core mining roles.

## **6.4 Implications of the study**

The study revealed the challenges in the mining company that female leaders in core roles experience. The insight can assist the mining company in enhancing the experiences of women and their development as they work in core roles by addressing these challenges. This can lead to women feeling supported and can create a women friendly work environment that will drive more females to pursue core mining jobs. The participants shared their thoughts on how the company can improve. The mining company of interest can adopt these recommendations to not only improve the work environment and experiences of work but also attract more women to join the company.

Even though the study is limited to one mining company with a small sample size, the findings of the study can be relevant to other mining companies in South Africa and these companies can adopt the recommendations.

## **6.5 Recommendations**

Below are the recommendations derived from the findings of the study.

### **6.5.1 Automating operations**

The participants in the study had opinions on how the mining industry can aid in supporting women in core mining roles. What was pertinent was the automation of the plants. The roles of employees on the shop floor require physical abilities. Women are not as physically strong as men. Automation can make physically demanding jobs easier for women. This means it is important to make mining equipment unisex-friendly.

### **6.5.2 Women supporting each other**

The lack of support among women by other women emerged as one of the themes of the study. The lack of women supporting other women in core leadership roles was strongly

stated by the participants. The WIM Committee needs to be used effectively in this regard. A participant opined that women have had to endure a lot and fight for their space to achieve core leadership roles. The participant also stated that since the women had to fight so hard, some women in leadership think that other women need to go through the same suffering, that is, to go through the same thorns and trenches. However, just because they suffered, it does not mean they need to suffer too, and this issue needs to be addressed.

### **6.5.3 Drive for high school girls to study mining relevant qualifications**

Increasing awareness of mining relevant qualifications, especially among young girls, can help drive an increase in the number of women pursuing mining careers. This drive needs to be a campaign where the mining houses go to their host communities and showcase the different jobs that are done in the mines and what qualifications are needed for each role. This can be a career awareness programme.

### **6.5.4 Leadership development programme for women in mining**

A leadership development programme specific to women in mining can benefit the industry. Women experience different challenges compared to men when leading big teams, especially if the team is comprised of mostly men. The leadership development programme should aim to impart skills that women can use and progress to higher management roles. There will need to be collaboration between the mining houses and the institutions of higher education to develop such a programme.

## **6.6 Areas for future research**

Future research in a variety of mines is needed to gain a better understanding of the challenges that women in core leadership roles face in mining and what support is available to them. By not just focusing on one mine, the results of the study could be generalised and will be relevant to different areas.

Future research should also include views of people involved in the training and development of leaders at mines to understand what they believe the challenges faced by female leaders are, and how best to develop more leaders faster.

## 6.7 Conclusion

The study set out to explore the leadership challenges faced by female leaders in core mining roles in a mining company in KwaZulu-Natal. The challenges that emerged from the research indicate that the lack of a support structure, mistreatment, abuse by authority, and being stereotyped are pertinent challenges that female leaders face. The participants gave recommendations on how the mining company of interest can resolve these challenges. These include automating operations, which can make physically demanding jobs easier; having women supporting each other instead of creating barriers for other women; increasing visibility or awareness of mining-relevant qualifications to attract more young women to pursue the career path; and having educational institutions tailor-make a leadership development programme to equip female leaders in mining with the required skills.

Currently, the female leaders in core mining roles deal with the challenges that they are facing by predominantly using a situational leadership style, figuring out the co-existence of motherhood and marriage or prioritising work, and prioritising personal safety while calling for a conducive environment for women. The mining company of interest also offers support to its female workforce. The support available includes non-technical training to fit, survive, and lead in the workplace; mentorship and coaching; and, finally, reporting platforms for employees to report anonymously if they experience mistreatment.

Future research can enhance findings on female leaders' core mining roles by conducting studies across multiple mines to allow for the findings to be generalised and applied to different contexts and individuals. Additionally, future research should also include input from training experts who specialise in leadership development to explore how the mining industry can better support female leaders in core roles.

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# APPENDICES

## APPENDIX 1: INFORMED CONSENT FORM

### Information Sheet and Consent to Participate in Research

**Title of research project:** Exploring the challenges of female leaders in core leadership roles in a mining company in KwaZulu-Natal

Hello

I am Anele Xulu and I currently work as a Smelter Services Superintendent at RBM. I am conducting research to fulfil the requirements for my MBA studies with the University of KwaZulu-Natal.

You are being invited to consider participating in a study that involves research into exploring the leadership challenges of senior female leaders at RBM. Participation is voluntary you are free to withdraw from the study at any time. The aim and purpose of this research is to identify challenges that female leaders face in the mining industry.

The study is expected to enrol senior female managers at RBM. It will involve interviewing the participants via Microsoft Teams. The duration of your participation if you choose to enroll and remain in the study is expected to be 45 to 60 minutes. The study may involve the sharing of personal experiences within the mining industry. Confidentiality of participants will be maintained by not using the names of participants. The record of interviews will only be accessible to the researcher.

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (approval number HSSREC/00007047/2024).

In the event of any problems or concerns/questions you may contact the researcher on the cellphone number [REDACTED], the email [REDACTED] or the UKZN Humanities and Social Sciences Research Ethics Committee, contact details as follows:

#### **HUMANITIES and SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION**

Research Office, Westville Campus  
Govan Mbeki Building  
Private Bag X 54001  
Durban  
4000  
KwaZulu-Natal, SOUTH AFRICA  
Tel: 27 31 2604557- Fax: 27 31 2604609  
Email: [HSSREC@ukzn.ac.za](mailto:HSSREC@ukzn.ac.za)

## CONSENT

I ..... (name) have been informed about the study entitled “Exploring the challenges of female leaders in core leadership roles in a mining company in KwaZulu-Natal” by Anele Xulu.

I understand the purpose and procedures of the study.

I have been given an opportunity to answer questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any of the benefits that I usually am entitled to.

If I have any further questions/concerns or queries related to the study I understand that I may contact the researcher on [REDACTED] or [REDACTED].

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact:

### **HUMANITIES and SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION**

Research Office, Westville Campus  
Govan Mbeki Building  
Private Bag X 54001  
Durban  
4000  
KwaZulu-Natal, SOUTH AFRICA  
Tel: 27 31 2604557 - Fax: 27 31 2604609  
Email: [HSSREC@ukzn.ac.za](mailto:HSSREC@ukzn.ac.za)

Additional consent,

I hereby provide consent to:

Audio-record my interview YES / NO

\_\_\_\_\_  
**Signature of Participant**

\_\_\_\_\_  
**Date**

## **APPENDIX 2: INTERVIEW GUIDE**

### **Demographics**

1. What is your undergraduate qualification?
2. What is your current position?
3. How long have you been in your leadership role?
4. How many years have you worked in the mining industry?
5. How long have you worked in this company?

### **What are the leadership challenges that female leaders in core leadership roles face in a mining company in KwaZulu-Natal?**

6. Do you think being a woman in the mining industry has slowed down your career progression compared to men? Elaborate?
7. What is your perception of salaries or pay in the mining industry between men and women?
8. What are the challenges you have faced as a leader in mining in general?
9. Do you have or have had a mentor and how was the relationship? Male or female?
10. Regarding gender-based discrimination, what efforts are you aware of that the company has made to address gender-based discrimination?
11. What more can the company do to address gender-based discrimination?
12. Can you describe how your past supervisors have supported or hampered your career progression as a woman in mining?
13. How has having children or being married affected your career?

### **How do female leaders in core leadership roles deal with the challenges faced in a mining company in KwaZulu-Natal?**

14. What leadership qualities do you possess?
15. Do you think female leaders need different types of leadership styles compared to men in the mining industry?

16. When faced with a challenge, what steps do you follow to address the situation? (leadership challenge)

**What support do female leaders in core leadership roles receive in a mining company in KwaZulu-Natal?**

17. What is the company doing to support women in mining or what initiatives are you aware of that the company is doing to support women in mining?
18. What more can the company do to support and encourage women to pursue leadership roles?
19. What advice would you give to other women wishing to pursue leadership roles in the mining industry?

## APPENDIX 3: GATEKEEPER'S LETTER

Prof Cecile Gerwel Proches  
Graduate School of Business and Leadership  
University Of KwaZulu-Natal  
Westville Campus  
Durban  
3630

24 April 2024


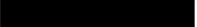
Dear Prof Cecile Gerwel Proches

RE: PERMISSION TO CONDUCT RESEARCH

This letter serves to confirm that I, Sam Ngaka, Charge Preparation Area, and Smelter Manager of Richards Bay Minerals a subsidiary of Rio Tinto hereby acknowledge and approve the research of Anele Xulu within the Richards Bay Minerals for the completion of his MBA degree.

Sincerely,



Sam Ngaka  
CPA and Smelter Manager  
Sam.   
Phone: 

## APPENDIX 4: ETHICAL CLEARANCE



20 May 2024

Anele Goodenough Xulu (208505005)  
Grad School of Bus & Leadership  
Westville Campus

Dear AG Xulu,

Protocol reference number: HSSREC/00007047/2024  
Project title: Exploring the challenges of female leaders in core leadership roles in a mining company in KwaZulu-Natal  
Degree: Masters

### Approval Notification – Expedited Application

This letter serves to notify you that your application received on 16 May 2024 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted FULL APPROVAL.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

Incidents of adverse events and serious adverse events (AEs and SAEs) should be reported in writing to HSSREC, the study sponsors, and any regulatory authority (where appropriate), within 7 working days of the occurrence for local sites and 14 days for all other South African sites.

This approval is valid until 20 May 2025.

To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2 - 3 months before the expiry date. A close-out report to be submitted when study is finished.

HSSREC is registered with the South African National Health Research Ethics Council (REC-040414-040).

Yours sincerely,

Professor Dipane Hlalele (Chair)  
/dd

### Humanities and Social Sciences Research Ethics Committee

Postal Address: Private Bag X54001, Durban, 4000, South Africa

Telephone: +27 (0)31 260 8350/4557/3587 Email: [hssrec@ukzn.ac.za](mailto:hssrec@ukzn.ac.za) Website: <http://research.ukzn.ac.za/Research-Ethics>

Founding Campuses:  Edgewood  Howard College  Medical School  Pietermaritzburg  Westville

INSPIRING GREATNESS

## APPENDIX 5: EDITING LETTER

**Athol Leach (Proofreading and Editing)**



31 Park Rd  
Fisherhaven  
Hermanus 7200

3 February 2025

To Whom It May Concern

This letter serves to confirm that I have edited the following MBA dissertation by Anele Xulu (208505005) titled:

**“EXPLORING THE CHALLENGES OF FEMALE LEADERS IN CORE LEADERSHIP ROLES IN A MINING COMPANY IN KWAZULU-NATAL”**

The dissertation was edited in terms of grammar, spelling, punctuation and overall style. In doing so, use was made of MS Word’s “Track changes” facility thus providing the student with the opportunity to reject or accept the changes made.

Please note that while I have checked the in-text references for consistency in terms of format, I have not checked the veracity of the sources themselves.

The tracked document is on file.

Sincerely

Athol Leach  
(MIS, Natal)